INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a New Source Review and Federally Enforceable State Operating Permit (FESOP)

for Taghleef Industries, Inc. in Vigo County

FESOP No.: F167-39727-00045

The Indiana Department of Environmental Management (IDEM) has received an application from Taghleef Industries, Inc., located at 3600 East Head Avenue, Rosedale, Indiana 47874, for a new source review and FESOP. If approved by IDEM's Office of Air Quality (OAQ), this proposed permit would allow Taghleef Industries, Inc. to construct and operate a stationary plastic film manufacturing operation.

The applicant intends to construct and operate existing equipment that will emit air pollutants. The potential to emit regulated pollutants will be limited to less than the TV and PSD major threshold levels, respectively. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to make this change.

IDEM is aware that the stationary plastic film manufacturing operation has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft FESOP contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

A copy of the permit application and IDEM's preliminary findings are available at:

Vigo County Library
1 Library Square
Terre Haute, IN 47807

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F167-39727-00045 in all correspondence.

Comments should be sent to:

Joshua Levering
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-6543
Or dial directly: (317) 234-6543
Fax: (317) 232-6749 attn: Joshua Levering
E-mail: JLeverin@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Joshua Levering of my staff at the above address.

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov
Eric J. Holcomb
Governor
Bruno L. Pigott
Commissioner

DRAFT

New Source Review and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

Taghleef Industries, Inc.
3600 East Head Avenue
Rosedale, Indiana 47874

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F167-39727-00045 Master Agency Interest ID.: 12018	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary plastic film manufacturing operation.

Source Address:	3600 East Head Avenue, Rosedale, Indiana 47874
General Source Phone Number:	(812) 462-5252
SIC Code:	3081 (Unsupported Plastics Film and Sheet)
County Location:	Vigo (Outside Fayette and Harrison Townships)
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) extrusion line, identified as Line 55, constructed in 1974, with a bottleneck maximum throughput capacity of 1,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description*	Construction Date	Maximum Throughput Capacity (lbs/hr)**	Control Device	Control Device ID	Stack ID
Line 55						
EU-01	PP Transfer	1975	1,000	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	1975	1,000	Dust Collector	CE-18	SP-22
EU-03	PP Transfer	2002	1,000	Filter Cartridge	CE-19	*indoors*
EU-04	Extruder	2006	1,000	*none*	-	-

*PP = Polypropylene pellets
** The extruder (EU-04) is considered a bottleneck for the PP Transfers (EU-01, EU-02, and EU-03). The actual maximum capacities are not provided.

(b) One (1) polymer handling line, identified as Line 55 Polymer Handling, constructed in 1969, with a maximum throughput capacity of 50,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling						

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
EU-Silo 1*	Storage silo	1969	3,125	Baghouse	CE-01	SP-01
EU-Silo 2*	Storage silo	1969	3,125	Baghouse	CE-02	SP-02
EU-Silo 3*	Storage silo	1969	3,125	Baghouse	CE-03	SP-03
EU-Silo 4*	Storage silo	1969	3,125	Baghouse	CE-04	SP-04
EU-Silo 5*	Storage silo	1969	3,125	Baghouse	CE-05	SP-05
EU-Silo 6*	Storage silo	1969	3,125	Baghouse	CE-06	SP-06
EU-Silo 7*	Storage silo	1969	3,125	Baghouse	CE-07	SP-07
EU-Silo 8*	Storage silo	1969	3,125	Baghouse	CE-08	SP-08
Total for EU-Silos 1-8			25,000			
EU-Silo 9**	Storage silo	1975	6,250	Baghouse	CE-09	SP-09
EU-Silo 10**	Storage silo	1975	6,250	Baghouse	CE-10	SP-10
EU-Silo 11**	Storage silo	1975	6,250	Baghouse	CE-11	SP-11
EU-Silo 12**	Storage silo	1975	6,250	Baghouse	CE-12	SP-12
Total for EU-Silos 9-12			25,000			
EU-12	Rail Car	*existing railroad*	5,936	*none*	-	-
EU-13	Polymer Conveying System	1969	25,000	Dust Collector	CE-13	*indoors*
EU-14	Polymer Conveying System	1975	25,000	Dust Collector	CE-14	*indoors*

* EU-Silos 1 through 8 are fed by EU-13.
** EU-Silos 9 through 12 are fed by EU-14.

(c) One (1) extrusion line, identified as Line 62, constructed in 1980, with a bottleneck maximum throughput capacity of 3,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 62						
EU-60	Polymer Holding Bin	1981	375	Dust Collector	CE-71	SP-92
EU-61	Storage Bin	1981	375	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin	1981	375			
EU-63	Storage Bin	1981	375			
EU-64	Polymer Blender	2000	375	Dust Collector	CE-68	*indoors*
EU-65A	Polymer Blending	2014	375	Dust Collector	CE-73	*indoors*
EU-65B	Polymer Blending	2014	375			
EU-66	Drying Bin	1981	375	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	1981	375	Cyclone Dust Collector	CE-69	*indoors*
EU-68	Drying Bin	1981	2,250	Dust Collector	CE-75	SP-101

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
EU-69	Storage Bin	1981	2,250	Cyclone Dust Collector	CE-76	*indoors*
EU-70	Storage Bin	1981	2,250	Baghouse	CE-67	SP-104
EU-71	Polymer Blending	2014	2,250	Cyclone Dust Collector	CE-82	*indoors*
EU-72	Storage Bin	1981	2,250	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	1981	2,250	Dust Collector	CE-78	SP-107
				Dust Collector	CE-79	SP-108
EU-74	Storage Bin	1981	2,250	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	1981	2,250	Dust Collector	CE-81	SP-105
EU-76	Extruder	1981	2,250	*none*	-	-
EU-77	Extruder	1981	375	*none*	-	-
EU-78	Extruder	2014	375	*none*	-	-
EU-82	Box Dumper	1981	648	Cyclone Dust Collector	CE-74	*indoors*

* The extruders (EU-76, EU-77, and EU-78) are considered a bottleneck for the upstream emission units for Line 62 (EU-60 through EU-75). The actual maximum capacities are not provided.

(d) One (1) extrusion line, identified as Line 63, constructed in 1981, with a bottleneck maximum throughput capacity of 2,800 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 63						
EU-90	Storage Bin	1981	2,800	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin	1981	2,800			
EU-93	Blender	1981	2,800			
EU-92	Drying Bin	1981	2,800	Dust Collector	CE-101	SP-141
EU-94	Extruder	1981	2,050	*none*	-	-
EU-95	Extruder	1981	375	*none*	-	-
EU-96	Extruder	1981	375	*none*	-	-

* The extruders (EU-94, EU-95, and EU-96) are considered a bottleneck for the upstream emission units for Line 63 (EU-90 through EU-93). The actual maximum capacities are not provided.

(e) One (1) extrusion line, identified as Line 64, constructed in 1991, with a bottleneck maximum throughput capacity of 8,400 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 64						
EU-110	Drying Bin	2007	6,600	Filter	CE-129	*indoors*
EU-111	Storage Bin	1991	6,600	Cyclone	CE-120	SP-170
				Dust Collector	CE-121	
EU-112	Drying Bin	2007	6,600	Filter Cartridge	CE-123	*indoors*

EU-113	Nauta Mixer	1991	6,600	Cyclone Dust Collector	CE-127	*indoors*
				Filter Separator	CE-128	SP-172
-	Main Extruder**	1991	6,600	*none*	-	-
EU-117	Blending System	2007	6,600	Filter Cartridge	CE-134	*indoors*
EU-118	Drying Bin	1991	900	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	1991	900	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	2007	900	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin	2007	900			
-	Satellite Extruder***	2007	900	*none*	-	-
-	Satellite Extruder***	2007	900	*none*	-	-
EU-122	Storage Bin	1991	900	Cyclone Dust Collector	CE-136	*indoors*
EU-123	Box Dumping Station	1991	900	*none*	-	-
EU-125	Storage Bin	1991	2,000	Baghouse	CE-137	SP-192
EU-126	Pelletizer	1991	2,000	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer	1991	2,000			
EU-127	Storage Bin	1991	2,000	Baghouse	CE-139	SP-195
EU-128	Extruder	1991	2,000	*none*	-	-

* The extruders (EU-113, EU-120, EU-121, and EU-128) are considered a bottleneck for the upstream emission units for Line 64 (EU-110 through EU-129). The actual maximum capacities are not provided.
** Main extruder is directly fed by the Nauta Mixer (EU-113).
*** One satellite extruder is directly fed by feeding bin EU-120, the other satellite extruder is directly fed by feeding bin EU-121.

(f) One (1) extrusion line, identified as Line 65, constructed in 1996, with a bottleneck maximum throughput capacity of 9,700 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 65						
EU-130	Drying Bin	1996	2,700	Baghouse	CE-141	SP-201
EU-131	Drying Bin	1996	2,700	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	1996	2,700	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	1996	750	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	1996	750	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	1996	2,000	Baghouse	CE-148	SP-211
EU-136	Polymer Bin	1996	2,700			
EU-137	Feeding Bin	2015	2,000	Dust Collector	CE-144	SP-206
-	Intermediate Extruder**	2015	2,000	*none*	-	-
EU-138	Feeding Bin	2015	2,000	Dust Collector	CE-145	SP-204
-	Intermediate Extruder**	2015	2,000	*none*	-	-
EU-139	Feeding Bin	2011	1,500	Dust Collector	CE-154	SP-231
-	Satellite Extruder**	2011	1,500	*none*	-	-
EU-140	Feeding Bin	2011	1,500	Dust Collector	CE-155	SP-232
-	Satellite Extruder**	2011	1,500	*none*	-	-
EU-141	Polymer	2011	2,700	Dust Collector	CE-146	SP-205

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
	Blending			Dust Collector	CE-152	SP-213
EU-146	Extruder	1996	2,700	*none*	-	-

* The extruders (EU-137, EU-138, EU-139, EU-140, and EU-146) are considered a bottleneck for the upstream emission units for Line 65 (EU-130 through EU-141). The actual maximum capacities are not provided.
** Each extruder is directly fed by only the one (1) Feeding Bin (EU-137, EU-138, EU-139, or EU-140) listed immediately before it.

(g) One (1) extrusion line, identified as Line 71, constructed in 1998, with a bottleneck maximum throughput capacity of 11,700 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 71						
EU-160	Storage Silo	1997	5,000	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	1997	5,000	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	1997	9,700	Filter Separator	CE-160	SP-240
EU-163	Storage Bin	1998	4,000	Filter Cartridge	CE-162	*indoors*
EU-164	Blending System	2007	9,700	Dust Collector	CE-163	SP-245
EU-165	Storage Bin	1998	9,700	Filter	CE-179	SP-246
EU-166	Drying Bin	1998	9,700	Filter	CE-164	SP-247
EU-167	Extruder	1998	9,700	*none*	-	-
EU-171	Drying Bin	1998	1,000	Filter	CE-169	SP-266
EU-172	Drying Bin	1998	1,000	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	2007	1,000	Dust Collector	CE-173	SP-268
-	Satellite Extruder**	2007	1,000	*none*	-	-
EU-174	Feeding Bin	2007	1,000	Dust Collector	CE-174	SP-269
-	Satellite Extruder**	2007	1,000	*none*	-	-
EU-175	Box Dumping Station	1998	1,000	*none*	-	-
EU-176	Reclaim Extruder	1998	110	*none*	-	-
EU-177	Supersack Unloader	2008	1,000	*none*	-	-
EU-178	Bag Unloader	2016	1,000	*none*	-	-
EU-179	Sack Dumper Bin	2008	1,000	*none*	-	-
EU-182	Rail Car Filling	1969	3,000	*none*	-	-
EU-183	Reclaim Bin	1969	5,000	*none*	-	-

* The extruders (EU-167, EU-173, and EU-174) are considered a bottleneck for the upstream emission units for Line 71 (EU-160 through EU-175). The actual maximum capacities are not provided.
** Each extruder is directly fed by only the one (1) Feeding Bin (EU-173 or EU-174) listed immediately before it.

(h) One (1) operation, identified as Tubular Reclaim and Secondary Processing, constructed in 1969, with a bottleneck maximum throughput capacity of 2,730 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing						
EU-07	Extruder	1969	2,730	*none*	-	SP-24
EU-08	Polymer Transfer	1975	2,730	Filter	CE-25	*indoors*
EU-09	Injection Molder	2013	2,730	Dust Collector	CE-26	*indoors*
EU-10	Injection Molder	2013	2,730	Dust Collector	CE-27	*indoors*
EU-11	Extruder	1975	2,730	*none*	-	SP-30
EU-FB1	Fluff Bin	1969	1,200	Baghouse	CE-20	SP-31
EU-FB2	Fluff Bin	1969	1,200	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	1969	1,200	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	1969	1,200	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	1969	1,200	Baghouse	CE-24	SP-35
EU-CH1	Flake Grinder	1969	130	*none*	-	SP-36
EU-CH2	Flake Grinder	1969	1,200	*none*	-	SP-37
EU-CH3	Flake Grinder	1969	1,000	*none*	-	SP-38
EU-CH4	Flake Grinder	1969	1,200	*none*	-	SP-39
EU-CH5	Flake Grinder	1969	1,200	*none*	-	SP-23

* The extruders (EU-07 and EU-11) are considered a bottleneck for the Fluff Bins (EU-FB1 through EU-FB5) and the Flake Grinders (EU-CH1 through EU-CH5). The actual maximum capacities are not provided.

(i) One (1) handling line, identified as Tenter Polymer Handling, constructed in 1980, with a maximum throughput capacity of 24,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Tenter Polymer Handling						
EU-30	Polymer Conveying	1980	7,000	Dust Collector	CE-40	SP-60
EU-31	Polymer Conveying	1980	7,000	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	1979	10,000	Dust Collector	CE-52	SP-72
EU-Silo 13*	Polymer Silo	1980	1,000	Cyclone	CE-42	SP-62
EU-Silo 14*	Polymer Silo	1980	1,000			
EU-Silo 15*	Polymer Silo	1980	1,000	Cyclone	CE-43	SP-63
EU-Silo 16*	Polymer Silo	1980	1,000			
EU-Silo 17*	Polymer Silo	1991	1,000	Cyclone	CE-44	SP-64
EU-Silo 18*	Polymer Silo	1991	1,000			
EU-Silo 19*	Polymer Silo	1991	1,000	Cyclone	CE-45	SP-65
EU-Silo 20*	Polymer Silo	1991	1,000			
EU-Silo 21*	Polymer Silo	1991	1,000	Cyclone	CE-46	SP-66

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
EU-Silo 22*	Polymer Silo	1991	1,000			
EU-Silo 23*	Polymer Silo	1991	1,000	Cyclone	CE-47	SP-67
EU-Silo 24*	Polymer Silo	1991	1,000			
EU-Silo 25*	Polymer Silo	1991	1,000	Cyclone	CE-48	SP-68
EU-Silo 26*	Polymer Silo	1991	1,000			
Total for EU-Silos 13-26			14,000			
EU-Silo 27**	Polymer Silo	1968	1,750	Cyclone	CE-50	SP-70
EU-Silo 28**	Polymer Silo	1968	1,750	Cyclone	CE-51	SP-71
EU-Silo 29**	Polymer Silo	1968	1,750			
EU-Silo 30**	Polymer Silo	2000	1,750	Cyclone	CE-49	SP-69
Total for EU-Silos 27-30			7,000			
* EU-Silos 13 through 26 are fed by EU-30 and EU-31. ** EU-Silos 27 through 30 are fed by EU-32.						

(j) One (1) reclaim storage system, identified as Tenter Reclaim, constructed in 1981, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Tenter Reclaim						
EU-210	Polypropylene Flake Storage	1981	426	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	1981	289	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	1981	426	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	1981	426	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	1981	1,086	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin	1981	1,086			
EU-216	Polypropylene Pellet Bin	1981	715			
EU-217	Polypropylene Pellet Bin	1981	715			

(k) One (1) process line, identified as Compounder Line 1, constructed in 2016, with a bottleneck maximum throughput capacity of 3,306 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Compounder Line 1						
EU-15	Virgin Polymer Day Bin	1969	3,306	Baghouse	CE-53	SP-43

EU-16	Dry Dust Extraction	2016	3,306	Dust Collector	CE-54	SP-44
EU-17	Virgin Pellet Conveying	2016	3,306	Dust Collector	CE-35	*indoors*
EU-18	Virgin Pellet Feeding	2016	3,306	Filter	CE-38	*indoors*
EU-19	Powder Transfer	2016	3,306	Dust Collector	CE-28	*indoors*
EU-20	Extruder and Vapor Extraction	2016	3,306	*none*	-	SP-48
EU-21	Finish Pellet Conveying	2016	3,306	Filter Cartridge	CE-32	*indoors*
EU-23	Powder Mixing Station	2016	50	Filter	CE-31	*indoors*
* The extruder, identified as EU-20, is considered a bottleneck for the upstream bin, conveying, feeding, and transfer units in Compounder Line 1. The actual maximum capacities are not provided.						

(l) Two (2) secondary processing machines, consisting of the following emission units:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
EU-MT94	Metalizer	2012	42	*none*	-	SP-40, SP-41
EU-MT95	Metalizer	2016	42	*none*	-	SP-42

(m) Six (6) plastic film treaters, using electricity to heat plastic film for stretching/extruding processes, using no control devices, exhausting outdoors, and consisting of the following:

Process Line	Emission Unit ID	Construction Date	Maximum Electricity Used to Heat Film (kW/hr)*
Line 55	EU-06	1975	68
Line 62	EU-81	1981	40
Line 63	EU-99	1981	40
Line 64	EU-116	1991	104
Line 65	EU-145	1996	192
Line 71	EU-170	1998	192
*There are no combustion emissions from the plastic film treaters. All NOx and VOC emissions are produced from the heating of plastic film.			

(n) Three (3) natural gas-fired boilers, each with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-191	Steam Boiler	1979	35.5	SP-281
EU-192	Steam Boiler	1980	19.0	SP-282
EU-193	Low NOx Steam Boiler	2016	24.1	SP-283

Under the provisions of 40 CFR 60, Subpart Dc, the natural gas-fired boiler, identified as EU-193, is an affected facility.

(o) Six (6) natural gas-fired process heaters, each with no control device, and consisting of the following:

Process Line	Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
Line 64	EU-115	Oven*	1991	6.3	SP-174 through SP-179, and SP-197
	EU-129	Flame Treater	1991	3.09	SP-198
Line 65	EU-144	Tenter Oven*	1996	6.35	SP-218 through SP-225
Line 71	EU-169	Flame Treater	1998	0.51	SP-261, SP-262
	EU-180	Tenter Oven*	1998	10.5	SP-251 through SP-260
-	EU-203	Hot Water Heater	2012	2.97	SP-293
*Low NOx Burner					

(p) Seven (7) natural gas-fired space heaters, each with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-148	Space Heater	1996	3.8	SP-215
EU-149	Space Heater	1996	3.8	SP-216
EU-150	Space Heater	1996	3.8	SP-217
EU-200	Space Heater	2015	0.075	SP-290
EU-201	Space Heater	2015	5.31	SP-291
EU-218	Space Heater	1991	3.5	SP-193
EU-219	Space Heater	1991	3.5	SP-199

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

(1) This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Three (3) emergency generators, with EU-194 being utilized as an emergency fire pump, each with no control device, and consisting of the following:

(1) Two (2) emergency generators:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-199	Natural gas	2013	194	SP-289

Under the provisions of 40 CFR 60, Subpart JJJJ, the natural gas-fired emergency generator, identified as EU-199, is an affected facility.

Under the provisions of 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency generator, identified as EU-190; and the natural gas-fired emergency generator, identified as EU-199, are affected facilities.

(2) One (1) emergency fire pump:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-194	Diesel	1983	255	SP-284

(b) Three (3) cooling towers, consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Water Circulation Rate (gallons/minute)	Stack ID
EU-195	Tenter Plant Cooling Tower	2004	10,383	SP-285
EU-196	Line 71 Cooling Tower	1998	3,000	SP-286
EU-198	Tubular Cooling Tower	2015	5,000	SP-288

(c) One (1) gasoline storage tank, consisting of the following:

Emission Unit ID	Construction Date	Storage Capacity (gallons)
GT1	1969	550

Under the provisions of 40 CFR 63, Subpart CCCCCC, the gasoline storage tank, identified as GT1, is an affected facility.

(2) This stationary source also includes the following insignificant activities, which are not specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Three (3) diesel storage tanks, consisting of the following:

Emission Unit ID	Construction Date	Storage Capacity (gallons)
DT1	1969	300
DT2	1974	300
DT3	1981	300

(b) Paved and unpaved roads.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)][326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F167-39727-00045, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.6 Enforceability [326 IAC 2-8-6][IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.7 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F167-39727-00045 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a

certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

(b) Emission Trades [326 IAC 2-8-15(b)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers

and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.11 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003

Indianapolis, Indiana 46204-2251

no later than ninety (90) days after the date of issuance of this permit.

The ERP does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) extrusion line, identified as Line 55, constructed in 1974, with a bottleneck maximum throughput capacity of 1,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description*	Construction Date	Maximum Throughput Capacity (lbs/hr)**	Control Device	Control Device ID	Stack ID
Line 55						
EU-01	PP Transfer	1975	1,000	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	1975	1,000	Dust Collector	CE-18	SP-22
EU-03	PP Transfer	2002	1,000	Filter Cartridge	CE-19	*indoors*
EU-04	Extruder	2006	1,000	*none*	-	-

*PP = Polypropylene pellets
** The extruder (EU-04) is considered a bottleneck for the PP Transfers (EU-01, EU-02, and EU-03). The actual maximum capacities are not provided.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 55					
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15	0.02
EU-02	PP Transfer	Dust Collector	CE-18	SP-22	0.02
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*	0.02

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 55						
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15	0.02	0.02
EU-02	PP Transfer	Dust Collector	CE-18	SP-22	0.02	0.02
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*	0.02	0.02

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55				
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	Dust Collector	CE-18	SP-22
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*
EU-04	Extruder	*none*	-	-

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.5 Particulate Control

(a) In order to assure compliance with Conditions D.1.1, D.1.2, and D.1.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55				
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	Dust Collector	CE-18	SP-22
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of all cyclones and dust collector stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55				
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	Dust Collector	CE-18	SP-22

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.7 Filter Cartridge Inspections

The Permittee shall perform quarterly inspections of the filter cartridge controlling particulate emissions from the PP Transfer, as listed below, to verify that it is being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective filters shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55				
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements

of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of the cyclones and dust collector stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.1.7, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.1.7.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) polymer handling line, identified as Line 55 Polymer Handling, constructed in 1969, with a maximum throughput capacity of 50,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling						
EU-Silo 1*	Storage silo	1969	3,125	Baghouse	CE-01	SP-01
EU-Silo 2*	Storage silo	1969	3,125	Baghouse	CE-02	SP-02
EU-Silo 3*	Storage silo	1969	3,125	Baghouse	CE-03	SP-03
EU-Silo 4*	Storage silo	1969	3,125	Baghouse	CE-04	SP-04
EU-Silo 5*	Storage silo	1969	3,125	Baghouse	CE-05	SP-05
EU-Silo 6*	Storage silo	1969	3,125	Baghouse	CE-06	SP-06
EU-Silo 7*	Storage silo	1969	3,125	Baghouse	CE-07	SP-07
EU-Silo 8*	Storage silo	1969	3,125	Baghouse	CE-08	SP-08
Total for EU-Silos 1-8			25,000			
EU-Silo 9**	Storage silo	1975	6,250	Baghouse	CE-09	SP-09
EU-Silo 10**	Storage silo	1975	6,250	Baghouse	CE-10	SP-10
EU-Silo 11**	Storage silo	1975	6,250	Baghouse	CE-11	SP-11
EU-Silo 12**	Storage silo	1975	6,250	Baghouse	CE-12	SP-12
Total for EU-Silos 9-12			25,000			
EU-12	Rail Car	*existing railroad*	5,936	*none*	-	-
EU-13	Polymer Conveying System	1969	25,000	Dust Collector	CE-13	*indoors*
EU-14	Polymer Conveying System	1975	25,000	Dust Collector	CE-14	*indoors*

* EU-Silos 1 through 8 are fed by EU-13.
** EU-Silos 9 through 12 are fed by EU-14.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 55 Polymer Handling					

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01	0.06
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02	0.06
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03	0.06
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04	0.06
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05	0.06
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06	0.06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07	0.06
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08	0.06
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09	0.13
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10	0.13
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11	0.13
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12	0.13
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*	0.50
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*	0.50

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Unit ID	Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 55 Polymer Handling						
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01	0.06	0.06
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02	0.06	0.06
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03	0.06	0.06
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04	0.06	0.06
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05	0.06	0.06
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06	0.06	0.06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07	0.06	0.06
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08	0.06	0.06
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09	0.13	0.13
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10	0.13	0.13
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11	0.13	0.13
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12	0.13	0.13
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*	0.50	0.50
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*	0.50	0.50

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling				
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12
EU-12	Rail Car	*none*	-	-
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.5 Particulate Control

(a) In order to assure compliance with Conditions D.2.1, D.2.2, and D.2.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling				
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.6 Testing Requirements [326 IAC 2-1.1-11]

(a) Dust Collector (CE-13)
Not later than 180 days after the issuance date of this permit, Permit No. F167-39727-00045, the Permittee shall perform PM, PM10, and PM2.5 testing of the dust collector (CE-13) controlling the polymer conveying system (Line 55 Polymer Handling: EU-13) utilizing methods approved by the commissioner. This test shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 includes filterable and condensable PM.

(b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.2.7 Visible Emissions Notations

(a) Visible emission notations of all baghouses stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling				
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.8 Dust Collector Inspections

The Permittee shall perform quarterly inspections of the dust collector controlling particulate emissions from the polymer conveying system, as listed below, to verify that it is being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling				
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*

D.2.9 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector at least once per day when the associated emission units are in operation:

Process Line: Emission Unit ID	Emission Unit/Process	Control Device	Pressure Drop Range (inches of water)
Line 55 Polymer Handling: EU-13	Polymer Conveying System	Dust Collector (CE-13)	2.0 to 8.0

When, for any one reading, the pressure drop across a dust collector is outside the normal range, the Permittee shall take a reasonable response. The normal pressure drop range for these units is listed in the table above, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of daily visible emission notations of the baghouses stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.2.8.

(c) To document the compliance status with Condition D.2.9, the Permittee shall maintain daily records of pressure drop across the dust collector, identified as the following:

Control Device
Dust Collector (CE-13)

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) extrusion line, identified as Line 62, constructed in 1980, with a bottleneck maximum throughput capacity of 3,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 62						
EU-60	Polymer Holding Bin	1981	375	Dust Collector	CE-71	SP-92
EU-61	Storage Bin	1981	375	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin	1981	375			
EU-63	Storage Bin	1981	375			
EU-64	Polymer Blender	2000	375	Dust Collector	CE-68	*indoors*
EU-65A	Polymer Blending	2014	375	Dust Collector	CE-73	*indoors*
EU-65B	Polymer Blending	2014	375			
EU-66	Drying Bin	1981	375	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	1981	375	Cyclone Dust Collector	CE-69	*indoors*
EU-68	Drying Bin	1981	2,250	Dust Collector	CE-75	SP-101
EU-69	Storage Bin	1981	2,250	Cyclone Dust Collector	CE-76	*indoors*
EU-70	Storage Bin	1981	2,250	Baghouse	CE-67	SP-104
EU-71	Polymer Blending	2014	2,250	Cyclone Dust Collector	CE-82	*indoors*
EU-72	Storage Bin	1981	2,250	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	1981	2,250	Dust Collector	CE-78	SP-107
				Dust Collector	CE-79	SP-108
EU-74	Storage Bin	1981	2,250	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	1981	2,250	Dust Collector	CE-81	SP-105
EU-76	Extruder	1981	2,250	*none*	-	-
EU-77	Extruder	1981	375	*none*	-	-
EU-78	Extruder	2014	375	*none*	-	-
EU-82	Box Dumper	1981	648	Cyclone Dust Collector	CE-74	*indoors*

* The extruders (EU-76, EU-77, and EU-78) are considered a bottleneck for the upstream emission units for Line 62 (EU-60 through EU-75). The actual maximum capacities are not provided.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall

comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 62					
EU-68	Drying Bin	Dust Collector	CE-75	SP-101	0.05
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*	0.05
EU-70	Storage Bin	Baghouse	CE-67	SP-104	0.05
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*	0.05
EU-72	Storage Bin	Dust Collector	CE-77	SP-106	0.05
EU-73	Drying Bin	Dust Collector	CE-78	SP-107	0.05
EU-74	Storage Bin	Dust Collector	CE-79	SP-108	0.05
EU-75	Storage Bin	Dust Collector	CE-80	SP-109	0.05

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 62						
EU-68	Drying Bin	Dust Collector	CE-75	SP-101	0.05	0.05
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*	0.05	0.05
EU-70	Storage Bin	Baghouse	CE-67	SP-104	0.05	0.05
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*	0.05	0.05
EU-72	Storage Bin	Dust Collector	CE-77	SP-106	0.05	0.05
EU-73	Drying Bin	Dust Collector	CE-78	SP-107	0.05	0.05
EU-74	Storage Bin	Dust Collector	CE-79	SP-108	0.05	0.05
EU-75	Storage Bin	Dust Collector	CE-80	SP-109	0.05	0.05

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant

Deterioration (PSD)) not applicable.

D.3.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 62				
EU-60	Polymer Holding Bin	Dust Collector	CE-71	SP-92
EU-61	Storage Bin	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin			
EU-63	Storage Bin			
EU-64	Polymer Blender	Dust Collector	CE-68	*indoors*
EU-65A	Polymer Blending	Dust Collector	CE-73	*indoors*
EU-65B	Polymer Blending			
EU-66	Drying Bin	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	Cyclone Dust Collector	CE-69	*indoors*
EU-68	Drying Bin	Dust Collector	CE-75	SP-101
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*
EU-70	Storage Bin	Baghouse	CE-67	SP-104
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*
EU-72	Storage Bin	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	Dust Collector	CE-78	SP-107
		Dust Collector	CE-79	SP-108
EU-74	Storage Bin	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	Dust Collector	CE-81	SP-105
EU-76	Extruder	*none*	-	-
EU-77	Extruder	*none*	-	-
EU-78	Extruder	*none*	-	-
EU-82	Box Dumper	Cyclone Dust Collector	CE-74	*indoors*

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.3.5 Particulate Control

(a) In order to assure compliance with Conditions D.3.1, D.3.2, and D.3.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 62				
EU-60	Polymer Holding Bin	Dust Collector	CE-71	SP-92
EU-61	Storage Bin	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin			
EU-63	Storage Bin			
EU-64	Polymer Blender	Dust Collector	CE-68	*indoors*
EU-65A	Polymer Blending	Dust Collector	CE-73	*indoors*

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
EU-65B	Polymer Blending			
EU-66	Drying Bin	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	Cyclone Dust Collector	CE-69	*indoors*
EU-68	Drying Bin	Dust Collector	CE-75	SP-101
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*
EU-70	Storage Bin	Baghouse	CE-67	SP-104
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*
EU-72	Storage Bin	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	Dust Collector	CE-78	SP-107
		Dust Collector	CE-79	SP-108
EU-74	Storage Bin	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	Dust Collector	CE-81	SP-105
EU-82	Box Dumper	Cyclone Dust Collector	CE-74	*indoors*

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.3.6 Visible Emissions Notations

(a) Visible emission notations of all baghouse and dust collectors stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 62				
EU-60	Polymer Holding Bin	Dust Collector	CE-71	SP-92
EU-68	Drying Bin	Dust Collector	CE-75	SP-101
EU-70	Storage Bin	Baghouse	CE-67	SP-104
EU-72	Storage Bin	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	Dust Collector	CE-78	SP-107
		Dust Collector	CE-79	SP-108
EU-74	Storage Bin	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	Dust Collector	CE-81	SP-105

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's

obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.7 Filter Cartridge/Dust Collector Inspections

The Permittee shall perform quarterly inspections of the filter cartridge and dust collectors controlling particulate emissions from the emission units listed below, to verify that they are being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective filters/bags shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 62				
EU-61	Storage Bin	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin			
EU-63	Storage Bin			
EU-64	Polymer Blender	Dust Collector	CE-68	*indoors*
EU-65A	Polymer Blending	Dust Collector	CE-73	*indoors*
EU-65B	Polymer Blending			
EU-66	Drying Bin	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	Cyclone Dust Collector	CE-69	*indoors*
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*
EU-82	Box Dumper	Cyclone Dust Collector	CE-74	*indoors*

D.3.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.3.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.6, the Permittee shall maintain records of daily visible emission notations of the baghouse and dust collectors stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.3.7, the Permittee shall maintain

records of the dates and results of the inspections required under Condition D.3.7.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) extrusion line, identified as Line 63, constructed in 1981, with a bottleneck maximum throughput capacity of 2,800 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 63						
EU-90	Storage Bin	1981	2,800	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin	1981	2,800			
EU-93	Blender	1981	2,800			
EU-92	Drying Bin	1981	2,800	Dust Collector	CE-101	SP-141
EU-94	Extruder	1981	2,050	*none*	-	-
EU-95	Extruder	1981	375	*none*	-	-
EU-96	Extruder	1981	375	*none*	-	-
* The extruders (EU-94, EU-95, and EU-96) are considered a bottleneck for the upstream emission units for Line 63 (EU-90 through EU-93). The actual maximum capacities are not provided.						

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 63					
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*	0.17
EU-91	Storage Bin				
EU-93	Blender				
EU-92	Drying Bin	Dust Collector	CE-101	SP-141	0.06

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.4.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 63						
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*	0.17	0.17
EU-91	Storage Bin					
EU-93	Blender					
EU-92	Drying Bin	Dust Collector	CE-101	SP-141	0.06	0.06

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.4.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 63				
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin			
EU-93	Blender			
EU-92	Drying Bin	Dust Collector	CE-101	SP-141
EU-94	Extruder	*none*	-	-
EU-95	Extruder	*none*	-	-
EU-96	Extruder	*none*	-	-

D.4.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.4.5 Particulate Control

(a) In order to assure compliance with Conditions D.4.1, D.4.2, and D.4.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 63				
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin			
EU-93	Blender			

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
EU-92	Drying Bin	Dust Collector	CE-101	SP-141

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.4.6 Visible Emissions Notations

(a) Visible emission notations of the dust collector stack exhaust, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 63				
EU-92	Drying Bin	Dust Collector	CE-101	SP-141

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.4.7 Filter Cartridge Inspections

The Permittee shall perform quarterly inspections of the filter cartridge controlling particulate emissions from the emission units listed below, to verify that it is being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective filters shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 63				
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin			
EU-93	Blender			

D.4.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.4.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.6, the Permittee shall maintain records of daily visible emission notations of the dust collector stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.4.7, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.4.7.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) One (1) extrusion line, identified as Line 64, constructed in 1991, with a bottleneck maximum throughput capacity of 8,400 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 64						
EU-110	Drying Bin	2007	6,600	Filter	CE-129	*indoors*
EU-111	Storage Bin	1991	6,600	Cyclone	CE-120	SP-170
				Dust Collector	CE-121	
EU-112	Drying Bin	2007	6,600	Filter Cartridge	CE-123	*indoors*
EU-113	Nauta Mixer	1991	6,600	Cyclone Dust Collector	CE-127	*indoors*
				Filter Separator	CE-128	SP-172
-	Main Extruder**	1991	6,600	*none*	-	-
EU-117	Blending System	2007	6,600	Filter Cartridge	CE-134	*indoors*
EU-118	Drying Bin	1991	900	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	1991	900	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	2007	900	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin	2007	900			
-	Satellite Extruder***	2007	900	*none*	-	-
-	Satellite Extruder***	2007	900	*none*	-	-
EU-122	Storage Bin	1991	900	Cyclone Dust Collector	CE-136	*indoors*
EU-123	Box Dumping Station	1991	900	*none*	-	-
EU-125	Storage Bin	1991	2,000	Baghouse	CE-137	SP-192
EU-126	Pelletizer	1991	2,000	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer	1991	2,000			
EU-127	Storage Bin	1991	2,000	Baghouse	CE-139	SP-195
EU-128	Extruder	1991	2,000	*none*	-	-

* The extruders (EU-113, EU-120, EU-121, and EU-128) are considered a bottleneck for the upstream emission units for Line 64 (EU-110 through EU-129). The actual maximum capacities are not provided.
** Main extruder is directly fed by the Nauta Mixer (EU-113).
*** One satellite extruder is directly fed by feeding bin EU-120, the other satellite extruder is directly fed by feeding bin EU-121.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 64					
EU-110	Drying Bin	Filter	CE-129	*indoors*	0.13
EU-111	Storage Bin	Cyclone	CE-120	SP-170	0.13
		Dust Collector	CE-121		
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*	0.13
EU-113	Nauta Mixer	Filter Separator	CE-128	SP-172	0.13
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*	0.13
EU-118	Drying Bin	Dust Collector	CE-131	SP-184	0.02
EU-119	Drying Bin	Dust Collector	CE-132	SP-185	0.02
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188	0.04
EU-121	Feeding Bin				
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*	0.02
EU-125	Storage Bin	Baghouse	CE-137	SP-192	0.04
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*	0.08
EU-129	Pelletizer				
EU-127	Storage Bin	Baghouse	CE-139	SP-195	0.04

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.5.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 64						
EU-110	Drying Bin	Filter	CE-129	*indoors*	0.13	0.13
EU-111	Storage Bin	Cyclone	CE-120	SP-170	0.13	0.13
		Dust Collector	CE-121			
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*	0.13	0.13
EU-113	Nauta Mixer	Filter Separator	CE-128	SP-172	0.13	0.13
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*	0.13	0.13

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
EU-118	Drying Bin	Dust Collector	CE-131	SP-184	0.02	0.02
EU-119	Drying Bin	Dust Collector	CE-132	SP-185	0.02	0.02
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188	0.04	0.04
EU-121	Feeding Bin					
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*	0.02	0.02
EU-125	Storage Bin	Baghouse	CE-137	SP-192	0.04	0.04
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*	0.08	0.08
EU-129	Pelletizer					
EU-127	Storage Bin	Baghouse	CE-139	SP-195	0.04	0.04

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.5.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 64				
EU-110	Drying Bin	Filter	CE-129	*indoors*
EU-111	Storage Bin	Cyclone	CE-120	SP-170
		Dust Collector	CE-121	
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*
EU-113	Nauta Mixer	Cyclone Dust Collector	CE-127	*indoors*
		Filter Separator	CE-128	SP-172
-	Main Extruder**	*none*	-	-
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*
EU-118	Drying Bin	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin			
-	Satellite Extruder***	*none*	-	-
-	Satellite Extruder***	*none*	-	-
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*
EU-123	Box Dumping Station	*none*	-	-
EU-125	Storage Bin	Baghouse	CE-137	SP-192
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer			
EU-127	Storage Bin	Baghouse	CE-139	SP-195

EU-128	Extruder	*none*	-	-

D.5.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.5.5 Particulate Control

(a) In order to assure compliance with Conditions D.5.1, D.5.2, and D.5.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 64				
EU-110	Drying Bin	Filter	CE-129	*indoors*
EU-111	Storage Bin	Cyclone	CE-120	SP-170
		Dust Collector	CE-121	
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*
EU-113	Nauta Mixer	Cyclone Dust Collector	CE-127	*indoors*
		Filter Separator	CE-128	SP-172
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*
EU-118	Drying Bin	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin			
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*
EU-125	Storage Bin	Baghouse	CE-137	SP-192
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer			
EU-127	Storage Bin	Baghouse	CE-139	SP-195

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.5.6 Testing Requirements [326 IAC 2-1.1-11]

(a) Filter Separator (CE-128)
Not later than 180 days after the issuance date of this permit, Permit No. F167-39727-00045, the Permittee shall perform PM, PM10, and PM2.5 testing of the filter separator (CE-128) controlling the Nauta Mixer (Line 64: EU-113) utilizing methods approved by the commissioner. This test shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 includes filterable and condensable PM.

(b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.5.7 Visible Emissions Notations

(a) Visible emission notations of all baghouses, dust collectors, and cyclone stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 64				
EU-111	Storage Bin	Cyclone	CE-120	SP-170
		Dust Collector	CE-121	
EU-118	Drying Bin	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin			
EU-125	Storage Bin	Baghouse	CE-137	SP-192
EU-127	Storage Bin	Baghouse	CE-139	SP-195

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.5.8 Filter/Filter Cartridge/Dust Collector Inspections

The Permittee shall perform quarterly inspections of the filter, filter cartridges and dust collectors controlling particulate emissions from the emission units listed below, to verify that they are being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective filters/bags shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 64				
EU-110	Drying Bin	Filter	CE-129	*indoors*
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*

EU-113	Nauta Mixer	Cyclone Dust Collector	CE-127	*indoors*
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer			

D.5.9 Parametric Monitoring

The Permittee shall record the pressure drop across the filter separator at least once per day when the associated emission units are in operation:

Process Line: Emission Unit ID	Emission Unit/Process	Control Device	Pressure Drop Range (inches of water)
Line 64: EU-113	Nauta Mixer	Filter Separator (CE-128)	2.0 to 8.0

When, for any one reading, the pressure drop across a dust collector and/or filter separator is outside the normal range, the Permittee shall take a reasonable response. The normal pressure drop range for these units is listed in the table above, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.5.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.5.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.7, the Permittee shall maintain records of daily visible emission notations of the baghouses, dust collectors, and cyclone stack exhausts. The Permittee shall include in its daily record when a visible emission

notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.5.8, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.5.8.

(c) To document the compliance status with Condition D.5.9, the Permittee shall maintain daily records of pressure drop across the filter separator, identified as the following:

Control Device
Filter Separator (CE-128)

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) One (1) extrusion line, identified as Line 65, constructed in 1996, with a bottleneck maximum throughput capacity of 9,700 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 65						
EU-130	Drying Bin	1996	2,700	Baghouse	CE-141	SP-201
EU-131	Drying Bin	1996	2,700	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	1996	2,700	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	1996	750	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	1996	750	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	1996	2,000	Baghouse	CE-148	SP-211
EU-136	Polymer Bin	1996	2,700			
EU-137	Feeding Bin	2015	2,000	Dust Collector	CE-144	SP-206
-	Intermediate Extruder**	2015	2,000	*none*	-	-
EU-138	Feeding Bin	2015	2,000	Dust Collector	CE-145	SP-204
-	Intermediate Extruder**	2015	2,000	*none*	-	-
EU-139	Feeding Bin	2011	1,500	Dust Collector	CE-154	SP-231
-	Satellite Extruder**	2011	1,500	*none*	-	-
EU-140	Feeding Bin	2011	1,500	Dust Collector	CE-155	SP-232
-	Satellite Extruder**	2011	1,500	*none*	-	-
EU-141	Polymer Blending	2011	2,700	Dust Collector	CE-146	SP-205
				Dust Collector	CE-152	SP-213
EU-146	Extruder	1996	2,700	*none*	-	-

* The extruders (EU-137, EU-138, EU-139, EU-140, and EU-146) are considered a bottleneck for the upstream emission units for Line 65 (EU-130 through EU-141). The actual maximum capacities are not provided.
** Each extruder is directly fed by only the one (1) Feeding Bin (EU-137, EU-138, EU-139, or EU-140) listed immediately before it.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.6.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 65					
EU-130	Drying Bin	Baghouse	CE-141	SP-201	0.05
EU-131	Drying Bin	Filter Separator	CE-142	SP-202	0.05
EU-132	Drying Bin	Filter Separator	CE-143	SP-203	0.05
EU-133	Drying Bin	Dust Collector	CE-149	SP-209	0.02
EU-134	Drying Bin	Dust Collector	CE-150	SP-210	0.02
EU-135	Polymer Bin	Baghouse	CE-148	SP-211	0.09
EU-136	Polymer Bin				
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206	0.04
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204	0.04
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231	0.03
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232	0.03
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205	0.05
		Dust Collector	CE-152	SP-213	

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.6.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 65						
EU-130	Drying Bin	Baghouse	CE-141	SP-201	0.05	0.05
EU-131	Drying Bin	Filter Separator	CE-142	SP-202	0.05	0.05
EU-132	Drying Bin	Filter Separator	CE-143	SP-203	0.05	0.05
EU-133	Drying Bin	Dust Collector	CE-149	SP-209	0.02	0.02
EU-134	Drying Bin	Dust Collector	CE-150	SP-210	0.02	0.02
EU-135	Polymer Bin	Baghouse	CE-148	SP-211	0.09	0.09
EU-136	Polymer Bin					
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206	0.04	0.04
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204	0.04	0.04
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231	0.03	0.03
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232	0.03	0.03
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205	0.05	0.05
		Dust Collector	CE-152	SP-213		

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant

Deterioration (PSD)) not applicable.

D.6.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 65				
EU-130	Drying Bin	Baghouse	CE-141	SP-201
EU-131	Drying Bin	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	Baghouse	CE-148	SP-211
EU-136	Polymer Bin			
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206
-	Intermediate Extruder	*none*	-	-
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204
-	Intermediate Extruder	*none*	-	-
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231
-	Satellite Extruder	*none*	-	-
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232
-	Satellite Extruder	*none*	-	-
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205
		Dust Collector	CE-152	SP-213
EU-146	Extruder	*none*	-	-

D.6.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.6.5 Particulate Control

(a) In order to assure compliance with Conditions D.6.1, D.6.2, and D.6.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 65				
EU-130	Drying Bin	Baghouse	CE-141	SP-201
EU-131	Drying Bin	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	Baghouse	CE-148	SP-211
EU-136	Polymer Bin			
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205
		Dust Collector	CE-152	SP-213

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.6.6 Visible Emissions Notations

(a) Visible emission notations of all baghouses, filter separators, and dust collectors stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 65				
EU-130	Drying Bin	Baghouse	CE-141	SP-201
EU-131	Drying Bin	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	Baghouse	CE-148	SP-211
EU-136	Polymer Bin			
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205
		Dust Collector	CE-152	SP-213

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.6.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.6.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.6, the Permittee shall maintain records of daily visible emission notations of the baghouses, filter separators, and dust collectors stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(g) One (1) extrusion line, identified as Line 71, constructed in 1998, with a bottleneck maximum throughput capacity of 11,700 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 71						
EU-160	Storage Silo	1997	5,000	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	1997	5,000	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	1997	9,700	Filter Separator	CE-160	SP-240
EU-163	Storage Bin	1998	4,000	Filter Cartridge	CE-162	*indoors*
EU-164	Blending System	2007	9,700	Dust Collector	CE-163	SP-245
EU-165	Storage Bin	1998	9,700	Filter	CE-179	SP-246
EU-166	Drying Bin	1998	9,700	Filter	CE-164	SP-247
EU-167	Extruder	1998	9,700	*none*	-	-
EU-171	Drying Bin	1998	1,000	Filter	CE-169	SP-266
EU-172	Drying Bin	1998	1,000	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	2007	1,000	Dust Collector	CE-173	SP-268
-	Satellite Extruder**	2007	1,000	*none*	-	-
EU-174	Feeding Bin	2007	1,000	Dust Collector	CE-174	SP-269
-	Satellite Extruder**	2007	1,000	*none*	-	-
EU-175	Box Dumping Station	1998	1,000	*none*	-	-
EU-176	Reclaim Extruder	1998	110	*none*	-	-
EU-177	Supersack Unloader	2008	1,000	*none*	-	-
EU-178	Bag Unloader	2016	1,000	*none*	-	-
EU-179	Sack Dumper Bin	2008	1,000	*none*	-	-
EU-182	Rail Car Filling	1969	3,000	*none*	-	-
EU-183	Reclaim Bin	1969	5,000	*none*	-	-

* The extruders (EU-167, EU-173, and EU-174) are considered a bottleneck for the upstream emission units for Line 71 (EU-160 through EU-175). The actual maximum capacities are not provided.
** Each extruder is directly fed by only the one (1) Feeding Bin (EU-173 or EU-174) listed immediately before it.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.7.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 71					
EU-160	Storage Silo	Dust Collector	CE-177	SP-241	0.10
EU-161	Storage Silo	Dust Collector	CE-178	SP-242	0.10
EU-162	Storage Bin	Filter Separator	CE-160	SP-240	0.19
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*	0.08
EU-164	Blending System	Dust Collector	CE-163	SP-245	0.19
EU-165	Storage Bin	Filter	CE-179	SP-246	0.19
EU-166	Drying Bin	Filter	CE-164	SP-247	0.19
EU-171	Drying Bin	Filter	CE-169	SP-266	0.02
EU-172	Drying Bin	Cyclone	CE-171	SP-267	0.02
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268	0.02
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269	0.02

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.7.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 71						
EU-160	Storage Silo	Dust Collector	CE-177	SP-241	0.10	0.10
EU-161	Storage Silo	Dust Collector	CE-178	SP-242	0.10	0.10
EU-162	Storage Bin	Filter Separator	CE-160	SP-240	0.19	0.19

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*	0.08	0.08
EU-164	Blending System	Dust Collector	CE-163	SP-245	0.19	0.19
EU-165	Storage Bin	Filter	CE-179	SP-246	0.19	0.19
EU-166	Drying Bin	Filter	CE-164	SP-247	0.19	0.19
EU-171	Drying Bin	Filter	CE-169	SP-266	0.02	0.02
EU-172	Drying Bin	Cyclone	CE-171	SP-267	0.02	0.02
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268	0.02	0.02
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269	0.02	0.02

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.7.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 71				
EU-160	Storage Silo	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	Filter Separator	CE-160	SP-240
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*
EU-164	Blending System	Dust Collector	CE-163	SP-245
EU-165	Storage Bin	Filter	CE-179	SP-246
EU-166	Drying Bin	Filter	CE-164	SP-247
EU-167	Extruder	*none*	-	-
EU-171	Drying Bin	Filter	CE-169	SP-266
EU-172	Drying Bin	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268
-	Satellite Extruder	*none*	-	-
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269
-	Satellite Extruder	*none*	-	-
EU-175	Box Dumping Station	*none*	-	-
EU-176	Reclaim Extruder	*none*	-	-
EU-177	Supersack Unloader	*none*	-	-
EU-178	Bag Unloader	*none*	-	-
EU-179	Sack Dumper Bin	*none*	-	-
EU-182	Rail Car Filling	*none*	-	-
EU-183	Reclaim Bin	*none*	-	-

D.7.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.7.5 Particulate Control

(a) In order to assure compliance with Conditions D.7.1, D.7.2, and D.7.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 71				
EU-160	Storage Silo	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	Filter Separator	CE-160	SP-240
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*
EU-164	Blending System	Dust Collector	CE-163	SP-245
EU-165	Storage Bin	Filter	CE-179	SP-246
EU-166	Drying Bin	Filter	CE-164	SP-247
EU-171	Drying Bin	Filter	CE-169	SP-266
EU-172	Drying Bin	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.7.6 Testing Requirements [326 IAC 2-1.1-11]

(a) Dust Collector (CE-163)
Not later than 180 days after the issuance date of this permit, Permit No. F167-39727-00045, the Permittee shall perform PM, PM10, and PM2.5 testing of the dust collector (CE-163) controlling the blending system (Line 71: EU-164) utilizing methods approved by the commissioner. This test shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 includes filterable and condensable PM.

(b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.7.7 Visible Emissions Notations

(a) Visible emission notations of all dust collectors, filters, cyclone, and filter separator stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 71				
EU-160	Storage Silo	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	Filter Separator	CE-160	SP-240
EU-165	Storage Bin	Filter	CE-179	SP-246
EU-166	Drying Bin	Filter	CE-164	SP-247
EU-171	Drying Bin	Filter	CE-169	SP-266
EU-172	Drying Bin	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.7.8 Filter Cartridge Inspections

The Permittee shall perform quarterly inspections of the filter cartridge controlling particulate emissions from the storage bin, as listed below, to verify that it is being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective filters shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 71				
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*

D.7.9 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector at least once per day when the associated emission units are in operation:

Process Line: Emission Unit ID	Emission Unit/Process	Control Device	Pressure Drop Range (inches of water)
Line 71: EU-164	Blending System	Dust Collector (CE-163)	2.0 to 8.0

When, for any one reading, the pressure drop across a dust collector is outside the normal range, the Permittee shall take a reasonable response. The normal pressure drop range for these units is listed in the table above, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.7.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.7.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.7, the Permittee shall maintain records of daily visible emission notations of the dust collectors, filters, cyclone, and filter separator stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.7.8, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.7.8.

(c) To document the compliance status with Condition D.7.9, the Permittee shall maintain daily records of pressure drop across the dust collector, identified as the following:

Control Device
Dust Collector (CE-163)

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(h) One (1) operation, identified as Tubular Reclaim and Secondary Processing, constructed in 1969, with a bottleneck maximum throughput capacity of 2,730 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing						
EU-07	Extruder	1969	2,730	*none*	-	SP-24
EU-08	Polymer Transfer	1975	2,730	Filter	CE-25	*indoors*
EU-09	Injection Molder	2013	2,730	Dust Collector	CE-26	*indoors*
EU-10	Injection Molder	2013	2,730	Dust Collector	CE-27	*indoors*
EU-11	Extruder	1975	2,730	*none*	-	SP-30
EU-FB1	Fluff Bin	1969	1,200	Baghouse	CE-20	SP-31
EU-FB2	Fluff Bin	1969	1,200	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	1969	1,200	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	1969	1,200	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	1969	1,200	Baghouse	CE-24	SP-35
EU-CH1	Flake Grinder	1969	130	*none*	-	SP-36
EU-CH2	Flake Grinder	1969	1,200	*none*	-	SP-37
EU-CH3	Flake Grinder	1969	1,000	*none*	-	SP-38
EU-CH4	Flake Grinder	1969	1,200	*none*	-	SP-39
EU-CH5	Flake Grinder	1969	1,200	*none*	-	SP-23

* The extruders (EU-07 and EU-11) are considered a bottleneck for the Fluff Bins (EU-FB1 through EU-FB5) and the Flake Grinders (EU-CH1 through EU-CH5). The actual maximum capacities are not provided.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.8.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Tubular Reclaim and Secondary Processing					
EU-08	Polymer Transfer	Filter	CE-25	*indoors*	0.05
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*	0.05
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*	0.05

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31	0.02
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32	0.02
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33	0.02
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34	0.02
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35	0.02

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.8.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Tubular Reclaim and Secondary Processing						
EU-08	Polymer Transfer	Filter	CE-25	*indoors*	0.05	0.05
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*	0.05	0.05
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*	0.05	0.05
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31	0.02	0.02
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32	0.02	0.02
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33	0.02	0.02
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34	0.02	0.02
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35	0.02	0.02

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.8.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing				
EU-07	Extruder	*none*	-	SP-24
EU-08	Polymer Transfer	Filter	CE-25	*indoors*
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*

EU-10	Injection Molder	Dust Collector	CE-27	*indoors*
EU-11	Extruder	*none*	-	SP-30
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35
EU-CH1	Flake Grinder	*none*	-	SP-36
EU-CH2	Flake Grinder	*none*	-	SP-37
EU-CH3	Flake Grinder	*none*	-	SP-38
EU-CH4	Flake Grinder	*none*	-	SP-39
EU-CH5	Flake Grinder	*none*	-	SP-23

D.8.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.8.5 Particulate Control

(a) In order to assure compliance with Conditions D.8.1, D.8.2, and D.8.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing				
EU-08	Polymer Transfer	Filter	CE-25	*indoors*
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.8.6 Visible Emissions Notations

(a) Visible emission notations of all baghouses stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing				
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31

EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.8.7 Filter/Dust Collector Inspections

The Permittee shall perform quarterly inspections of the filter and dust collectors controlling particulate emissions from the emission units listed below, to verify that they are being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective filters/bags shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing				
EU-08	Polymer Transfer	Filter	CE-25	*indoors*
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*

D.8.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse’s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.8.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.8.6, the Permittee shall maintain records of daily visible emission notations of the baghouses stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.8.7, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.8.7.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(i) One (1) handling line, identified as Tenter Polymer Handling, constructed in 1980, with a maximum throughput capacity of 24,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Tenter Polymer Handling						
EU-30	Polymer Conveying	1980	7,000	Dust Collector	CE-40	SP-60
EU-31	Polymer Conveying	1980	7,000	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	1979	10,000	Dust Collector	CE-52	SP-72
EU-Silo 13*	Polymer Silo	1980	1,000	Cyclone	CE-42	SP-62
EU-Silo 14*	Polymer Silo	1980	1,000			
EU-Silo 15*	Polymer Silo	1980	1,000	Cyclone	CE-43	SP-63
EU-Silo 16*	Polymer Silo	1980	1,000			
EU-Silo 17*	Polymer Silo	1991	1,000	Cyclone	CE-44	SP-64
EU-Silo 18*	Polymer Silo	1991	1,000			
EU-Silo 19*	Polymer Silo	1991	1,000	Cyclone	CE-45	SP-65
EU-Silo 20*	Polymer Silo	1991	1,000			
EU-Silo 21*	Polymer Silo	1991	1,000	Cyclone	CE-46	SP-66
EU-Silo 22*	Polymer Silo	1991	1,000			
EU-Silo 23*	Polymer Silo	1991	1,000	Cyclone	CE-47	SP-67
EU-Silo 24*	Polymer Silo	1991	1,000			
EU-Silo 25*	Polymer Silo	1991	1,000	Cyclone	CE-48	SP-68
EU-Silo 26*	Polymer Silo	1991	1,000			
Total for EU-Silos 13-26			14,000			
EU-Silo 27**	Polymer Silo	1968	1,750	Cyclone	CE-50	SP-70
EU-Silo 28**	Polymer Silo	1968	1,750	Cyclone	CE-51	SP-71
EU-Silo 29**	Polymer Silo	1968	1,750			
EU-Silo 30**	Polymer Silo	2000	1,750	Cyclone	CE-49	SP-69
Total for EU-Silos 27-30			7,000			

* EU-Silos 13 through 26 are fed by EU-30 and EU-31.
** EU-Silos 27 through 30 are fed by EU-32.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.9.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Tenter Polymer Handling					
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60	0.14
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61	0.14
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72	0.20
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62	0.04
EU-Silo 14	Polymer Silo				
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63	0.04
EU-Silo 16	Polymer Silo				
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64	0.04
EU-Silo 18	Polymer Silo				
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65	0.04
EU-Silo 20	Polymer Silo				
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66	0.04
EU-Silo 22	Polymer Silo				
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67	0.04
EU-Silo 24	Polymer Silo				
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68	0.04
EU-Silo 26	Polymer Silo				
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70	0.04
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71	0.07
EU-Silo 29	Polymer Silo				
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69	0.04

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.9.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Tenter Polymer Handling						
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60	0.14	0.14
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61	0.14	0.14

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72	0.20	0.20
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62	0.04	0.04
EU-Silo 14	Polymer Silo					
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63	0.04	0.04
EU-Silo 16	Polymer Silo					
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64	0.04	0.04
EU-Silo 18	Polymer Silo					
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65	0.04	0.04
EU-Silo 20	Polymer Silo					
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66	0.04	0.04
EU-Silo 22	Polymer Silo					
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67	0.04	0.04
EU-Silo 24	Polymer Silo					
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68	0.04	0.04
EU-Silo 26	Polymer Silo					
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70	0.04	0.04
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71	0.07	0.07
EU-Silo 29	Polymer Silo					
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69	0.04	0.04

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.9.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tenter Polymer Handling				
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62
EU-Silo 14	Polymer Silo			
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63
EU-Silo 16	Polymer Silo			
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64
EU-Silo 18	Polymer Silo			
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65
EU-Silo 20	Polymer Silo			
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66
EU-Silo 22	Polymer Silo			
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67
EU-Silo 24	Polymer Silo			

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68
EU-Silo 26	Polymer Silo			
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71
EU-Silo 29	Polymer Silo			
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69

D.9.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.9.5 Particulate Control

(a) In order to assure compliance with Conditions D.9.1, D.9.2, and D.9.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tenter Polymer Handling				
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62
EU-Silo 14	Polymer Silo			
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63
EU-Silo 16	Polymer Silo			
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64
EU-Silo 18	Polymer Silo			
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65
EU-Silo 20	Polymer Silo			
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66
EU-Silo 22	Polymer Silo			
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67
EU-Silo 24	Polymer Silo			
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68
EU-Silo 26	Polymer Silo			
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71
EU-Silo 29	Polymer Silo			
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.9.6 Testing Requirements [326 IAC 2-1.1-11]

(a) Dust Collector (CE-49)

Not later than 180 days after the issuance date of this permit, Permit No. F167-39727-00045, the Permittee shall perform PM, PM10, and PM2.5 testing of the dust collector (CE-49) controlling the polymer silo (Tenter Polymer Handling: EU-Silo 30) utilizing methods approved by the commissioner. This test shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 includes filterable and condensable PM.

(b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.9.7 Visible Emissions Notations

(a) Visible emission notations of all dust collectors and cyclones stack exhausts, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tenter Polymer Handling				
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62
EU-Silo 14	Polymer Silo			
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63
EU-Silo 16	Polymer Silo			
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64
EU-Silo 18	Polymer Silo			
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65
EU-Silo 20	Polymer Silo			
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66
EU-Silo 22	Polymer Silo			
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67
EU-Silo 24	Polymer Silo			
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68
EU-Silo 26	Polymer Silo			
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71
EU-Silo 29	Polymer Silo			
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.9.8 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector at least once per day when the associated emission units are in operation:

Process Line: Emission Unit ID	Emission Unit/Process	Control Device	Pressure Drop Range (inches of water)
Tenter Polymer Handling: EU-Silo 30	Polymer Silo	Dust Collector (CE-49)	2.0 to 8.0

When, for any one reading, the pressure drop across a dust collector is outside the normal range, the Permittee shall take a reasonable response. The normal pressure drop range for these units is listed in the table above, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.9.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.9.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.9.7, the Permittee shall maintain records of daily visible emission notations of the dust collectors and cyclones stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did

not operate that day).

(b) To document the compliance status with Condition D.9.8, the Permittee shall maintain daily records of pressure drop across the dust collector, identified as the following:

Control Device
Dust Collector (CE-49)

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.10 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(j) One (1) reclaim storage system, identified as Tenter Reclaim, constructed in 1981, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Tenter Reclaim						
EU-210	Polypropylene Flake Storage	1981	426	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	1981	289	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	1981	426	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	1981	426	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	1981	1,086	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin	1981	1,086			
EU-216	Polypropylene Pellet Bin	1981	715			
EU-217	Polypropylene Pellet Bin	1981	715			

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.10.1 PSD Minor Source Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

The PM emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Tenter Reclaim					
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300	0.01
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301	0.01
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302	0.01
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303	0.01
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304	0.07

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
EU-215	Polypropylene Pellet Bin				
EU-216	Polypropylene Pellet Bin				
EU-217	Polypropylene Pellet Bin				

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.10.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Tenter Reclaim						
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300	0.01	0.01
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301	0.01	0.01
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302	0.01	0.01
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303	0.01	0.01
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304	0.07	0.07
EU-215	Polypropylene Pellet Bin					
EU-216	Polypropylene Pellet Bin					
EU-217	Polypropylene Pellet Bin					

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.10.3 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tenter Reclaim				
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin			
EU-216	Polypropylene Pellet Bin			
EU-217	Polypropylene Pellet Bin			

D.10.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.10.5 Particulate Control

(a) In order to assure compliance with Conditions D.10.1, D.10.2, and D.10.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tenter Reclaim				
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin			
EU-216	Polypropylene Pellet Bin			
EU-217	Polypropylene Pellet Bin			

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.10.6 Visible Emissions Notations

(a) Visible emission notations of all dust collectors stack exhausts, as indicated in the table

below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Tenter Reclaim				
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin			
EU-216	Polypropylene Pellet Bin			
EU-217	Polypropylene Pellet Bin			

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.10.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.10.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.10.6, the Permittee shall maintain records of daily visible emission notations of the dust collectors stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.11 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(k) One (1) process line, identified as Compounder Line 1, constructed in 2016, with a bottleneck maximum throughput capacity of 3,306 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Compounder Line 1						
EU-15	Virgin Polymer Day Bin	1969	3,306	Baghouse	CE-53	SP-43
EU-16	Dry Dust Extraction	2016	3,306	Dust Collector	CE-54	SP-44
EU-17	Virgin Pellet Conveying	2016	3,306	Dust Collector	CE-35	*indoors*
EU-18	Virgin Pellet Feeding	2016	3,306	Filter	CE-38	*indoors*
EU-19	Powder Transfer	2016	3,306	Dust Collector	CE-28	*indoors*
EU-20	Extruder and Vapor Extraction	2016	3,306	*none*	-	SP-48
EU-21	Finish Pellet Conveying	2016	3,306	Filter Cartridge	CE-32	*indoors*
EU-23	Powder Mixing Station	2016	50	Filter	CE-31	*indoors*
* The extruder, identified as EU-20, is considered a bottleneck for the upstream bin, conveying, feeding, and transfer units in Compounder Line 1. The actual maximum capacities are not provided.						

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.11.1 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the table below:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Compounder Line 1						
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43	0.06	0.06
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44	0.06	0.06

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*	0.06	0.06
EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*	0.06	0.06
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*	0.06	0.06
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*	0.06	0.06

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.11.2 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Compounder Line 1				
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44
EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*
EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*
EU-20	Extruder and Vapor Extraction	*none*	-	SP-48
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*
EU-23	Powder Mixing Station	Filter	CE-31	*indoors*

D.11.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.11.4 Particulate Control

(a) In order to assure compliance with Conditions D.4.1, D.4.2, and D.4.3, the control devices for particulate control shall be in operation and control emissions from the corresponding following processes at all times they are in operation:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Compounder Line 1				
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44

EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*
EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*
EU-23	Powder Mixing Station	Filter	CE-31	*indoors*

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

D.11.5 Visible Emissions Notations

(a) Visible emission notations of the baghouse and dust collector stack exhaust, as indicated in the table below, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Compounder Line 1				
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.11.6 Dust Collector/Filter Cartridge Inspections

The Permittee shall perform quarterly inspections of the dust collectors, filter, and filter cartridge controlling particulate emissions from the emission units listed below, to verify that it is being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective bags/filters shall be replaced.

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Compounder Line 1				
EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*

EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*

D.11.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For a single compartment baghouse/dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse/dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.11.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.11.5, the Permittee shall maintain records of daily visible emission notations of the baghouse and dust collector stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.11.6, the Permittee shall maintain records of the dates and results of the inspections required under Condition D.11.6.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.12 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(l) Two (2) secondary processing machines, consisting of the following emission units:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
EU-MT94	Metalizer	2012	42	*none*	-	SP-40, SP-41
EU-MT95	Metalizer	2016	42	*none*	-	SP-42

(o) Six (6) natural gas-fired process heaters, each with no control device, and consisting of the following:

Process Line	Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
Line 64	EU-115	Oven*	1991	6.3	SP-174 through SP-179, and SP-197
	EU-129	Flame Treater	1991	3.09	SP-198
Line 65	EU-144	Tenter Oven*	1996	6.35	SP-218 through SP-225
Line 71	EU-169	Flame Treater	1998	0.51	SP-261, SP-262
	EU-180	Tenter Oven*	1998	10.5	SP-251 through SP-260
-	EU-203	Hot Water Heater	2012	2.97	SP-293
*Low NOx Burner					

(p) Seven (7) natural gas-fired space heaters, each with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-148	Space Heater	1996	3.8	SP-215
EU-149	Space Heater	1996	3.8	SP-216
EU-150	Space Heater	1996	3.8	SP-217
EU-200	Space Heater	2015	0.075	SP-290
EU-201	Space Heater	2015	5.31	SP-291
EU-218	Space Heater	1991	3.5	SP-193
EU-219	Space Heater	1991	3.5	SP-199

Insignificant Activities

(a) Three (3) emergency generators, with EU-194 being utilized as an emergency fire pump, each with no control device, and consisting of the following:

(1) Two (2) emergency generators:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-199	Natural gas	2013	194	SP-289

Under the provisions of 40 CFR 60, Subpart JJJJ, the natural gas-fired emergency generator, identified as EU-199, is an affected facility.

Under the provisions of 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency generator, identified as EU-190; and the natural gas-fired emergency generator, identified as EU-199, are affected facilities.

(2) One (1) emergency fire pump:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-194	Diesel	1983	255	SP-284

(b) Three (3) cooling towers, consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Water Circulation Rate (gallons/minute)	Stack ID
EU-195	Tenter Plant Cooling Tower	2004	10,383	SP-285
EU-196	Line 71 Cooling Tower	1998	3,000	SP-286
EU-198	Tubular Cooling Tower	2015	5,000	SP-288

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

D.12.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the following operations listed below shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

(1) Process Lines:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Secondary Processing Machines				
EU-MT94	Metalizer	*none*	-	SP-40, SP-41
EU-MT95	Metalizer	*none*	-	SP-42

(2) Six (6) natural gas-fired process heaters:

Process Line	Emission Unit ID	Emission Unit Description	Stack ID
Line 64	EU-115	Oven*	SP-174 through SP-179, and SP-197
	EU-129	Flame Treater	SP-198
Line 65	EU-144	Tenter Oven*	SP-218 through SP-225
Line 71	EU-169	Flame Treater	SP-261, SP-262
	EU-180	Tenter Oven*	SP-251 through SP-260
-	EU-203	Hot Water Heater	SP-293
*Low NOx Burner			

(3) Seven (7) natural gas-fired space heaters:

Emission Unit ID	Emission Unit Description	Stack ID
EU-148	Space Heater	SP-215
EU-149	Space Heater	SP-216
EU-150	Space Heater	SP-217
EU-200	Space Heater	SP-290
EU-201	Space Heater	SP-291
EU-218	Space Heater	SP-193
EU-219	Space Heater	SP-199

(4) Three (3) emergency generators, each with no control device, and consisting of the following:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-194	Diesel	1983	255	SP-284
EU-199	Natural gas	2013	194	SP-289

(5) Three (3) cooling towers:

Emission Unit ID	Emission Unit Description	Stack ID
EU-195	Tenter Plant Cooling Tower	SP-285
EU-196	Line 71 Cooling Tower	SP-286
EU-198	Tubular Cooling Tower	SP-288

D.12.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.13 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(n) Three (3) natural gas-fired boilers, each with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-191	Steam Boiler	1979	35.5	SP-281
EU-192	Steam Boiler	1980	19.0	SP-282
EU-193	Low NOx Steam Boiler	2016	24.1	SP-283

Under the provisions of 40 CFR 60, Subpart Dc, the natural gas-fired boiler, identified as EU-193, is an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.13.1 Particulate [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(b)(3) (Particulate Matter Limitations Except Lake County), the allowable particulate emission rate from each of the three (3) natural gas-fired boilers listed below shall not exceed one-hundredth (0.01) grain per dry standard cubic foot (dscf).

Emission Unit ID	Emission Unit Description	Stack ID
EU-191	Steam Boiler	SP-281
EU-192	Steam Boiler	SP-282
EU-193	Low NOx Steam Boiler	SP-283

D.13.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION E.1 NSPS

Emissions Unit Description:

(n) One (1) natural gas-fired boiler, with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-193	Low NOx Steam Boiler	2016	24.1	SP-283

Under the provisions of 40 CFR 60, Subpart Dc, the natural gas-fired boiler, identified as EU-193, is an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 Small Industrial-Commercial-Institutional Steam Generating Units NSPS [326 IAC 12][40 CFR Part 60, Subpart Dc]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.41c
(3) 40 CFR 60.42c(h)(4)
(4) 40 CFR 60.48c(g)(1),(2),(3), and (i)

SECTION E.2 NSPS

Emissions Unit Description: Insignificant Activities

(a)(1) One (1) emergency generator, with no control device, and consisting of the following:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-199	Natural gas	2013	194	SP-289

Under the provisions of 40 CFR 60, Subpart JJJJ, the natural gas-fired emergency generator, identified as EU-199, is an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart JJJJ.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.2.2 Stationary Spark Ignition Internal Combustion Engines NSPS [326 IAC 12][40 CFR Part 60, Subpart JJJJ]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.4230(a)(4)(iv)
(2) 40 CFR 60.4233(e)
(3) 40 CFR 60.4234
(4) 40 CFR 60.4236
(5) 40 CFR 60.4237(b)
(6) 40 CFR 60.4243(b)(1),(2)(i), (d), (e), and (f)
(7) 40 CFR 60.4244
(8) 40 CFR 60.4245(e)
(9) 40 CFR 60.4246
(10) 40 CFR 60.4248
(11) Tables 1, 2, 3, and 4

SECTION E.3 NESHAP

Emissions Unit Description:

Insignificant Activities

(a)(1) Two (2) emergency generators, each with no control device, and consisting of the following:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-199	Natural gas	2013	194	SP-289

Under the provisions of 40 CFR 60, Subpart JJJJ, the natural gas-fired emergency generator, identified as EU-199, is an affected facility.

Under the provisions of 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency generator, identified as EU-190; and the natural gas-fired emergency generator, identified as EU-199, are affected facilities.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.3.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.3.2 Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ][326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit(s) listed above:

(1) 40 CFR 63.6585(a),(c), and (d)
(2) 40 CFR 63.6590(a)(1)(iii), (2)(iii)
(3) 40 CFR 63.6595(a)(6),(7), and (c)
(4) 40 CFR 63.6603(a)
(5) 40 CFR 63.6604(b)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6612

(8) 40 CFR 63.6625(e)(3)
(9) 40 CFR 63.6630(a)
(10) 40 CFR 63.6645(a)(2)
(11) 40 CFR 63.6650(a)
(12) 40 CFR 63.6665
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
(15) Table 2d

SECTION E.4 NESHAP

Emissions Unit Description:

Insignificant Activities

(a) One (1) gasoline storage tank, consisting of the following:

Emission Unit ID	Construction Date	Storage Capacity (gallons)
GT1	1969	550

Under the provisions of 40 CFR 63, Subpart CCCCCC, the gasoline storage tank, identified as GT1, is an affected facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.4.2 Source Category: Gasoline Dispensing Facilities NESHAP [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment D to the operating permit), for the emission unit(s) listed above:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111(a),(b),(e), and (f)
(3) 40 CFR 63.11112
(4) 40 CFR 63.11113
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11130
(8) 40 CFR 63.11131
(9) 40 CFR 63.11132
(10) Table 3

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Taghleef Industries, Inc.
Source Address: 3600 East Head Avenue, Rosedale, Indiana 47874
FESOP Permit No.: F167-39727-00045

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Taghleef Industries, Inc.
Source Address: 3600 East Head Avenue, Rosedale, Indiana 47874
FESOP Permit No.: F167-39727-00045

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-8-12

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Taghleef Industries, Inc.
Source Address: 3600 East Head Avenue, Rosedale, Indiana 47874
FESOP Permit No.: F167-39727-00045

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:________________________________

Title / Position:___________________________________

Date:____

Phone: ____

Mail to: Permit Administration and Support Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Taghleef Industries, Inc.
3600 East Head Avenue
Rosedale, Indiana 47874

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that Taghleef Industries, Inc. 3600 East Head Avenue, Rosedale, Indiana 47874, completed construction of the plastic film manufacturing operation on _____in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on March 12, 2018 and as permitted pursuant to New Source Review Permit and Federally Enforceable State Operating Permit No. F167-39727-00045, Plant ID No. 167-00045 issued on _____.

5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana

on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature_____
Name_____ (typed or printed)

Attachment A

Federally Enforceable State Operating Permit (FESOP) No: F167-39727-00045

[Downloaded from the eCFR on May 13, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§ 60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in § 60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under § 60.14.

(e) Affected facilities (*i.e.* heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or subpart CCCC of this part is not subject to this subpart.

(g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart.

(h) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_X standards under this subpart and the SO_2 standards under subpart J or subpart Ja of this part, as applicable.

(i) Temporary boilers are not subject to this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see § 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see § 60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see § 60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see § 60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see § 60.17).

Dry flue gas desulfurization technology means a SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see § 60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO_2 emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO_2 emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Wet flue gas desulfurization technology means an SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2 .

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.42c Standard for sulfur dioxide (SO2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO_2 emissions limit or the 90 percent SO_2 reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2 emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 50 percent (0.50) of the potential SO_2 emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2 reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area; or

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the following:

(1) The percent of potential SO_2 emission rate or numerical SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s = SO_2 emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

K_b = 260 ng/J (0.60 lb/MMBtu);

K_c = 215 ng/J (0.50 lb/MMBtu);

H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2 control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this

section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under § 60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO_2 emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2 emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and § 60.8, compliance with the percent reduction requirements and SO_2 emission limits under § 60.42c is based on the average percent reduction and the average SO_2 emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2 emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average SO_2 emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} (E_{ho} o) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted E_{ao} (E_{ao} o). The E_{ho} o is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w(1 - X_j)}{X_j}$$

Where:

E_{ho} o = Adjusted E_{ho} , ng/J (lb/MMBtu);

E_{ho} = Hourly SO_2 emission rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_g$ o) is computed from E_{ao} o from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate (E_{ai} o) using the following formula:

$$\%R_g o = 100\left(1 - \frac{E^{\circ}_{ao}}{E^{\circ}_{ai}}\right)$$

Where:

$\%R_g$ o = Adjusted $\%R_g$, in percent;

E_{ao} o = Adjusted E_{ao} , ng/J (lb/MMBtu); and

E_{ai} o = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai} o, an adjusted hourly SO_2 inlet rate (E_{hi} o) is used. The E_{hi} o is computed using the following formula:

$$E_{hi}o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{hi} o = Adjusted E_{hi} , ng/J (lb/MMBtu);

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0; and

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).

(h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in § 60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 standards under § 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under § 60.43c shall conduct an initial performance test as required under § 60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A-2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A-3 of this part or 17 of appendix A-6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O_2 or CO_2 measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A-4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under § 60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with § 60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under § 60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under § 60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under § 60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2 (or CO_2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O2 (or CO_2), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in § 60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.,* reference method) data and performance test (*i.e.,* compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under § 60.43c(e)(4) shall follow the applicable procedures under § 60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2 emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2 concentrations and either O_2 or CO_2 concentrations at the outlet of the SO_2 control device (or the outlet of the steam generating unit if no SO_2 control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c shall measure SO_2 concentrations and either O_2 or CO_2 concentrations at both the inlet and outlet of the SO_2 control device.

(b) The 1-hour average SO_2 emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO_2 emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under § 60.13(h)(2). Hourly SO_2 emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO_2 CEMS at the inlet to the SO_2 control device shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted, and the span value of the SO_2 CEMS at the outlet from the SO_2 control device shall be 50 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO_2 CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2 input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when

calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2 at the inlet or outlet of the SO_2 control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO_2 and CO_2 measurement train operated at the candidate location and a second similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to § 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under § 60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under § 60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in § 60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in § 60.11 to demonstrate compliance with the applicable limit in § 60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from

the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.,* 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.,* 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in § 60.45c(a)(8).

(ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in § 60.43c(c) are not required to operate a COMS if they follow the applicable procedures in § 60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in § 60.45c(c). The CEMS specified in paragraph § 60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in § 60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2 , or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS.

Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in § 60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in § 60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An owner or operator of an affected facility that is subject to an opacity standard in § 60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section.

(1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section § 60.48Da of this part.

(2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section § 60.48Da of this part.

(3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§ 60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under § 60.48c(c).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2 emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in § 60.7, the owner or operator of an affected facility subject to the opacity limits in § 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2 or diluent (O_2 or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

Attachment B

Federally Enforceable State Operating Permit (FESOP) No: F167-39727-00045

[Downloaded from the eCFR on October 31, 2016]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

SOURCE: 73 FR 3591, Jan. 18, 2008, unless otherwise noted.

What This Subpart Covers

§60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.

(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

(i) On or after July 1, 2008; or

(ii) On or after January 1, 2009, for emergency engines.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(5) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

(6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

(b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.

(e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(f) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

Emission Standards for Manufacturers

§60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as follows:

If engine displacement is * * *	**and manufacturing dates are * * ***	**the engine must meet emission standards and related requirements for nonhandheld engines under * * ***
(1) below 225 cc	July 1, 2008 to December 31, 2011	40 CFR part 90.
(2) below 225 cc	January 1, 2012 or later	40 CFR part 1054.
(3) at or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR part 90.
(4) at or above 225 cc	January 1, 2011 or later	40 CFR part 1054.

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in §60.4230(a)(2), or manufactured on or after the applicable date in §60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that use gasoline and that are manufactured on or after the applicable date in §60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) that use gasoline to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(c) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that are rich burn engines that use LPG and that are manufactured on or after the applicable date in §60.4230(a)(2), or manufactured on or after the applicable date in §60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP that are rich burn engines that use LPG and that are manufactured on or after the applicable date in §60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc that are rich burn engines that use LPG to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP (except gasoline and rich burn engines that use LPG), must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc (except gasoline and rich burn engines that use LPG) to the certification emission standards for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

(e) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart must certify those engines to the emission standards in Table 1 to this subpart. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) that are lean burn engines that use LPG to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. For stationary SI ICE with a maximum engine power greater than or equal to 100 HP (75 KW) and less than 500 HP (373 KW) manufactured prior to January 1, 2011, and for stationary SI ICE with a maximum engine power greater than or equal to 500 HP (373 KW) manufactured prior to July 1, 2010, manufacturers may choose to certify these engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines.

(f) Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, to the extent they apply to equipment manufacturers.

(g) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary SI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed stationary SI ICE.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59175, Oct. 8, 2008; 76 FR 37973, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

§60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Engines manufactured by stationary SI internal combustion engine manufacturers must meet the emission standards as required in §60.4231 during the certified emissions life of the engines.

Emission Standards for Owners and Operators

§60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in §60.4231(a) for their stationary SI ICE.

(b) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that use gasoline must comply with the emission standards in §60.4231(b) for their stationary SI ICE.

(c) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE.

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

(f) Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section.

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with emission standards in §60.4231(a) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in §60.4231(a) applicable to engines manufactured on July 1, 2008.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline engines and are modified or reconstructed after June 12, 2006, must comply with the emission standards in §60.4231(b) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in §60.4231(b) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in §60.4231(c). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in §60.4231(c) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal to 130 HP must meet a nitrogen oxides (NO_X) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_X emission standard of 250 ppmvd at 15 percent oxygen (O_2), a CO emission standard 540 ppmvd at 15 percent O_2 (675 ppmvd at 15 percent O_2 for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2, where the date of manufacture of the engine is:

(i) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP (except lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;

(iii) Prior to January 1, 2009, for emergency engines;

(iv) Prior to January 1, 2008, for non-emergency lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines. Engines with maximum engine power less than 500 HP and a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power less than 500 HP manufactured on July 1, 2008. Engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) and a date of manufacture prior to July 1, 2007 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) manufactured on July 1, 2007. Lean burn engines greater than or equal to 500 HP and less than 1,350 HP with a date of manufacture prior to January 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE that are lean burn engines greater than or equal to 500 HP and less than 1,350 HP and manufactured on January 1, 2008.

(g) Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

§60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

Other Requirements for Owners and Operators

§60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§60.4236 What is the deadline for importing or installing stationary SI ICE produced in previous model years?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

§60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

Compliance Requirements for Manufacturers

§60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP) or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(a) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(b) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(c) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program or a manufacturer of equipment containing such engines?

(a) Manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to certify their engines to the emission standards in §60.4231(d) or (e), as applicable, under the voluntary certification program described in this

subpart. Manufacturers who certify their engines under the voluntary certification program must meet the requirements as specified in paragraphs (b) through (g) of this section. In addition, manufacturers of stationary SI internal combustion engines who choose to certify their engines under the voluntary certification program, must also meet the requirements as specified in §60.4247.

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 90 or 40 CFR part 1054 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D-1 cycle of International Organization of Standardization 8178-4: 1996(E) (incorporated by reference, see 40 CFR 60.17) or the test cycle requirements specified in Table 3 to 40 CFR 1048.505, except that Table 3 of 40 CFR 1048.505 applies to high load engines only. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

(c) Certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, is voluntary, but manufacturers who decide to certify are subject to all of the requirements indicated in this subpart with regard to the engines included in their certification. Manufacturers must clearly label their stationary SI engines as certified or non-certified engines.

(d) Manufacturers of natural gas fired stationary SI ICE who conduct voluntary certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the definition of pipeline-quality natural gas. The fuel used for certifying stationary SI natural gas engines must meet the definition of pipeline-quality natural gas as described in §60.4248. In addition, the manufacturer must provide information to the owner and operator of the certified stationary SI engine including the specifications of the pipeline-quality natural gas to which the engine is certified and what adjustments the owner or operator must make to the engine when installed in the field to ensure compliance with the emission standards.

(e) Manufacturers of stationary SI ICE that are lean burn engines fueled by LPG who conduct voluntary certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the specifications in 40 CFR 1065.720.

(f) Manufacturers may certify their engines for operation using gaseous fuels in addition to pipeline-quality natural gas; however, the manufacturer must specify the properties of that fuel and provide testing information showing that the engine will meet the emission standards specified in §60.4231(d) or (e), as applicable, when operating on that fuel. The manufacturer must also provide instructions for configuring the stationary engine to meet the emission standards on fuels that do not meet the pipeline-quality natural gas definition. The manufacturer must also provide information to the owner and operator of the certified stationary SI engine regarding the configuration that is most conducive to reduced emissions where the engine will be operated on gaseous fuels with different quality than the fuel that it was certified to.

(g) A stationary SI engine manufacturer may certify an engine family solely to the standards applicable to landfill/digester gas engines as specified in §60.4231(d) or (e), as applicable, but must certify their engines for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(h) For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

(i) For engines being certified to the voluntary certification standards in Table 1 of this subpart, the VOC measurement shall be made by following the procedures in 40 CFR 1065.260 and 1065.265 in order to determine the total NMHC emissions by using a flame-ionization detector and non-methane cutter. As an alternative to the

nonmethane cutter, manufacturers may use a gas chromatograph as allowed under 40 CFR 1065.267 and may measure ethane, as well as methane, for excluding such levels from the total VOC measurement.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59176, Oct. 8, 2008; 76 FR 37974, June 28, 2011]

§60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must meet the provisions of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as applicable, as well as 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1048 or 1054, except that engines certified pursuant to the voluntary certification procedures in §60.4241 are subject only to the provisions indicated in §60.4247 and are permitted to provide instructions to owners and operators allowing for deviations from certified configurations, if such deviations are consistent with the provisions of paragraphs §60.4241(c) through (f). Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, as applicable. Labels on engines certified to 40 CFR part 1048 must refer to stationary engines, rather than or in addition to nonroad engines, as appropriate.

(b) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054 for that model year may certify any such family that contains both nonroad and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts. This provision also applies to equipment or component manufacturers certifying to standards under 40 CFR part 1060.

(c) Manufacturers of engine families certified to 40 CFR part 1048 may meet the labeling requirements referred to in paragraph (a) of this section for stationary SI ICE by either adding a separate label containing the information required in paragraph (a) of this section or by adding the words “and stationary” after the word “nonroad” to the label.

(d) For all engines manufactured on or after January 1, 2011, and for all engines with a maximum engine power greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, a stationary SI engine manufacturer that certifies an engine family solely to the standards applicable to emergency engines must add a permanent label stating that the engines in that family are for emergency use only. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(e) All stationary SI engines subject to mandatory certification that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230. Stationary SI engines subject to standards in 40 CFR part 90 may use the provisions in 40 CFR 90.909. Manufacturers of stationary engines with a maximum engine power greater than 25 HP that are not certified to standards and other requirements under 40 CFR part 1048 are subject to the labeling provisions of 40 CFR 1048.20 pertaining to excluded stationary engines.

(f) For manufacturers of gaseous-fueled stationary engines required to meet the warranty provisions in 40 CFR 90.1103 or 1054.120, we may establish an hour-based warranty period equal to at least the certified emissions life of the engines (in engine operating hours) if we determine that these engines are likely to operate for a number of hours greater than the applicable useful life within 24 months. We will not approve an alternate warranty under this paragraph (f) for nonroad engines. An alternate warranty period approved under this paragraph (f) will be the specified number of engine operating hours or two years, whichever comes first. The engine manufacturer shall request this alternate warranty period in its application for certification or in an earlier submission. We may approve an alternate warranty period for an engine family subject to the following conditions:

(1) The engines must be equipped with non-resettable hour meters.

(2) The engines must be designed to operate for a number of hours substantially greater than the applicable certified emissions life.

(3) The emission-related warranty for the engines may not be shorter than any published warranty offered by the manufacturer without charge for the engines. Similarly, the emission-related warranty for any component shall not be shorter than any published warranty offered by the manufacturer without charge for that component.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008]

Compliance Requirements for Owners and Operators

§60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent

practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f).

(d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

(f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

(1) Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(i) If you are an owner or operator of a modified or reconstructed stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according to one of the methods specified in paragraphs (i)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4233(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

Testing Requirements for Owners and Operators

§60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

Notification, Reports, and Records for Owners and Operators

§60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the

standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.

(e) If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in §60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4243(d)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016]

General Provisions

§60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

MOBILE SOURCE PROVISIONS

§60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Manufacturers certifying to emission standards in 40 CFR part 90, including manufacturers certifying emergency engines below 130 HP, must meet the provisions of 40 CFR part 90. Manufacturers certifying to emission standards in 40 CFR part 1054 must meet the provisions of 40 CFR part 1054. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060 to the extent they apply to equipment manufacturers.

(b) Manufacturers required to certify to emission standards in 40 CFR part 1048 must meet the provisions of 40 CFR part 1048. Manufacturers certifying to emission standards in 40 CFR part 1048 pursuant to the voluntary certification program must meet the requirements in Table 4 to this subpart as well as the standards in 40 CFR 1048.101.

(c) For manufacturers of stationary SI internal combustion engines participating in the voluntary certification program and certifying engines to Table 1 to this subpart, Table 4 to this subpart shows which parts of the mobile source provisions in 40 CFR parts 1048, 1065, and 1068 apply to you. Compliance with the deterioration factor provisions under 40 CFR 1048.205(n) and 1048.240 will be required for engines built new on and after January 1, 2010. Prior to January 1, 2010, manufacturers of stationary internal combustion engines participating in the voluntary certification program have the option to develop their own deterioration factors based on an engineering analysis.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008]

Definitions

§60.4248 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use

engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

(i) 1,000 hours of operation.

(ii) Your recommended overhaul interval.

(iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO_2).

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4243(d).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4243(d)(2)(ii) or (iii) and §60.4243(d)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a

pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NO_X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in 40 CFR part 63, subpart PPPPP, that tests stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in §60.4231(d) or (e), as applicable.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013]

Table 1 to Subpart JJJJ of Part 60—NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards[a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[d]	NO_X	CO	VOC[d]
Non-Emergency SI Natural Gas[b] and Non-Emergency SI Lean Burn LPG[b]	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG	500≤HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86
	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas (except lean burn 500≤HP<1,350)	HP<500	7/1/2008	3.0	5.0	1.0	220	610	80
		1/1/2011	2.0	5.0	1.0	150	610	80
	HP≥500	7/1/2007	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas Lean Burn	500≤HP<1,350	1/1/2008	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Emergency	25<HP<130	1/1/2009	[c]10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

[a]Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b]Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of Table 1 of this subpart.

[c]The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_X + HC.

[d]For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[76 FR 37975, June 28, 2011]

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

[As stated in §60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to §60.4244	a. limit the concentration of NO_X in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ad]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[de]	(c) Measurements to determine moisture must be made at the same time as the measurement for NO_X concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure NO_X at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device	(5) Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005)[ad], Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[de]	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ad]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for CO concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[de]	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device	(5) Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005)[ade], Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[de]	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for VOC, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ad]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for VOC concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[de]	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device	(5) Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a hydrocarbon cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6[ce], Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[de]	(d) Results of this test consist of the average of the three 1-hour or longer runs.

[a]Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.

[b]You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O_2 content of the exhaust gas as an alternative to EPA Method 3B. AMSE PTC 19.10-1981 incorporated by reference, see 40 CFR 60.17

[c]You may use EPA Method 18 of 40 CFR part 60, appendix A-6, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (*http://www.epa.gov/ttn/emc/prelim/otm11.pdf*).

[d]Incorporated by reference; see 40 CFR 60.17.

[e]You must meet the requirements in §60.4245(d).

[81 FR 59809, Aug. 30, 2016]

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

[As stated in §60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4248.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4245.
§60.8	Performance tests	Yes	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	No	
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Table 4 to Subpart JJJJ of Part 60—Applicability of Mobile Source Provisions for Manufacturers Participating in the Voluntary Certification Program and Certifying Stationary SI ICE to Emission Standards in Table 1 of Subpart JJJJ

[As stated in §60.4247, you must comply with the following applicable mobile source provisions if you are a manufacturer participating in the voluntary certification program and certifying stationary SI ICE to emission standards in Table 1 of subpart JJJJ]

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048 subpart A	Overview and Applicability	Yes	
1048 subpart B	Emission Standards and Related Requirements	Yes	Except for the specific sections below.
1048.101	Exhaust Emission Standards	No	
1048.105	Evaporative Emission Standards	No	
1048.110	Diagnosing Malfunctions	No	
1048.140	Certifying Blue Sky Series Engines	No	
1048.145	Interim Provisions	No	
1048 subpart C	Certifying Engine Families	Yes	Except for the specific sections below.
1048.205(b)	AECD reporting	Yes	
1048.205(c)	OBD Requirements	No	
1048.205(n)	Deterioration Factors	Yes	Except as indicated in 60.4247(c).
1048.205(p)(1)	Deterioration Factor Discussion	Yes	

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048.205(p)(2)	Liquid Fuels as they require	No	
1048.240(b)(c)(d)	Deterioration Factors	Yes	
1048 subpart D	Testing Production-Line Engines	Yes	
1048 subpart E	Testing In-Use Engines	No	
1048 subpart F	Test Procedures	Yes	
1065.5(a)(4)	Raw sampling (refers reader back to the specific emissions regulation for guidance)	Yes	
1048 subpart G	Compliance Provisions	Yes	
1048 subpart H	Reserved		
1048 subpart I	Definitions and Other Reference Information	Yes	
1048 appendix I and II	Yes		
1065 (all subparts)	Engine Testing Procedures	Yes	Except for the specific section below.
1065.715	Test Fuel Specifications for Natural Gas	No	
1068 (all subparts)	General Compliance Provisions for Nonroad Programs	Yes	Except for the specific sections below.
1068.245	Hardship Provisions for Unusual Circumstances	No	
1068.250	Hardship Provisions for Small-Volume Manufacturers	No	
1068.255	Hardship Provisions for Equipment Manufacturers and Secondary Engine Manufacturers	No	

Attachment C

Federally Enforceable State Operating Permit (FESOP) No: F167-39727-00045

[Downloaded from the eCFR on July 23, 2014]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

§63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

§63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

Emission and Operating Limitations

§63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

§63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

§63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

Testing and Initial Compliance Requirements

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

§63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq.\ 1)$$

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \quad (Eq.\ 2)$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu)

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad (Eq. 3)$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2—15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad (Eq. 4)$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO2} = CO_2 correction factor, percent.

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O_2 or CO_2 according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR

part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

Continuous Compliance Requirements

§63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the

engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

Notifications, Reports, and Records

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

§63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

§63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a

site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see §63.14).

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (*e.g.* biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.[1]
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR.	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2.	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O_2.	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O_2.	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O_2.	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[2]Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For CO and O_2 measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[ac] (heated probe not necessary)	(b) Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005)[abc] (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O_2, dry basis.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For formaldehyde, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[a] (heated probe not necessary)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03[a]	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formalde-hyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[a], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7	(a) THC concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
3. Stationary RICE	a. limit the concentra-tion of formalde-hyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and		(a) For formaldehyde, CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[a] (heated probe not necessary)	(a) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the station-ary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03[a]	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formalde-hyde at the exhaust of the station-ary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[a], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the station-ary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005)[ac], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03[a]	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[b]You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[79 FR 11290, Feb. 27, 2014]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.[a]
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in §63.6650(b)(1)-(5).

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4)(ii)	Report	a. The information in §63.6650(h)(1)	i. annually according to the requirements in §63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 Scope and Application. What is this Protocol?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O_2) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O_2).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O_2)	*7782-44-7*	

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O_2, or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 Summary of Protocol

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O_2 gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 Definitions

3.1 Measurement System. The total equipment required for the measurement of CO and O_2 concentrations. The measurement system consists of the following major subsystems:

3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O_2 and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 Interferences.

When present in sufficient concentrations, NO and NO_2 are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 Safety. [Reserved]

6.0 Equipment and Supplies.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O_2 concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O_2; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 Reagents and Standards. What calibration gases are needed?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O_2. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O_2) is acceptable for calibration of the O_2 cell. If needed, any lower percentage O_2 calibration gas must be a mixture of O_2 in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O_2 Calibration Gas Concentration.

Select an O_2 gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O_2. When the average exhaust gas O_2 readings are above 6 percent, you may use dry ambient air (20.9 percent O_2) for the up-scale O_2 calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO_2).

8.0 Sample Collection and Analysis

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O_2 concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ±3 percent, as instructed by the EC cell manufacturer.

9.0 Quality Control (Reserved)

10.0 Calibration and Standardization

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O_2 and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ±3 percent of the up-scale gas value or ±1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ±0.3 percent O_2 for the O_2 channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this "sample conditioning phase" once per minute until readings are constant for at least two minutes. Then begin the "measurement data phase" and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to ±5 percent or ±1 ppm for CO or ±0.5 percent O_2, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to ±2 percent or ±1 ppm for CO or ±0.5 percent O_2, whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

12.0 Calculations and Data Analysis

Determine the CO and O_2 concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

13.0 Protocol Performance

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is ±2 percent, or ±1 ppm,

whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ±2 percent *or* ±1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO_2 gas standards that are generally recognized as representative of diesel-fueled engine NO and NO_2 emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO_2 interference response should be less than or equal to ±5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 Pollution Prevention (Reserved)

15.0 Waste Management (Reserved)

16.0 Alternative Procedures (Reserved)

17.0 References

(1) “Development of an Electrochemical Cell Emission Analyzer Test Protocol”, Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) “Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers”, EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.

(3) “ICAC Test Protocol for Periodic Monitoring”, EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.

(4) “Code of Federal Regulations”, Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

Table 1: Appendix A—Sampling Run Data.

Facility_____ Engine I.D._____ Date_____											
Run Type:	(_)		(_)		(_)		(_)				
(X)	Pre-Sample Calibration		Stack Gas Sample		Post-Sample Cal. Check		Repeatability Check				
Run #	1	1	2	2	3	3	4	4	Time	Scrub. OK	Flow- Rate
Gas	O_2	CO	O_2	CO	O_2	CO	O_2	CO			
Sample Cond. Phase											
″											
″											
″											
″											
Measurement Data Phase											
″											
″											
″											
″											
″											
″											
″											
″											
″											
″											
Mean											
Refresh Phase											
″											
″											
″											
″											

[78 FR 6721, Jan. 30, 2013]

Attachment D

Federally Enforceable State Operating Permit (FESOP) No: F167-39727-00045

[Downloaded from the eCFR on May 13, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Source: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in § 63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in § 63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in § 63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in § 63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in § 63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to § 63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under § 63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

§ 63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in § 63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in § 63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in § 63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

§ 63.11113 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in § 63.11111(c) or § 63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under § 63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Emission Limitations and Management Practices

§ 63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review

of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must keep applicable records and submit reports as specified in § 63.11125(d) and § 63.11126(b).

[76 FR 4182, Jan. 24, 2011]

§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports as specified in § 63.11125, § 63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in § 63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

§ 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

(a) You must comply with the requirements in section § 63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in § 63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in § 63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under § 63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

(a) You must comply with the requirements in §§ 63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in § 63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in § 63.11120.

(f) You must submit the applicable notifications as required under § 63.11124.

(g) You must keep records and submit reports as specified in §§ 63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

Testing and Monitoring Requirements

§ 63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in § 63.11113(e), of a vapor balance system required under § 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see § 63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see § 63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).

(iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, *see* § 63.14).

(b) Each owner or operator choosing, under the provisions of § 63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph § 63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see § 63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.,* performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in § 63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

Notifications, Records, and Reports

§ 63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in § 63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in § 63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in § 63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in § 63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, within 60 days of the applicable compliance date specified in § 63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in § 63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in § 63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in § 63.11118. If your affected source is subject to the control requirements in § 63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in § 63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, in accordance with the schedule specified in § 63.9(h). The Notification of

Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in § 63.9(e), prior to initiating testing required by § 63.11120(a) and (b).

(5) You must submit additional notifications specified in § 63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in § 63.11118 must keep records of all tests performed under § 63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in § 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (*e.g.,* via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

(1) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

§ 63.11126 What are my reporting requirements?

(a) Each owner or operator subject to the management practices in § 63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under § 63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

Other Requirements and Information

§ 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§ 63.11131 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§ 63.11116 through 63.11118 and 63.11120.

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f), as defined in § 63.90, and as required in this subpart.

(3) Approval of major alternatives to recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

§ 63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

Motor vehicle means any self-propelled vehicle designed for transporting persons or property on a street or highway.

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in § 63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in § 63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More1

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to § 63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to § 63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in § 63.11132, and comply with the requirements of item 1 in this Table.

[1] The management practices specified in this Table are not applicable if you are complying with the requirements in § 63.11118(b)(2), except that if you are complying with the requirements in § 63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in § 63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in § 63.11111.
§ 63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, § 63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§ 63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in § 63.11132.
§ 63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§ 63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§ 63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to § 63.11116
§ 63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§ 63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§ 63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, § 63.11113 specifies the compliance dates.
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§ 63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No.*See*§ 63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§ 63.6(e)(2)	[Reserved]		
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§ 63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§ 63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§ 63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§ 63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§ 63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§ 63.6(h)(2)(ii)	[Reserved]		

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§ 63.6(h)(3)	[Reserved]		
§ 63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§ 63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§ 63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§ 63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§ 63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§ 63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§ 63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§ 63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to § 63.8(e); COMS are properly maintained and operated according to § 63.8(c) and data quality as § 63.8(d)	No.
§ 63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§ 63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§ 63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§ 63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§ 63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§ 63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§ 63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§ 63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§ 63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, § 63.11120(c) specifies conditions for conducting performance tests.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§ 63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§ 63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§ 63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§ 63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in § 63.11 apply	Yes.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§ 63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§ 63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in § 63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in § 63.6(e)(3)	No.
§ 63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§ 63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§ 63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§ 63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§ 63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§ 63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§ 63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§ 63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§ 63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§ 63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§ 63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§ 63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§ 63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§ 63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§ 63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§ 63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§ 63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§ 63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No.*See* § 63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§ 63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§ 63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§ 63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§ 63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§ 63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§ 63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§ 63.10(b)(3)	Records	Applicability determinations	Yes.
§ 63.10(c)	Records	Additional records for CMS	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§ 63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§ 63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§ 63.10(d)(5)	SSM Reports	Contents and submission	No.*See* § 63.11126(b) for malfunction reporting requirements.
§ 63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§ 63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions	No.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No, § 63.11130(K) specifies excess emission events for this subpart.
§ 63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§ 63.10(c)(5)-(13) and 63.8(c)(7)-(8)	No.
§ 63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§ 63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.11(b)	Flares	Requirements for flares	No.
§ 63.12	Delegation	State authority to enforce standards	Yes.
§ 63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§ 63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§ 63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Source Specific Operating Agreement (SSOA) Transitioning to a Federally Enforceable State Operating Permit (FESOP) with New Source Review (NSR)

Source Description and Location

Source Name:	**Taghleef Industries, Inc.**
Source Location:	**3600 East Head Avenue, Rosedale, Indiana 47874**
County:	**Vigo (Otter Creek Township)**
SIC Code:	**3081 (Unsupported Plastics Film and Sheet)**
Operation Permit No.:	**F167-39727-00045**
Permit Reviewer:	**Joshua Levering**

On March 12, 2018, the Office of Air Quality (OAQ) received an application from Taghleef Industries, Inc. related to the construction and operation of new emission units at an existing stationary plastic film manufacturing operation and transition from a Source Specific Operating Agreement (SSOA) to a FESOP/NSR.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

Permit Number	Issuance Date
SSOA No. S167-9183-00045	September 29, 2003
Review Request No. 167-19151-00045	May 26, 2004
Administrative Amendment No. 167-32918-00045	March 18, 2013

Due to this application, the source is transitioning from a SSOA to a FESOP.

County Attainment Status

The source is located in Vigo County, but not in Fayette or Harrison Township.

Pollutant	Designation
SO_2	Non-attainment effective October 4, 2013, for the Fayette and Harrison Twp. Better than national standards for the remainder of the county.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Vigo County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Vigo County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by Taghleef Industries, Inc. on March 12, 2018, relating to the following:

(a) The source has requested to transition from a SSOA to a FESOP because the potential to emit of the existing emission units plus the potential to emit of the existing unpermitted emission units is greater than the SSOA criteria pollutant threshold levels. The FESOP will specify new limits and requirements that are applicable to the source which were previously not required by the SSOA.

(b) The source requested integral determinations for all control devices at the facility. However, Taghleef Industries, Inc. decided not to pursue integral determinations on their existing control devices after a discussion with IDEM, OAQ. Therefore, potential emissions for the source will be

evaluated based on maximum bottleneck throughput capacities of the extrusion, handling, and process lines, where applicable, without any integral control device determinations.

(c) The proposed FESOP does not involve the construction or modification of any new or existing emission units. However, the FESOP will now include all previously constructed and operated emission units that have not been specifically identified in SSOA No. S167-9183-00045, issued on September 29, 2003.

(d) SSOA No. S167-9183-00045, issued on September 29, 2003, was for External Combustion Sources [326 IAC 2-9-13]. These existing external combustion sources will be specifically identified in the proposed FESOP and applicability determinations for state rules and federal requirements will also be detailed in this TSD.

(e) The Registration, CP 167-V026-00045, was issued on February 23, 1998, for Applied Extrusion Technologies by Vigo County Air Pollution Control. This Registration included requirements for the transfer equipment, polymer extruders, and natural gas-fired combustion units for Tenter Polypropylene Production Line #71.

However, these emission units were not permitted in the SSOA No. S167-9183-00045, issued on September 29, 2003, which supersedes all previous approvals. Therefore, these existing emission units from the Tenter Polypropylene Production Line #71 will now be specifically identified within the extrusion line, identified as Line 71, in the proposed FESOP.

(f) Administrative Amendment No. 167-32918-00045, issued on March 18, 2013, is a change in ownership and company name as a result of sale. The source changed names from Applied Extrusion Technologies, Inc. to Taghleef Industries, Inc.

The source consists of the following permitted emission units:

(a) External Combustion Sources [326 IAC 2-9-13]

The existing external combustion sources will be specifically identified in the FESOP and in the section below.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) One (1) extrusion line, identified as Line 55, constructed in 1974, with a bottleneck maximum throughput capacity of 1,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description*	Construction Date	Maximum Throughput Capacity (lbs/hr)**	Control Device	Control Device ID	Stack ID
Line 55						
EU-01	PP Transfer	1975	1,000	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	1975	1,000	Dust Collector	CE-18	SP-22
EU-03	PP Transfer	2002	1,000	Filter Cartridge	CE-19	*indoors*
EU-04	Extruder	2006	1,000	*none*	-	-

*PP = Polypropylene pellets
** The extruder (EU-04) is considered a bottleneck for the PP Transfers (EU-01, EU-02, and EU-03). The actual maximum capacities are not provided.

(b) One (1) polymer handling line, identified as Line 55 Polymer Handling, constructed in 1969, with a maximum throughput capacity of 50,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Line 55 Polymer Handling						
EU-Silo 1*	Storage silo	1969	3,125	Baghouse	CE-01	SP-01
EU-Silo 2*	Storage silo	1969	3,125	Baghouse	CE-02	SP-02
EU-Silo 3*	Storage silo	1969	3,125	Baghouse	CE-03	SP-03
EU-Silo 4*	Storage silo	1969	3,125	Baghouse	CE-04	SP-04
EU-Silo 5*	Storage silo	1969	3,125	Baghouse	CE-05	SP-05
EU-Silo 6*	Storage silo	1969	3,125	Baghouse	CE-06	SP-06
EU-Silo 7*	Storage silo	1969	3,125	Baghouse	CE-07	SP-07
EU-Silo 8*	Storage silo	1969	3,125	Baghouse	CE-08	SP-08
Total for EU-Silos 1-8			25,000			
EU-Silo 9**	Storage silo	1975	6,250	Baghouse	CE-09	SP-09
EU-Silo 10**	Storage silo	1975	6,250	Baghouse	CE-10	SP-10
EU-Silo 11**	Storage silo	1975	6,250	Baghouse	CE-11	SP-11
EU-Silo 12**	Storage silo	1975	6,250	Baghouse	CE-12	SP-12
Total for EU-Silos 9-12			25,000			
EU-12	Rail Car	*existing railroad*	5,936	*none*	-	-
EU-13	Polymer Conveying System	1969	25,000	Dust Collector	CE-13	*indoors*
EU-14	Polymer Conveying System	1975	25,000	Dust Collector	CE-14	*indoors*

* EU-Silos 1 through 8 are fed by EU-13.
** EU-Silos 9 through 12 are fed by EU-14.

(c) One (1) extrusion line, identified as Line 62, constructed in 1980, with a bottleneck maximum throughput capacity of 3,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 62						
EU-60	Polymer Holding Bin	1981	375	Dust Collector	CE-71	SP-92
EU-61	Storage Bin	1981	375	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin	1981	375			
EU-63	Storage Bin	1981	375			
EU-64	Polymer Blender	2000	375	Dust Collector	CE-68	*indoors*

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
EU-65A	Polymer Blending	2014	375	Dust Collector	CE-73	*indoors*
EU-65B	Polymer Blending	2014	375			
EU-66	Drying Bin	1981	375	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	1981	375	Cyclone Dust Collector	CE-69	*indoors*
EU-68	Drying Bin	1981	2,250	Dust Collector	CE-75	SP-101
EU-69	Storage Bin	1981	2,250	Cyclone Dust Collector	CE-76	*indoors*
EU-70	Storage Bin	1981	2,250	Baghouse	CE-67	SP-104
EU-71	Polymer Blending	2014	2,250	Cyclone Dust Collector	CE-82	*indoors*
EU-72	Storage Bin	1981	2,250	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	1981	2,250	Dust Collector	CE-78	SP-107
				Dust Collector	CE-79	SP-108
EU-74	Storage Bin	1981	2,250	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	1981	2,250	Dust Collector	CE-81	SP-105
EU-76	Extruder	1981	2,250	*none*	-	-
EU-77	Extruder	1981	375	*none*	-	-
EU-78	Extruder	2014	375	*none*	-	-
EU-82	Box Dumper	1981	648	Cyclone Dust Collector	CE-74	*indoors*
* The extruders (EU-76, EU-77, and EU-78) are considered a bottleneck for the upstream emission units for Line 62 (EU-60 through EU-75). The actual maximum capacities are not provided.						

(d) One (1) extrusion line, identified as Line 63, constructed in 1981, with a bottleneck maximum throughput capacity of 2,800 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 63						
EU-90	Storage Bin	1981	2,800	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin	1981	2,800			
EU-93	Blender	1981	2,800			
EU-92	Drying Bin	1981	2,800	Dust Collector	CE-101	SP-141
EU-94	Extruder	1981	2,050	*none*	-	-
EU-95	Extruder	1981	375	*none*	-	-
EU-96	Extruder	1981	375	*none*	-	-
* The extruders (EU-94, EU-95, and EU-96) are considered a bottleneck for the upstream emission units for Line 63 (EU-90 through EU-93). The actual maximum capacities are not provided.						

(e) One (1) extrusion line, identified as Line 64, constructed in 1991, with a bottleneck maximum throughput capacity of 8,400 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 64						
EU-110	Drying Bin	2007	6,600	Filter	CE-129	*indoors*
EU-111	Storage Bin	1991	6,600	Cyclone	CE-120	SP-170
				Dust Collector	CE-121	
EU-112	Drying Bin	2007	6,600	Filter Cartridge	CE-123	*indoors*
EU-113	Nauta Mixer	1991	6,600	Cyclone Dust Collector	CE-127	*indoors*
				Filter Separator	CE-128	SP-172
-	Main Extruder**	1991	6,600	*none*	-	-
EU-117	Blending System	2007	6,600	Filter Cartridge	CE-134	*indoors*
EU-118	Drying Bin	1991	900	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	1991	900	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	2007	900	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin	2007	900			
-	Satellite Extruder***	2007	900	*none*	-	-
-	Satellite Extruder***	2007	900	*none*	-	-
EU-122	Storage Bin	1991	900	Cyclone Dust Collector	CE-136	*indoors*
EU-123	Box Dumping Station	1991	900	*none*	-	-
EU-125	Storage Bin	1991	2,000	Baghouse	CE-137	SP-192
EU-126	Pelletizer	1991	2,000	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer	1991	2,000			
EU-127	Storage Bin	1991	2,000	Baghouse	CE-139	SP-195
EU-128	Extruder	1991	2,000	*none*	-	-

* The extruders (EU-113, EU-120, EU-121, and EU-128) are considered a bottleneck for the upstream emission units for Line 64 (EU-110 through EU-129). The actual maximum capacities are not provided.
** Main extruder is directly fed by the Nauta Mixer (EU-113).
*** One satellite extruder is directly fed by feeding bin EU-120, the other satellite extruder is directly fed by feeding bin EU-121.

(f) One (1) extrusion line, identified as Line 65, constructed in 1996, with a bottleneck maximum throughput capacity of 9,700 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 65						
EU-130	Drying Bin	1996	2,700	Baghouse	CE-141	SP-201
EU-131	Drying Bin	1996	2,700	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	1996	2,700	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	1996	750	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	1996	750	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	1996	2,000	Baghouse	CE-148	SP-211
EU-136	Polymer Bin	1996	2,700			
EU-137	Feeding Bin	2015	2,000	Dust Collector	CE-144	SP-206
-	Intermediate Extruder**	2015	2,000	*none*	-	-
EU-138	Feeding Bin	2015	2,000	Dust Collector	CE-145	SP-204

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
-	Intermediate Extruder**	2015	2,000	*none*	-	-
EU-139	Feeding Bin	2011	1,500	Dust Collector	CE-154	SP-231
-	Satellite Extruder**	2011	1,500	*none*	-	-
EU-140	Feeding Bin	2011	1,500	Dust Collector	CE-155	SP-232
-	Satellite Extruder**	2011	1,500	*none*	-	-
EU-141	Polymer Blending	2011	2,700	Dust Collector	CE-146	SP-205
				Dust Collector	CE-152	SP-213
EU-146	Extruder	1996	2,700	*none*	-	-

* The extruders (EU-137, EU-138, EU-139, EU-140, and EU-146) are considered a bottleneck for the upstream emission units for Line 65 (EU-130 through EU-141). The actual maximum capacities are not provided.
** Each extruder is directly fed by only the one (1) Feeding Bin (EU-137, EU-138, EU-139, or EU-140) listed immediately before it.

(g) One (1) extrusion line, identified as Line 71, constructed in 1998, with a bottleneck maximum throughput capacity of 11,700 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Line 71						
EU-160	Storage Silo	1997	5,000	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	1997	5,000	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	1997	9,700	Filter Separator	CE-160	SP-240
EU-163	Storage Bin	1998	4,000	Filter Cartridge	CE-162	*indoors*
EU-164	Blending System	2007	9,700	Dust Collector	CE-163	SP-245
EU-165	Storage Bin	1998	9,700	Filter	CE-179	SP-246
EU-166	Drying Bin	1998	9,700	Filter	CE-164	SP-247
EU-167	Extruder	1998	9,700	*none*	-	-
EU-171	Drying Bin	1998	1,000	Filter	CE-169	SP-266
EU-172	Drying Bin	1998	1,000	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	2007	1,000	Dust Collector	CE-173	SP-268
-	Satellite Extruder**	2007	1,000	*none*	-	-
EU-174	Feeding Bin	2007	1,000	Dust Collector	CE-174	SP-269
-	Satellite Extruder**	2007	1,000	*none*	-	-
EU-175	Box Dumping Station	1998	1,000	*none*	-	-
EU-176	Reclaim Extruder	1998	110	*none*	-	-
EU-177	Supersack Unloader	2008	1,000	*none*	-	-

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
EU-178	Bag Unloader	2016	1,000	*none*	-	-
EU-179	Sack Dumper Bin	2008	1,000	*none*	-	-
EU-182	Rail Car Filling	1969	3,000	*none*	-	-
EU-183	Reclaim Bin	1969	5,000	*none*	-	-
* The extruders (EU-167, EU-173, and EU-174) are considered a bottleneck for the upstream emission units for Line 71 (EU-160 through EU-175). The actual maximum capacities are not provided. ** Each extruder is directly fed by only the one (1) Feeding Bin (EU-173 or EU-174) listed immediately before it.						

(h) One (1) operation, identified as Tubular Reclaim and Secondary Processing, constructed in 1969, with a bottleneck maximum throughput capacity of 2,730 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Tubular Reclaim and Secondary Processing						
EU-07	Extruder	1969	2,730	*none*	-	SP-24
EU-08	Polymer Transfer	1975	2,730	Filter	CE-25	*indoors*
EU-09	Injection Molder	2013	2,730	Dust Collector	CE-26	*indoors*
EU-10	Injection Molder	2013	2,730	Dust Collector	CE-27	*indoors*
EU-11	Extruder	1975	2,730	*none*	-	SP-30
EU-FB1	Fluff Bin	1969	1,200	Baghouse	CE-20	SP-31
EU-FB2	Fluff Bin	1969	1,200	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	1969	1,200	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	1969	1,200	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	1969	1,200	Baghouse	CE-24	SP-35
EU-CH1	Flake Grinder	1969	130	*none*	-	SP-36
EU-CH2	Flake Grinder	1969	1,200	*none*	-	SP-37
EU-CH3	Flake Grinder	1969	1,000	*none*	-	SP-38
EU-CH4	Flake Grinder	1969	1,200	*none*	-	SP-39
EU-CH5	Flake Grinder	1969	1,200	*none*	-	SP-23
* The extruders (EU-07 and EU-11) are considered a bottleneck for the Fluff Bins (EU-FB1 through EU-FB5) and the Flake Grinders (EU-CH1 through EU-CH5). The actual maximum capacities are not provided.						

(i) One (1) handling line, identified as Tenter Polymer Handling, constructed in 1980, with a maximum throughput capacity of 24,000 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Tenter Polymer Handling						
EU-30	Polymer Conveying	1980	7,000	Dust Collector	CE-40	SP-60

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
EU-31	Polymer Conveying	1980	7,000	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	1979	10,000	Dust Collector	CE-52	SP-72
EU-Silo 13*	Polymer Silo	1980	1,000	Cyclone	CE-42	SP-62
EU-Silo 14*	Polymer Silo	1980	1,000			
EU-Silo 15*	Polymer Silo	1980	1,000	Cyclone	CE-43	SP-63
EU-Silo 16*	Polymer Silo	1980	1,000			
EU-Silo 17*	Polymer Silo	1991	1,000	Cyclone	CE-44	SP-64
EU-Silo 18*	Polymer Silo	1991	1,000			
EU-Silo 19*	Polymer Silo	1991	1,000	Cyclone	CE-45	SP-65
EU-Silo 20*	Polymer Silo	1991	1,000			
EU-Silo 21*	Polymer Silo	1991	1,000	Cyclone	CE-46	SP-66
EU-Silo 22*	Polymer Silo	1991	1,000			
EU-Silo 23*	Polymer Silo	1991	1,000	Cyclone	CE-47	SP-67
EU-Silo 24*	Polymer Silo	1991	1,000			
EU-Silo 25*	Polymer Silo	1991	1,000	Cyclone	CE-48	SP-68
EU-Silo 26*	Polymer Silo	1991	1,000			
Total for EU-Silos 13-26			14,000			
EU-Silo 27**	Polymer Silo	1968	1,750	Cyclone	CE-50	SP-70
EU-Silo 28**	Polymer Silo	1968	1,750	Cyclone	CE-51	SP-71
EU-Silo 29**	Polymer Silo	1968	1,750			
EU-Silo 30**	Polymer Silo	2000	1,750	Cyclone	CE-49	SP-69
Total for EU-Silos 27-30			7,000			
* EU-Silos 13 through 26 are fed by EU-30 and EU-31. ** EU-Silos 27 through 30 are fed by EU-32.						

(j) One (1) reclaim storage system, identified as Tenter Reclaim, constructed in 1981, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
Tenter Reclaim						
EU-210	Polypropylene Flake Storage	1981	426	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	1981	289	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	1981	426	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	1981	426	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	1981	1,086	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin	1981	1,086			
EU-216	Polypropylene Pellet Bin	1981	715			
EU-217	Polypropylene Pellet Bin	1981	715			

(k) One (1) process line, identified as Compounder Line 1, constructed in 2016, with a bottleneck maximum throughput capacity of 3,306 pounds per hour of polymer material, consisting of the following emission units and control devices:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)*	Control Device	Control Device ID	Stack ID
Compounder Line 1						
EU-15	Virgin Polymer Day Bin	1969	3,306	Baghouse	CE-53	SP-43
EU-16	Dry Dust Extraction	2016	3,306	Dust Collector	CE-54	SP-44
EU-17	Virgin Pellet Conveying	2016	3,306	Dust Collector	CE-35	*indoors*
EU-18	Virgin Pellet Feeding	2016	3,306	Filter	CE-38	*indoors*
EU-19	Powder Transfer	2016	3,306	Dust Collector	CE-28	*indoors*
EU-20	Extruder and Vapor Extraction	2016	3,306	*none*	-	SP-48
EU-21	Finish Pellet Conveying	2016	3,306	Filter Cartridge	CE-32	*indoors*
EU-23	Powder Mixing Station	2016	50	Filter	CE-31	*indoors*
* The extruder, identified as EU-20, is considered a bottleneck for the upstream bin, conveying, feeding, and transfer units in Compounder Line 1. The actual maximum capacities are not provided.						

(l) Two (2) secondary processing machines, consisting of the following emission units:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Throughput Capacity (lbs/hr)	Control Device	Control Device ID	Stack ID
EU-MT94	Metalizer	2012	42	*none*	-	SP-40, SP-41
EU-MT95	Metalizer	2016	42	*none*	-	SP-42

(m) Six (6) plastic film treaters, using electricity to heat plastic film for stretching/extruding processes, using no control devices, exhausting outdoors, and consisting of the following:

Process Line	Emission Unit ID	Construction Date	Maximum Electricity Used to Heat Film (kW/hr)*
Line 55	EU-06	1975	68
Line 62	EU-81	1981	40
Line 63	EU-99	1981	40
Line 64	EU-116	1991	104
Line 65	EU-145	1996	192
Line 71	EU-170	1998	192
*There are no combustion emissions from the plastic film treaters. All NOx and VOC emissions are produced from the heating of plastic film.			

(n) Three (3) natural gas-fired boilers, each with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-191	Steam Boiler	1979	35.5	SP-281
EU-192	Steam Boiler	1980	19.0	SP-282
EU-193	Low NOx Steam Boiler	2016	24.1	SP-283

Under the provisions of 40 CFR 60, Subpart Dc, the natural gas-fired boiler, identified as EU-193, is an affected facility.

(o) Six (6) natural gas-fired process heaters, each with no control device, and consisting of the following:

Process Line	Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
Line 64	EU-115	Oven*	1991	6.3	SP-174 through SP-179, and SP-197
	EU-129	Flame Treater	1991	3.09	SP-198
Line 65	EU-144	Tenter Oven*	1996	6.35	SP-218 through SP-225
Line 71	EU-169	Flame Treater	1998	0.51	SP-261, SP-262
	EU-180	Tenter Oven*	1998	10.5	SP-251 through SP-260
-	EU-203	Hot Water Heater	2012	2.97	SP-293
*Low NOx Burner					

(p) Seven (7) natural gas-fired space heaters, each with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-148	Space Heater	1996	3.8	SP-215
EU-149	Space Heater	1996	3.8	SP-216
EU-150	Space Heater	1996	3.8	SP-217
EU-200	Space Heater	2015	0.075	SP-290
EU-201	Space Heater	2015	5.31	SP-291
EU-218	Space Heater	1991	3.5	SP-193
EU-219	Space Heater	1991	3.5	SP-199

Insignificant Activities

(a) Three (3) emergency generators, with EU-194 being utilized as an emergency fire pump, each with no control device, and consisting of the following:

(1) Two (2) emergency generators:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-199	Natural gas	2013	194	SP-289

Under the provisions of 40 CFR 60, Subpart JJJJ, the natural gas-fired emergency generator, identified as EU-199, is an affected facility.

Under the provisions of 40 CFR 63, Subpart ZZZZ, the diesel-fired emergency generator,

identified as EU-190; and the natural gas-fired emergency generator, identified as EU-199, are affected facilities.

(2) One (1) emergency fire pump:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-194	Diesel	1983	255	SP-284

(b) Three (3) cooling towers, consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Water Circulation Rate (gallons/minute)	Stack ID
EU-195	Tenter Plant Cooling Tower	2004	10,383	SP-285
EU-196	Line 71 Cooling Tower	1998	3,000	SP-286
EU-198	Tubular Cooling Tower	2015	5,000	SP-288

(c) One (1) gasoline storage tank, consisting of the following:

Emission Unit ID	Construction Date	Storage Capacity (gallons)
GT1	1969	550

Under the provisions of 40 CFR 63, Subpart CCCCCC, the gasoline storage tank, identified as GT1, is an affected facility.

(d) Three (3) diesel storage tanks, consisting of the following:

Emission Unit ID	Construction Date	Storage Capacity (gallons)
DT1	1969	300
DT2	1974	300
DT3	1981	300

(e) Paved and unpaved roads.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – NSR for Unpermitted Emission Units

(a) The proposed FESOP involves the construction and operation of unpermitted emission units with potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants:
(1) PM, PM10, and direct PM2.5;
(2) Nitrogen oxides (NOx), and
(3) Volatile Organic Compounds (VOC).

(b) The following table is used to determine the appropriate permit level under 326 IAC 2-8-11.1 (Permit Revisions). This table reflects the PTE before controls of the unpermitted emission units. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

	Potential To Emit of Unpermitted Emission Units (tons/year)								
Process/ Emission Unit	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
22 Extruders of Lines 55, 62, 63, 64, 65, 71, and Tubular Reclaim and Secondary Processing	9.94	9.94	9.94	-	-	3.71	-	0.06	0.04 (Formal-dehyde)
Line 55 PP Transfers	5.26	5.26	5.26	-	-	-	-	-	-
Line 55 Polymer Handling	185.60	185.60	185.60	-	-	-	-	-	-
Line 62	38.58	38.58	38.58	-	-	-	-	-	-
Line 63	19.62	19.62	19.62	-	-	-	-	-	-
Line 64	81.29	81.29	81.29	-	-	-	-	-	-
Line 65	42.05	42.05	42.05	-	-	-	-	-	-
Line 71	120.73	120.73	120.73	-	-	-	-	-	-
Tubular Reclaim and Secondry Processing	27.93	27.93	27.93	-	-	-	-	-	-
Tenter Polymer Handling	78.84	78.84	78.84	-	-	-	-	-	-
Tenter Reclaim	9.06	9.06	9.06	-	-	-	-	-	-
Compounder Line 1	126.72	37.18	37.18	-	-	-	-	-	-
Metalizer 94 & 95	0.46	0.13	0.13	-	-	-	-	-	-
Treaters	-	-	-	-	38.44	38.44	-	-	-
Insignificant Activities									
NG Emergency Generator	2.80E-05	3.63E-03	3.63E-03	2.14E-04	1.48	0.04	0.12	0.03	0.02 (Formal-dehyde)
Diesel Emergency Generators	0.29	0.29	0.29	0.27	4.05	0.33	0.87	3.55E-03	1.08E-03 (Formal-dehyde)
Cooling Towers	0.03	0.03	0.03	-	-	-	-	-	-
Storage Tanks	-	-	-	-	-	0.10	-	-	-
Fugitive Emissions - Paved & Unpaved Roads	*14.79*	*3.08*	*0.68*	-	-	-	-	-	-
Total PTE of Entire Source	**746.40**	**656.54**	**656.54**	**0.27**	**43.98**	**38.81**	**0.99**	**0.03**	**0.02 (Formal-dehyde)**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

Process/ Emission Unit	Potential To Emit of Unpermitted Emission Units (tons/year)								
	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant". $PM_{2.5}$ listed is direct $PM_{2.5}$.									

Pursuant to 326 IAC 2-8-11.1(f)(1)(E), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves the construction of unpermitted emission units with potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants:

(i) PM, PM10, or direct PM2.5;
(ii) Nitrogen oxides (NOx), and
(iii) Volatile Organic Compounds (VOC).

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	747.48
PM10(1)	662.08
PM2.5(1)	662.08
SO_2	0.61
NO_x	88.70
VOC	45.75
CO	48.64

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10) and particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM2.5), not particulate matter (PM), are each considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Hexane	1.02
Formaldehyde	0.12
Acetaldehyde	0.02
TOTAL HAPs	**1.16**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(30)) of PM10 and PM2.5 are each greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are each less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

PTE of the Entire Source After Issuance of the FESOP

The table below summarizes the potential to emit of the entire source after issuance of this FESOP, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
Process/ Emission Unit	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
22 Extruders of Lines 55, 62, 63, 64, 65, 71, and Tubular Reclaim and Secondary Processing	9.94	9.94	9.94	-	-	3.71	-	0.06	0.04 (Formal-dehyde)
Line 55 PP Transfers (1),(2)	0.26	0.26	0.26	-	-	-	-	-	-
Line 55 Polymer Handling (1),(2),(3)	19.16	19.16	19.16	-	-	-	-	-	-
Line 62 (1),(2),(4)	8.63	8.63	8.63	-	-	-	-	-	-
Line 63 (1),(2)	0.98	0.98	0.98	-	-	-	-	-	-
Line 64 (1),(2),(5)	5.56	5.56	5.56	-	-	-	-	-	-
Line 65 (1),(2)	2.10	2.10	2.10	-	-	-	-	-	-
Line 71 (1),(2),(6)	26.19	26.19	26.19	-	-	-	-	-	-
Tubular Reclaim and Secondry Processing (1),(2),(7)	4.31	4.31	4.31	-	-	-	-	-	-
Tenter Polymer Handling (1),(2)	3.94	3.94	3.94	-	-	-	-	-	-
Tenter Reclaim (1),(2)	0.45	0.45	0.45	-	-	-	-	-	-
Compounder Line 1 (2),(8)	126.72	6.97	6.97	-	-	-	-	-	-
Metalizer 94 & 95	0.46	0.13	0.13	-	-	-	-	-	-
Treaters	-	-	-	-	38.44	38.44	-	-	-
NG Boilers	0.64	3.56	3.56	0.20	26.71	1.86	28.35	0.64	0.61 (Hexane)
NG Heaters	0.44	1.98	1.98	0.14	18.01	1.26	19.30	0.43	0.41 (Hexane)
Insignificant Activities									
NG Emergency Generator	2.80E-05	0.00	0.00	2.14E-04	1.48	0.04	0.12	0.03	0.02 (Formal-dehyde)
Diesel Emergency Generators	0.29	0.29	0.29	0.27	4.05	0.33	0.87	3.55E-03	1.08E-03 (Formal-dehyde)
Cooling Towers	0.03	0.03	0.03	-	-	-	-	-	-
Storage Tanks	-	-	-	-	-	0.10	-	-	-
Fugitive Emissions - Paved & Unpaved Roads	*14.79*	*3.08*	*0.68*	-	-	-	-	-	-

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Total PTE of Entire Source	**210.11**	**94.50**	**94.50**	**0.61**	**88.70**	**45.75**	**48.64**	**1.16**	**1.02 (Hexane)**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

negl. = negligible
*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".

(1) Limited PM PTE based on lb/hr emission limitations to comply with 326 IAC 2-2 (PSD). All other emission units reflect the unlimited potential to emit.
(2) Limited PM10 and PM2.5 PTE based on lb/hr emission limitations to comply with 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP). All other emission units reflect the unlimited potential to emit.
(3) Line 55 Polymer Handling: EU-12 is unlimited. EU-Silos 1-12, EU-13, and EU-14 are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(4) Line 62: EU-60 through EU-67 and EU-82 PTE are unlimited. EU-68 through EU-75 PTE are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(5) Line 64: EU-123 is unlimited. All other emission units are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(6) Line 71: EU-175, EU-176, EU-177, EU-178, EU-179, EU-182, and EU-183 PTE are uncontrolled/unlimited. EU-160 through EU-166, EU-171, EU-172, EU-173, and EU-174 PTE are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(7) Tubular Reclaim and Secondary Processing: EU-CH1 through EU-CH5 are uncontrolled/unlimited. EU-08, EU-09, EU-10, and EU-FB1 through EU-FB5 are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(8) Compounder Line 1: PM is not limited for any of the emission units on this line. EU-20 and EU-23 are unlimited. EU-15 through EU-19, and EU-21 are based on PM10 and PM2.5 lb/hr emission limitations.

(a) FESOP Status

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

(1) The PM10 and PM2.5 emissions after control from the following units shall not exceed the emission limits listed in the tables below:

(a)

Process Line	Emission Unit ID / Associated Bin ID	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
22 Extruders						
55	EU-04	-	-	-	-	-
62	EU-76	-	-	-	-	-
	EU-77	-	-	-	-	-

Process Line	Emission Unit ID / Associated Bin ID	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
	EU-78	-	-	-	-	-
63	EU-94	-	-	-	-	-
	EU-95	-	-	-	-	-
	EU-96	-	-	-	-	-
64	EU-113	-	-	-	-	-
	EU-120	-	-	-	-	-
	EU-121	-	-	-	-	-
	EU-128	-	-	-	-	-
65	EU-137	-	-	-	-	-
	EU-138	-	-	-	-	-
	EU-139	-	-	-	-	-
	EU-140	-	-	-	-	-
	EU-146	-	-	-	-	-
71	EU-167	-	-	-	-	-
	EU-173	-	-	-	-	-
	EU-174	-	-	-	-	-
	EU-176	-	-	-	-	-
Tubular Reclaim and Secondary Processing	EU-07	-	-	-	-	-
	EU-11	-	-	-	-	-
The twenty-two (22) extruders will not be limited.						

(b)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 55						
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15	0.02	0.02
EU-02	PP Transfer	Dust Collector	CE-18	SP-22	0.02	0.02
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*	0.02	0.02

(c)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 55 Polymer Handling						
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01	0.06	0.06
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02	0.06	0.06
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03	0.06	0.06
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04	0.06	0.06
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05	0.06	0.06

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06	0.06	0.06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07	0.06	0.06
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08	0.06	0.06
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09	0.13	0.13
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10	0.13	0.13
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11	0.13	0.13
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12	0.13	0.13
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*	0.50	0.50
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*	0.50	0.50
EU-12 (Rail Car Delivery) of Line 55 Polymer Handling will not be limited.						

(d)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 62						
EU-68	Drying Bin	Dust Collector	CE-75	SP-101	0.05	0.05
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*	0.05	0.05
EU-70	Storage Bin	Baghouse	CE-67	SP-104	0.05	0.05
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*	0.05	0.05
EU-72	Storage Bin	Dust Collector	CE-77	SP-106	0.05	0.05
EU-73	Drying Bin	Dust Collector	CE-78	SP-107	0.05	0.05
EU-74	Storage Bin	Dust Collector	CE-79	SP-108	0.05	0.05
EU-75	Storage Bin	Dust Collector	CE-80	SP-109	0.05	0.05
EU-60 to EU-67 and EU-82 of Line 62 will not be limited.						

(e)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 63						
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*	0.17	0.17
EU-91	Storage Bin					
EU-93	Blender					
EU-92	Drying Bin	Dust Collector	CE-101	SP-141	0.06	0.06

(f)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 64						
EU-110	Drying Bin	Filter	CE-129	*indoors*	0.13	0.13
EU-111	Storage Bin	Cyclone	CE-120	SP-170	0.13	0.13
		Dust Collector	CE-121			
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*	0.13	0.13
EU-113	Nauta Mixer	Filter Separator	CE-128	SP-172	0.13	0.13
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*	0.13	0.13
EU-118	Drying Bin	Dust Collector	CE-131	SP-184	0.02	0.02
EU-119	Drying Bin	Dust Collector	CE-132	SP-185	0.02	0.02
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188	0.04	0.04
EU-121	Feeding Bin					
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*	0.02	0.02
EU-125	Storage Bin	Baghouse	CE-137	SP-192	0.04	0.04
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*	0.08	0.08
EU-129	Pelletizer					
EU-127	Storage Bin	Baghouse	CE-139	SP-195	0.04	0.04
EU-123 of Line 64 will not be limited.						

(g)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 65						
EU-130	Drying Bin	Baghouse	CE-141	SP-201	0.05	0.05
EU-131	Drying Bin	Filter Separator	CE-142	SP-202	0.05	0.05
EU-132	Drying Bin	Filter Separator	CE-143	SP-203	0.05	0.05
EU-133	Drying Bin	Dust Collector	CE-149	SP-209	0.02	0.02
EU-134	Drying Bin	Dust Collector	CE-150	SP-210	0.02	0.02
EU-135	Polymer Bin	Baghouse	CE-148	SP-211	0.09	0.09
EU-136	Polymer Bin					
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206	0.04	0.04
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204	0.04	0.04

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231	0.03	0.03
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232	0.03	0.03
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205	0.05	0.05

(h)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Line 71						
EU-160	Storage Silo	Dust Collector	CE-177	SP-241	0.10	0.10
EU-161	Storage Silo	Dust Collector	CE-178	SP-242	0.10	0.10
EU-162	Storage Bin	Filter Separator	CE-160	SP-240	0.19	0.19
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*	0.08	0.08
EU-164	Blending System	Dust Collector	CE-163	SP-245	0.19	0.19
EU-165	Storage Bin	Filter	CE-179	SP-246	0.19	0.19
EU-166	Drying Bin	Filter	CE-164	SP-247	0.19	0.19
EU-171	Drying Bin	Filter	CE-169	SP-266	0.02	0.02
EU-172	Drying Bin	Cyclone	CE-171	SP-267	0.02	0.02
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268	0.02	0.02
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269	0.02	0.02
EU-175, EU-176, EU-177, EU-178, EU-179, EU-182, and EU-183 of Line 71 will not be limited.						

(i)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Tubular Reclaim and Secondary Processing						
EU-08	Polymer Transfer	Filter	CE-25	*indoors*	0.05	0.05
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*	0.05	0.05
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*	0.05	0.05
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31	0.02	0.02
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32	0.02	0.02
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33	0.02	0.02
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34	0.02	0.02
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35	0.02	0.02
EU-CH1 to EU-CH5 of Tubular Reclaim and Secondary Processing will not be limited.						

(j)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Tenter Polymer Handling						
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60	0.14	0.14
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61	0.14	0.14
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72	0.20	0.20
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62	0.04	0.04
EU-Silo 14	Polymer Silo					
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63	0.04	0.04
EU-Silo 16	Polymer Silo					
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64	0.04	0.04
EU-Silo 18	Polymer Silo					
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65	0.04	0.04
EU-Silo 20	Polymer Silo					
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66	0.04	0.04
EU-Silo 22	Polymer Silo					
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67	0.04	0.04
EU-Silo 24	Polymer Silo					
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68	0.04	0.04
EU-Silo 26	Polymer Silo					
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70	0.04	0.04
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71	0.07	0.07
EU-Silo 29	Polymer Silo					
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69	0.04	0.04

(k)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Tenter Reclaim						
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300	0.01	0.01
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301	0.01	0.01
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302	0.01	0.01
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303	0.01	0.01
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304	0.07	0.07
EU-215	Polypropylene Pellet Bin					
EU-216	Polypropylene Pellet Bin					
EU-217	Polypropylene Pellet Bin					

(l)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM10 Emission Limit (lbs/hr)	PM2.5 Emission Limit (lbs/hr)
Compounder Line 1						
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43	0.06	0.06
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44	0.06	0.06
EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*	0.06	0.06
EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*	0.06	0.06
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*	0.06	0.06
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*	0.06	0.06
EU-20 and EU-23 of Compounder Line 1 will not be limited.						

(m) The two (2) secondary processing machines, identified as Metalizers EU-MT94 and EU-MT95, will not be limited.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

These are all new limits for the source.

(b) PSD Minor Source
This existing source is not a major stationary source, under PSD (326 IAC 2-2), because:
(1) The potential to emit PM, PM10, and PM2.5 is limited to less than 250 tons per year,
(2) The potential to emit all other PSD regulated pollutants are less than 250 tons per year,
(3) This source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1), and

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

(1) The PM emissions after control from the following units shall not exceed the emission limits listed in the tables below:

(a)

Process Line	Emission Unit ID / Associated Bin ID	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
22 Extruders					
55	EU-04	-	-	-	-
62	EU-76	-	-	-	-
	EU-77	-	-	-	-
	EU-78	-	-	-	-

Process Line	Emission Unit ID / Associated Bin ID	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
63	EU-94	-	-	-	-
	EU-95	-	-	-	-
	EU-96	-	-	-	-
64	EU-113	-	-	-	-
	EU-120	-	-	-	-
	EU-121	-	-	-	-
	EU-128	-	-	-	-
65	EU-137	-	-	-	-
	EU-138	-	-	-	-
	EU-139	-	-	-	-
	EU-140	-	-	-	-
	EU-146	-	-	-	-
71	EU-167	-	-	-	-
	EU-173	-	-	-	-
	EU-174	-	-	-	-
	EU-176	-	-	-	-
Tubular Reclaim and Secondary Processing	EU-07	-	-	-	-
	EU-11	-	-	-	-
The twenty-two (22) extruders will not be limited.					

(b)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 55					
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15	0.02
EU-02	PP Transfer	Dust Collector	CE-18	SP-22	0.02
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*	0.02

(c)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 55 Polymer Handling					
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01	0.06
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02	0.06
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03	0.06
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04	0.06
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05	0.06
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06	0.06

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07	0.06
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08	0.06
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09	0.13
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10	0.13
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11	0.13
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12	0.13
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*	0.50
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*	0.50
EU-12 (Rail Car Delivery) of Line 55 Polymer Handling will not be limited.					

(d)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 62					
EU-68	Drying Bin	Dust Collector	CE-75	SP-101	0.05
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*	0.05
EU-70	Storage Bin	Baghouse	CE-67	SP-104	0.05
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*	0.05
EU-72	Storage Bin	Dust Collector	CE-77	SP-106	0.05
EU-73	Drying Bin	Dust Collector	CE-78	SP-107	0.05
EU-74	Storage Bin	Dust Collector	CE-79	SP-108	0.05
EU-75	Storage Bin	Dust Collector	CE-80	SP-109	0.05
EU-60 to EU-67 and EU-82 of Line 62 will not be limited.					

(e)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 63					
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*	0.17
EU-91	Storage Bin				
EU-93	Blender				
EU-92	Drying Bin	Dust Collector	CE-101	SP-141	0.06

(f)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 64					
EU-110	Drying Bin	Filter	CE-129	*indoors*	0.13
EU-111	Storage Bin	Cyclone	CE-120	SP-170	0.13
		Dust Collector	CE-121		
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*	0.13
EU-113	Nauta Mixer	Filter Separator	CE-128	SP-172	0.13
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*	0.13
EU-118	Drying Bin	Dust Collector	CE-131	SP-184	0.02
EU-119	Drying Bin	Dust Collector	CE-132	SP-185	0.02
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188	0.04
EU-121	Feeding Bin				
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*	0.02
EU-125	Storage Bin	Baghouse	CE-137	SP-192	0.04
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*	0.08
EU-129	Pelletizer				
EU-127	Storage Bin	Baghouse	CE-139	SP-195	0.04
EU-123 of Line 64 will not be limited.					

(g)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 65					
EU-130	Drying Bin	Baghouse	CE-141	SP-201	0.05
EU-131	Drying Bin	Filter Separator	CE-142	SP-202	0.05
EU-132	Drying Bin	Filter Separator	CE-143	SP-203	0.05
EU-133	Drying Bin	Dust Collector	CE-149	SP-209	0.02
EU-134	Drying Bin	Dust Collector	CE-150	SP-210	0.02
EU-135	Polymer Bin	Baghouse	CE-148	SP-211	0.09
EU-136	Polymer Bin				
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206	0.04
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204	0.04

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231	0.03
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232	0.03
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205	0.05

(h)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Line 71					
EU-160	Storage Silo	Dust Collector	CE-177	SP-241	0.10
EU-161	Storage Silo	Dust Collector	CE-178	SP-242	0.10
EU-162	Storage Bin	Filter Separator	CE-160	SP-240	0.19
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*	0.08
EU-164	Blending System	Dust Collector	CE-163	SP-245	0.19
EU-165	Storage Bin	Filter	CE-179	SP-246	0.19
EU-166	Drying Bin	Filter	CE-164	SP-247	0.19
EU-171	Drying Bin	Filter	CE-169	SP-266	0.02
EU-172	Drying Bin	Cyclone	CE-171	SP-267	0.02
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268	0.02
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269	0.02
EU-175, EU-176, EU-177, EU-178, EU-179, EU-182, and EU-183 of Line 71 will not be limited.					

(i)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Tubular Reclaim and Secondary Processing					
EU-08	Polymer Transfer	Filter	CE-25	*indoors*	0.05
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*	0.05
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*	0.05
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31	0.02
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32	0.02
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33	0.02
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34	0.02
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35	0.02
EU-CH1 to EU-CH5 of Tubular Reclaim and Secondary Processing will not be limited.					

(j)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Tenter Polymer Handling					
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60	0.14
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61	0.14
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72	0.20
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62	0.04
EU-Silo 14	Polymer Silo				
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63	0.04
EU-Silo 16	Polymer Silo				
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64	0.04
EU-Silo 18	Polymer Silo				
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65	0.04
EU-Silo 20	Polymer Silo				
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66	0.04
EU-Silo 22	Polymer Silo				
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67	0.04
EU-Silo 24	Polymer Silo				
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68	0.04
EU-Silo 26	Polymer Silo				
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70	0.04
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71	0.07
EU-Silo 29	Polymer Silo				
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69	0.04

(k)

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
Tenter Reclaim					
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300	0.01
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301	0.01
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302	0.01
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303	0.01
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304	0.07
EU-215	Polypropylene Pellet Bin				
EU-216	Polypropylene Pellet Bin				

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	PM Emission Limit (lbs/hr)
EU-217	Polypropylene Pellet Bin				

(l) The emission units of the process line, identified as Compounder Line 1, and the two (2) secondary processing machines, identified as Metalizers EU-MT94 and EU-MT95, will not be limited for particulate matter (PM).

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

These are all new limits for the source.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Db (326 IAC 12), are not included in the permit for the following:

(i) Two (2) natural gas-fired steam boilers, identified as EU-191 and EU-192, since these facilities did not commence construction, modification, or reconstruction after June 19, 1984.

(ii) One (1) natural gas-fired steam boiler, identified as EU-193, since this facility did commence construction, modification, or reconstruction after June 19, 1984, but does not have a heat input capacity of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).

(b) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit for the natural gas-fired steam boilers, identified as EU-191 and EU-192, since these facilities did not commence construction, modification, or reconstruction after June 9, 1989.

(c) The natural gas-fired boiler, identified as EU-193, is subject to the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc), because the steam generating unit commenced construction after June 9, 1989 and has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

The unit subject to this rule include the following:

(i) One (1) natural gas-fired boiler, with no control device, and consisting of the following:

Emission Unit ID	Emission Unit Description	Construction Date	Maximum Input Capacity (MMBtu/hr)	Stack ID
EU-193	Low NOx Steam Boiler	2016	24.1	SP-283

Applicable portions of the NSPS are the following:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.41c
(3) 40 CFR 60.42c(h)(4)
(4) 40 CFR 60.48c(g)(1),(2),(3), and (i)

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the natural gas-fired boiler, identified as EU-193, except as otherwise specified in 40 CFR 60, Subpart Dc.

These are new requirements for the natural gas-fired boiler, identified as EU-193.

(d) The requirements of the New Source Performance Standard for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry, 40 CFR 60, Subpart DDD (326 IAC 12), are not included in the permit, since this source is not involved in the manufacture of polypropylene, polyethylene, polystyrene, or poly (ethylene terephthalate) as defined in 40 CFR 60.561.

Taghleef Industries, Inc. purchases polypropylene pellets which are compacted and melted to form a continuous, viscous liquid that is extruded through dies to make plastic film. Through this process, polypropylene is never produced, only melted and shaped to change physical forms.

(e) The requirements of the New Source Performance Standard for Polymeric Coating of Supporting Substrates, 40 CFR 60, Subpart VVV (326 IAC 12), are not included in the permit, since this source does not operate any coating operation or onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates.

(f) The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII (326 IAC 12), are not included in the permit, since neither of the two (2) diesel-fired emergency generators, identified as EU-190 and EU-194, commenced construction, modification, or reconstruction after July 11, 2005.

(g) The natural gas-fired emergency generator, identified as EU-199, is subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ), because the source owns and operates a stationary spark ignition (SI) internal combustion engine (ICE) that commenced construction after June 12, 2006, where the stationary SI ICE are manufactured on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

The unit subject to this rule include the following:

(i) One (1) emergency generator, with no control device, and consisting of the following:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-199	Natural gas	2013	194	SP-289

Applicable portions of the NSPS are the following:

(1) 40 CFR 60.4230(a)(4)(iv)
(2) 40 CFR 60.4233(e)
(3) 40 CFR 60.4234
(4) 40 CFR 60.4236
(5) 40 CFR 60.4237(b)
(6) 40 CFR 60.4243(b)(1),(2)(i), (d), (e), and (f)
(7) 40 CFR 60.4244
(8) 40 CFR 60.4245(e)
(9) 40 CFR 60.4246
(10) 40 CFR 60.4248
(11) Tables 1, 2, 3, and 4

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the natural gas-fired emergency generator, identified as EU-199, except as otherwise specified in 40 CFR 60, Subpart JJJJ.

These are new requirements for the natural gas-fired emergency generator, identified as EU-199.

(h) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Group I Polymers and Resins, 40 CFR 63.480, Subpart U (326 IAC 20-19), are not included in the permit, since this source does not own or operate any elastomer product process units (EPPU) or associated equipment, and is not a major source of HAPs.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Group IV Polymers and Resins, 40 CFR 63.1310, Subpart JJJ (326 IAC 20-21), are not included in the permit, since this source does not own or operate any thermoplastic product process units (TPPU) or associated equipment, and is not a major source of HAPs.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Manufacture of Amino/Phenolic Resins, 40 CFR 63.1400, Subpart OOO (326 IAC 20-58), are not included in the permit, since this source does not own or operate any amino/phenolic resin process units (APPU) or associated equipment, and is not a major source of HAPs.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Reinforced Plastic Composites Production, 40 CFR 63.5780, Subpart WWWW (326 IAC 20-56), are not included in the permit, since this source does not own or operate a reinforced plastic composites production facility and is not located at a major source of HAP emissions.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63.6580, Subpart ZZZZ (326 IAC 20-82), are not included in the permit for the emergency generator, identified as EU-194, since this emission unit is being utilized as an emergency fire pump. EU-194 meets the definition of an existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year, as stated in 40 CFR 63.6585(f)(2).

(f) The two (2) emergency generators are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR 63, Subpart ZZZZ), because each of the two (2) emergency generators are a stationary RICE located at an area source of HAP, and are not being tested at a stationary RICE test cell/stand.

The units subject to this rule include the following:

(i) Two (2) emergency generators, each with no control device, and consisting of the following:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-199	Natural gas	2013	194	SP-289

Applicable portions of the NESHAP are the following:

(1) 40 CFR 63.6585(a),(c), and (d)
(2) 40 CFR 63.6590(a)(1)(iii), (2)(iii)
(3) 40 CFR 63.6595(a)(6),(7), and (c)
(4) 40 CFR 63.6603(a)
(5) 40 CFR 63.6604(b)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6612
(8) 40 CFR 63.6625(e)(3)
(9) 40 CFR 63.6630(a)
(10) 40 CFR 63.6645(a)(2)
(11) 40 CFR 63.6650(a)
(12) 40 CFR 63.6665
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
(15) Table 2d

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the two (2) emergency generators except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

These are new requirements for the two (2) emergency generators, identified as EU-190 and EU-199.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63.7480, Subpart DDDDD (326 IAC 20-95), are not included in the permit, since the boilers and process heaters at this source are not located at, or part of, a major source of HAP.

(h) The gasoline storage tank, identified as GT1, is subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC), because the gasoline storage tank is part of a gasoline dispensing facility (GDF) located at an area source of HAPs.

The unit subject to this rule include the following:

(i) One (1) gasoline storage tank, consisting of the following:

Emission Unit ID	Construction Date	Storage Capacity (gallons)
GT1	1969	550

Applicable portions of the NESHAP are the following:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111(a),(b),(e), and (f)
(3) 40 CFR 63.11112
(4) 40 CFR 63.11113
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11130
(8) 40 CFR 63.11131
(9) 40 CFR 63.11132
(10) Table 3

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the gasoline storage tank, identified as GT1, except as otherwise specified in 40 CFR 63, Subpart CCCCCC.

These are new requirements for the gasoline storage tank, identified as GT1.

(i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Polyvinyl Chloride and Copolymers Production Area Sources, 40 CFR 63.11140, Subpart DDDDDD, are not included in the permit, since this source does not own or operate a plant that produces polyvinyl chloride (PVC) or copolymers, and the source does not own or operate polyvinyl chloride and copolymers process units (PVCPU).

(j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63.11193, Subpart JJJJJJ, are not included in the permit, since the three (3) natural gas-fired boilers, identified as EU-191, EU-192, and EU-193, are specifically exempt to this subpart as stated under 40 CFR 63.11195(e) because these emission units are gas-fired boilers.

(k) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the source is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

(d) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

(e) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

(g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the paved and unpaved roads do not have potential fugitive particulate emissions greater than 25 tons per year.

(h) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(i) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

(a) The six (6) natural gas-fired process heaters and the seven (7) space heaters are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because pursuant to 326 IAC 1-2-19, these emission units do not meet the definition of an indirect heating unit.

(b) The three (3) natural gas-fired boilers meet the definition of an indirect heating unit, however the requirements of 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) are not applicable to the boilers because they are subject to a more stringent particulate matter limit under 326 IAC 6.5 (Particulate Matter Limitations Except Lake County).

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) The requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) are not applicable to the emission units at this source because they are subject to a more stringent particulate matter limit under 326 IAC 6.5 (Particulate Matter Limitations Except Lake County).

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)

(a) This existing stationary plastic film manufacturing operation is located in Vigo County. This source is not specifically listed in 326 IAC 6.5-9; however, it does have an unlimited potential to emit greater than one hundred (100) tons of particulate matter (PM) per year.

(b) Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the facilities listed below shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

(1) Process Lines:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID
Line 55				
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15
EU-02	PP Transfer	Dust Collector	CE-18	SP-22
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*
EU-04	Extruder	*none*	-	-
Line 55 Polymer Handling				
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12
EU-12	Rail Car	*none*	-	-
EU-13	Polymer Conveying System	Dust Collector	CE-13	*indoors*
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*
Line 62				
EU-60	Polymer Holding Bin	Dust Collector	CE-71	SP-92
EU-61	Storage Bin	Filter Cartridge	CE-72	*indoors*
EU-62	Storage Bin			
EU-63	Storage Bin			
EU-64	Polymer Blender	Dust Collector	CE-68	*indoors*
EU-65A	Polymer Blending	Dust Collector	CE-73	*indoors*
EU-65B	Polymer Blending			
EU-66	Drying Bin	Cyclone Dust Collector	CE-93	*indoors*
EU-67	Storage Bin	Cyclone Dust Collector	CE-69	*indoors*
EU-68	Drying Bin	Dust Collector	CE-75	SP-101
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*

EU-70	Storage Bin	Baghouse	CE-67	SP-104
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*
EU-72	Storage Bin	Dust Collector	CE-77	SP-106
EU-73	Drying Bin	Dust Collector	CE-78	SP-107
		Dust Collector	CE-79	SP-108
EU-74	Storage Bin	Dust Collector	CE-80	SP-109
EU-75	Storage Bin	Dust Collector	CE-81	SP-105
EU-76	Extruder	*none*	-	-
EU-77	Extruder	*none*	-	-
EU-78	Extruder	*none*	-	-
EU-82	Box Dumper	Cyclone Dust Collector	CE-74	*indoors*
Line 63				
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*
EU-91	Storage Bin			
EU-93	Blender			
EU-92	Drying Bin	Dust Collector	CE-101	SP-141
EU-94	Extruder	*none*	-	-
EU-95	Extruder	*none*	-	-
EU-96	Extruder	*none*	-	-
Line 64				
EU-110	Drying Bin	Filter	CE-129	*indoors*
EU-111	Storage Bin	Cyclone	CE-120	SP-170
		Dust Collector	CE-121	
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*
EU-113	Nauta Mixer	Cyclone Dust Collector	CE-127	*indoors*
		Filter Separator	CE-128	SP-172
-	Main Extruder	*none*	-	-
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*
EU-118	Drying Bin	Dust Collector	CE-131	SP-184
EU-119	Drying Bin	Dust Collector	CE-132	SP-185
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188
EU-121	Feeding Bin			
-	Satellite Extruder	*none*	-	-
-	Satellite Extruder	*none*	-	-
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*
EU-123	Box Dumping Station	*none*	-	-
EU-125	Storage Bin	Baghouse	CE-137	SP-192
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*
EU-129	Pelletizer			
EU-127	Storage Bin	Baghouse	CE-139	SP-195
EU-128	Extruder	*none*	-	-
Line 65				
EU-130	Drying Bin	Baghouse	CE-141	SP-201
EU-131	Drying Bin	Filter Separator	CE-142	SP-202
EU-132	Drying Bin	Filter Separator	CE-143	SP-203
EU-133	Drying Bin	Dust Collector	CE-149	SP-209
EU-134	Drying Bin	Dust Collector	CE-150	SP-210
EU-135	Polymer Bin	Baghouse	CE-148	SP-211
EU-136	Polymer Bin			

EU-137	Feeding Bin	Dust Collector	CE-144	SP-206
-	Intermediate Extruder	*none*	-	-
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204
-	Intermediate Extruder	*none*	-	-
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231
-	Satellite Extruder	*none*	-	-
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232
-	Satellite Extruder	*none*	-	-
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205
		Dust Collector	CE-152	SP-213
EU-146	Extruder	*none*	-	-
Line 71				
EU-160	Storage Silo	Dust Collector	CE-177	SP-241
EU-161	Storage Silo	Dust Collector	CE-178	SP-242
EU-162	Storage Bin	Filter Separator	CE-160	SP-240
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*
EU-164	Blending System	Dust Collector	CE-163	SP-245
EU-165	Storage Bin	Filter	CE-179	SP-246
EU-166	Drying Bin	Filter	CE-164	SP-247
EU-167	Extruder	*none*	-	-
EU-171	Drying Bin	Filter	CE-169	SP-266
EU-172	Drying Bin	Cyclone	CE-171	SP-267
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268
-	Satellite Extruder	*none*	-	-
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269
-	Satellite Extruder	*none*	-	-
EU-175	Box Dumping Station	*none*	-	-
EU-176	Reclaim Extruder	*none*	-	-
EU-177	Supersack Unloader	*none*	-	-
EU-178	Bag Unloader	*none*	-	-
EU-179	Sack Dumper Bin	*none*	-	-
EU-182	Rail Car Filling	*none*	-	-
EU-183	Reclaim Bin	*none*	-	-
Tubular Reclaim and Secondary Processing				
EU-07	Extruder	*none*	-	SP-24
EU-08	Polymer Transfer	Filter	CE-25	*indoors*
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*
EU-11	Extruder	*none*	-	SP-30
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35
EU-CH1	Flake Grinder	*none*	-	SP-36
EU-CH2	Flake Grinder	*none*	-	SP-37
EU-CH3	Flake Grinder	*none*	-	SP-38
EU-CH4	Flake Grinder	*none*	-	SP-39

EU-CH5	Flake Grinder	*none*	-	SP-23
Tenter Polymer Handling				
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60
EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62
EU-Silo 14	Polymer Silo			
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63
EU-Silo 16	Polymer Silo			
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64
EU-Silo 18	Polymer Silo			
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65
EU-Silo 20	Polymer Silo			
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66
EU-Silo 22	Polymer Silo			
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67
EU-Silo 24	Polymer Silo			
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68
EU-Silo 26	Polymer Silo			
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71
EU-Silo 29	Polymer Silo			
EU-Silo 30	Polymer Silo	Cyclone	CE-49	SP-69
Tenter Reclaim				
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304
EU-215	Polypropylene Pellet Bin			
EU-216	Polypropylene Pellet Bin			
EU-217	Polypropylene Pellet Bin			
Compounder Line 1				
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44
EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*
EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*
EU-20	Extruder and Vapor Extraction	*none*	-	SP-48
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*
EU-23	Powder Mixing Station	Filter	CE-31	*indoors*
Secondary Processing Machines				
EU-MT94	Metalizer	*none*	-	SP-40, SP-41
EU-MT95	Metalizer	*none*	-	SP-42

(2) Six (6) natural gas-fired process heaters:

Process Line	Emission Unit ID	Emission Unit Description	Stack ID
Line 64	EU-115	Oven*	SP-174 through SP-179, and SP-197
	EU-129	Flame Treater	SP-198
Line 65	EU-144	Tenter Oven*	SP-218 through SP-225
Line 71	EU-169	Flame Treater	SP-261, SP-262
	EU-180	Tenter Oven*	SP-251 through SP-260
-	EU-203	Hot Water Heater	SP-293

*Low NOx Burner

(3) Seven (7) natural gas-fired space heaters:

Emission Unit ID	Emission Unit Description	Stack ID
EU-148	Space Heater	SP-215
EU-149	Space Heater	SP-216
EU-150	Space Heater	SP-217
EU-200	Space Heater	SP-290
EU-201	Space Heater	SP-291
EU-218	Space Heater	SP-193
EU-219	Space Heater	SP-199

(4) Three (3) emergency generators, each with no control device, and consisting of the following:

Emission Unit ID	Combustion Fuel	Construction Date	Maximum Input Capacity (HP)	Stack ID
EU-190	Diesel	1979	268	SP-280
EU-194*	Diesel	1983	255	SP-284
EU-199	Natural gas	2013	194	SP-289

*Emergency fire pump

(5) Three (3) cooling towers:

Emission Unit ID	Emission Unit Description	Stack ID
EU-195	Tenter Plant Cooling Tower	SP-285
EU-196	Line 71 Cooling Tower	SP-286
EU-198	Tubular Cooling Tower	SP-288

(c) Pursuant to 326 IAC 6.5-1-2(b)(3), the gaseous fuel-fired steam generators listed below are limited to a particulate matter (PM) content of not greater than one-hundredth (0.01) grain per dry standard cubic foot (dscf).

(1) Three (3) natural gas-fired boilers:

Emission Unit ID	Emission Unit Description	Stack ID
EU-191	Steam Boiler	SP-281
EU-192	Steam Boiler	SP-282
EU-193	Low NOx Steam Boiler	SP-283

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

(a) Each existing unit is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each existing unit is less than twenty-five (25) tons per year.

(b) There are no 326 IAC 8 Rules that are applicable to the facility.

326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)

This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from each emission unit is less than twenty-five (25) tons per year and ten (10) pounds per hour.

Compliance Determination, Monitoring and Testing Requirements

(a) The compliance determination and monitoring requirements applicable to this source are as follows:

(1) Visible Emissions Notations:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	Operating Parameters *	Frequency
Line 55						
EU-01	PP Transfer	Cyclones	CE-15, CE-16, CE-17	SP-15	VE	Once per day
EU-02	PP Transfer	Dust Collector	CE-18	SP-22	VE	Once per day
Line 55 Polymer Handling						
EU-Silo 1	Storage silo	Baghouse	CE-01	SP-01	VE	Once per day
EU-Silo 2	Storage silo	Baghouse	CE-02	SP-02	VE	Once per day
EU-Silo 3	Storage silo	Baghouse	CE-03	SP-03	VE	Once per day
EU-Silo 4	Storage silo	Baghouse	CE-04	SP-04	VE	Once per day
EU-Silo 5	Storage silo	Baghouse	CE-05	SP-05	VE	Once per day
EU-Silo 6	Storage silo	Baghouse	CE-06	SP-06	VE	Once per day
EU-Silo 7	Storage silo	Baghouse	CE-07	SP-07	VE	Once per day
EU-Silo 8	Storage silo	Baghouse	CE-08	SP-08	VE	Once per day
EU-Silo 9	Storage silo	Baghouse	CE-09	SP-09	VE	Once per day
EU-Silo 10	Storage silo	Baghouse	CE-10	SP-10	VE	Once per day
EU-Silo 11	Storage silo	Baghouse	CE-11	SP-11	VE	Once per day
EU-Silo 12	Storage silo	Baghouse	CE-12	SP-12	VE	Once per day
Line 62						
EU-60	Polymer Holding Bin	Dust Collector	CE-71	SP-92	VE	Once per day
EU-68	Drying Bin	Dust Collector	CE-75	SP-101	VE	Once per day

EU-70	Storage Bin	Baghouse	CE-67	SP-104	VE	Once per day
EU-72	Storage Bin	Dust Collector	CE-77	SP-106	VE	Once per day
EU-73	Drying Bin	Dust Collector	CE-78	SP-107	VE	Once per day
		Dust Collector	CE-79	SP-108	VE	Once per day
EU-74	Storage Bin	Dust Collector	CE-80	SP-109	VE	Once per day
EU-75	Storage Bin	Dust Collector	CE-81	SP-105	VE	Once per day
Line 63						
EU-92	Drying Bin	Dust Collector	CE-101	SP-141	VE	Once per day
Line 64						
EU-111	Storage Bin	Cyclone	CE-120	SP-170	VE	Once per day
		Dust Collector	CE-121			
EU-118	Drying Bin	Dust Collector	CE-131	SP-184	VE	Once per day
EU-119	Drying Bin	Dust Collector	CE-132	SP-185	VE	Once per day
EU-120	Feeding Bin	Dust Collector	CE-135	SP-188	VE	Once per day
EU-121	Feeding Bin					
EU-125	Storage Bin	Baghouse	CE-137	SP-192	VE	Once per day
EU-127	Storage Bin	Baghouse	CE-139	SP-195	VE	Once per day
Line 65						
EU-130	Drying Bin	Baghouse	CE-141	SP-201	VE	Once per day
EU-131	Drying Bin	Filter Separator	CE-142	SP-202	VE	Once per day
EU-132	Drying Bin	Filter Separator	CE-143	SP-203	VE	Once per day
EU-133	Drying Bin	Dust Collector	CE-149	SP-209	VE	Once per day
EU-134	Drying Bin	Dust Collector	CE-150	SP-210	VE	Once per day
EU-135	Polymer Bin	Baghouse	CE-148	SP-211	VE	Once per day
EU-136	Polymer Bin					
EU-137	Feeding Bin	Dust Collector	CE-144	SP-206	VE	Once per day
EU-138	Feeding Bin	Dust Collector	CE-145	SP-204	VE	Once per day
EU-139	Feeding Bin	Dust Collector	CE-154	SP-231	VE	Once per day
EU-140	Feeding Bin	Dust Collector	CE-155	SP-232	VE	Once per day
EU-141	Polymer Blending	Dust Collector	CE-146	SP-205	VE	Once per day
		Dust Collector	CE-152	SP-213	VE	Once per day
Line 71						
EU-160	Storage Silo	Dust Collector	CE-177	SP-241	VE	Once per day
EU-161	Storage Silo	Dust Collector	CE-178	SP-242	VE	Once per day
EU-162	Storage Bin	Filter Separator	CE-160	SP-240	VE	Once per day
EU-165	Storage Bin	Filter	CE-179	SP-246	VE	Once per day
EU-166	Drying Bin	Filter	CE-164	SP-247	VE	Once per day
EU-171	Drying Bin	Filter	CE-169	SP-266	VE	Once per day
EU-172	Drying Bin	Cyclone	CE-171	SP-267	VE	Once per day
EU-173	Feeding Bin	Dust Collector	CE-173	SP-268	VE	Once per day
EU-174	Feeding Bin	Dust Collector	CE-174	SP-269	VE	Once per day
Tubular Reclaim and Secondary Processing						
EU-FB1	Fluff Bin	Baghouse	CE-20	SP-31	VE	Once per day
EU-FB2	Fluff Bin	Baghouse	CE-21	SP-32	VE	Once per day
EU-FB3	Fluff Bin	Baghouse	CE-22	SP-33	VE	Once per day
EU-FB4	Fluff Bin	Baghouse	CE-23	SP-34	VE	Once per day
EU-FB5	Fluff Bin	Baghouse	CE-24	SP-35	VE	Once per day
Tenter Polymer Handling						
EU-30	Polymer Conveying	Dust Collector	CE-40	SP-60	VE	Once per day

EU-31	Polymer Conveying	Dust Collector	CE-41	SP-61	VE	Once per day
EU-32	Polymer Conveying	Dust Collector	CE-52	SP-72	VE	Once per day
EU-Silo 13	Polymer Silo	Cyclone	CE-42	SP-62	VE	Once per day
EU-Silo 14	Polymer Silo					
EU-Silo 15	Polymer Silo	Cyclone	CE-43	SP-63	VE	Once per day
EU-Silo 16	Polymer Silo					
EU-Silo 17	Polymer Silo	Cyclone	CE-44	SP-64	VE	Once per day
EU-Silo 18	Polymer Silo					
EU-Silo 19	Polymer Silo	Cyclone	CE-45	SP-65	VE	Once per day
EU-Silo 20	Polymer Silo					
EU-Silo 21	Polymer Silo	Cyclone	CE-46	SP-66	VE	Once per day
EU-Silo 22	Polymer Silo					
EU-Silo 23	Polymer Silo	Cyclone	CE-47	SP-67	VE	Once per day
EU-Silo 24	Polymer Silo					
EU-Silo 25	Polymer Silo	Cyclone	CE-48	SP-68	VE	Once per day
EU-Silo 26	Polymer Silo					
EU-Silo 27	Polymer Silo	Cyclone	CE-50	SP-70	VE	Once per day
EU-Silo 28	Polymer Silo	Cyclone	CE-51	SP-71	VE	Once per day
EU-Silo 29	Polymer Silo					
Tenter Reclaim						
EU-210	Polypropylene Flake Storage	Dust Collector	CE-200	SP-300	VE	Once per day
EU-211	Polypropylene Flake Storage	Dust Collector	CE-201	SP-301	VE	Once per day
EU-212	Polypropylene Flake Storage	Dust Collector	CE-202	SP-302	VE	Once per day
EU-213	Polypropylene Flake Storage	Dust Collector	CE-203	SP-303	VE	Once per day
EU-214	Polypropylene Pellet Bin	Dust Collector	CE-204	SP-304	VE	Once per day
EU-215	Polypropylene Pellet Bin					
EU-216	Polypropylene Pellet Bin					
EU-217	Polypropylene Pellet Bin					
Compounder Line 1						
EU-15	Virgin Polymer Day Bin	Baghouse	CE-53	SP-43	VE	Once per day
EU-16	Dry Dust Extraction	Dust Collector	CE-54	SP-44	VE	Once per day

*VE = Visible Emissions

(2) Particulate Control Device Inspections:

Emission Unit ID	Emission Unit Description	Control Device	Control Device ID	Stack ID	Range*	Frequency
Line 55						
EU-03	PP Transfer	Filter Cartridge	CE-19	*indoors*	Replace	Quarterly
Line 55 Polymer Handling						
EU-14	Polymer Conveying System	Dust Collector	CE-14	*indoors*	Replace	Quarterly

Line 62						
EU-61	Storage Bin	Filter Cartridge	CE-72	*indoors*	Replace	Quarterly
EU-62	Storage Bin					
EU-63	Storage Bin					
EU-64	Polymer Blender	Dust Collector	CE-68	*indoors*	Replace	Quarterly
EU-65A	Polymer Blending	Dust Collector	CE-73	*indoors*	Replace	Quarterly
EU-65B	Polymer Blending					
EU-66	Drying Bin	Cyclone Dust Collector	CE-93	*indoors*	Replace	Quarterly
EU-67	Storage Bin	Cyclone Dust Collector	CE-69	*indoors*	Replace	Quarterly
EU-69	Storage Bin	Cyclone Dust Collector	CE-76	*indoors*	Replace	Quarterly
EU-71	Polymer Blending	Cyclone Dust Collector	CE-82	*indoors*	Replace	Quarterly
EU-82	Box Dumper	Cyclone Dust Collector	CE-74	*indoors*	Replace	Quarterly
Line 63						
EU-90	Storage Bin	Filter Cartridge	CE-100	*indoors*	Replace	Quarterly
EU-91	Storage Bin					
EU-93	Blender					
Line 64						
EU-110	Drying Bin	Filter	CE-129	*indoors*	Replace	Quarterly
EU-112	Drying Bin	Filter Cartridge	CE-123	*indoors*	Replace	Quarterly
EU-113	Nauta Mixer	Cyclone Dust Collector	CE-127	*indoors*	Replace	Quarterly
EU-117	Blending System	Filter Cartridge	CE-134	*indoors*	Replace	Quarterly
EU-122	Storage Bin	Cyclone Dust Collector	CE-136	*indoors*	Replace	Quarterly
EU-126	Pelletizer	Filter Cartridge	CE-138	*indoors*	Replace	Quarterly
EU-129	Pelletizer					
Line 71						
EU-163	Storage Bin	Filter Cartridge	CE-162	*indoors*	Replace	Quarterly
Tubular Reclaim and Secondary Processing						
EU-08	Polymer Transfer	Filter	CE-25	*indoors*	Replace	Quarterly
EU-09	Injection Molder	Dust Collector	CE-26	*indoors*	Replace	Quarterly
EU-10	Injection Molder	Dust Collector	CE-27	*indoors*	Replace	Quarterly
Compounder Line 1						
EU-17	Virgin Pellet Conveying	Dust Collector	CE-35	*indoors*	Replace	Quarterly
EU-18	Virgin Pellet Feeding	Filter	CE-38	*indoors*	Replace	Quarterly
EU-19	Powder Transfer	Dust Collector	CE-28	*indoors*	Replace	Quarterly
EU-21	Finish Pellet Conveying	Filter Cartridge	CE-32	*indoors*	Replace	Quarterly

* All defective particulate control devices shall be replaced.

(3) Parametric Monitoring:

Process Line: Emission Unit ID	Emission Unit/Process	Control Device	Operating Parameters	Frequency
Line 55 Polymer Handling: EU-13	Polymer Conveying System	Dust Collector (CE-13)	Pressure Drop	Once per day
Line 64: EU-113	Nauta Mixer	Filter Separator (CE-128)	Pressure Drop	Once per day
Line 71: EU-164	Blending System	Dust Collector (CE-163)	Pressure Drop	Once per day
Tenter Polymer Handling: EU-Silo 30	Polymer Silo	Cyclone (CE-49)	Pressure Drop	Once per day

These monitoring conditions are necessary because the baghouses, dust collectors, filters, and cyclones used to control the associated emission units in the table above must operate properly to ensure compliance with 326 IAC 2-8-4 (FESOP), 326 IAC 6.5 (Particulate Matter Limitations Except Lake County), and the limits that render 326 IAC 2-2 (PSD) not applicable.

(b) The testing requirements applicable to this source are as follows:

These testing requirements are necessary to demonstrate compliance with 326 IAC 2-2 (PSD), 326 IAC 2-8-4 (FESOP), and 326 IAC 6.5 (Particulate Matter Limitations Except Lake County).

Testing Requirements					
Line and Emission Unit ID	**Emission Unit Description**	**Control Device and Stack IDs**	**Pollutant**	**Timeframe for Testing**	**Frequency of Testing**
Line 55 Polymer Handling: EU-13	Polymer Conveying System	Dust Collector (CE-13, *indoors*)	PM, PM10, PM2.5	Not later than 180 days after the issuance date of this permit.	Once every five (5) years
Line 64: EU-113	Nauta Mixer	Filter Separator (CE-128, SP-172)	PM, PM10, PM2.5	Not later than 180 days after the issuance date of this permit.	Once every five (5) years
Line 71: EU-164	Blending System	Dust Collector (CE-163, SP-245)	PM, PM10, PM2.5	Not later than 180 days after the issuance date of this permit.	Once every five (5) years
Tenter Polymer Handling: EU-Silo 30	Polymer Silo	Cyclone (CE-49, SP-69)	PM, PM10, PM2.5	Not later than 180 days after the issuance date of this permit.	Once every five (5) years

(1) These are all new testing requirements for the source.

(2) There are emission limits for several units, however testing is required only for the emission units in the table above because these emission units have the largest maximum throughput capacities, and therefore have been selected as representative units for similar processes throughout the source, as follows:

(a) Line 55 Polymer Handling: EU-13 Polymer Conveying System will be tested as representative of the Line 55 PP Transfer emission units, the Tenter Polymer Handling line Polymer Conveying emission units, and the other Line 55 Polymer Handling Polymer Conveying System.

(b) Line 64: EU-113 Nauta Mixer will be tested as representative of the Drying, Storage, Polymer, Fluff, and Polypropylene Pellet Bins associated with Lines 62, 63, 64, 65, 71, Tubular Reclaim and Secondary Processing, and the Tenter Reclaim.

Note: EU-113 Nauta Mixer has the second-highest maximum throughput capacity for all bins, with Line 71 having the largest storage bins. However, Line 71 will be tested for the EU-164 Blending System.

(c) Line 71: EU-164 Blending System will be tested as representative of the Polymer Blending emission units associated with Lines 62 and 65; the Blender in Line 63, and the Line 64: EU-117 Blending System.

(d) Tenter Polymer Handling: EU-Silo 30 Polymer Silo will be tested as representative of the Storage Silos associated with Line 55 Polymer Handling and Line 71; and the Polymer Silos associated with the Tenter Polymer Handling line.

(3) The twenty-two (22) extruders will not be tested for particulate matter for the following reasons:

(a) The extruders provide melted polymer (plastic) to their associated dies that form the plastic into a flat sheet to produce film. The particulate matter emissions from each extruder are not exhausted through a stack and there are no control devices associated with any of the extruders.

(b) A reliable emission factor published by the Air and Waste Management Association was provided by the source, and used to calculate the potential to emit (See Appendix A: Emission Calculations).

(c) These emission units are not limited to ensure compliance with 326 IAC 2-8-4 (FESOP) or the limits that render 326 IAC 2-2 (PSD) not applicable.

(4) The two (2) pelletizers (Line 64: EU-126 and EU-129) will not be tested for particulate matter for the following reasons:

(a) The pelletizers exhaust indoors;

(b) The pelletizers are controlled by replaceable cartridge filters; and

(c) The pelletizers will have compliance monitoring requirements of quarterly inspections of the cartridge filters controlling particulate matter.

(5) The two (2) injection molders (Tubular Reclaim and Secondary Processing: EU-09 and EU-10) will not be tested for particulate matter for the following reasons:

(a) The injection molders exhaust indoors;

(b) The injection molders are controlled by a very small dust collector with replaceable cartridge filters; and

(c) The injection molders will have compliance monitoring requirements of quarterly inspections of the dust collector and cartridge filters controlling particulate matter.

(6) The Flake Grinders, identified as EU-CH1 through EU-CH5, are not required to test because these emission units are uncontrolled and the associated emissions are not

limited to ensure compliance with 326 IAC 2-8-4 (FESOP) or the limits that render 326 IAC 2-2 (PSD) not applicable.

(7) The Powder Mixing Station, identified as EU-23, are not required to test because these emission units are not limited to ensure compliance with 326 IAC 2-8-4 (FESOP) or the limits that render 326 IAC 2-2 (PSD) not applicable.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 12, 2018. Additional information was received on May 14, 2018. Emission factors for handling, storage, and conveying processes throughout the source were clarified and updated with information received on July 16, 2018.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Review and FESOP No. F167-39727-00045. The staff recommends to the Commissioner that this New Source Review and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Joshua Levering at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emissions Calculations
Emission Summary

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Unlimited Potential to Emit of the Entire Source (tons/year)

Emission Units/Process	PM	PM10	PM2.5 *	SOx	NOx	VOC	CO	Total HAPs	Worst Single HAP	
22 Extruders of Lines 55, 62, 63, 64, 65, 71, and Tubular Reclaim and Secondary Processing	9.94	9.94	9.94	-	-	3.71	-	0.06	0.04	Formaldehyde
Line 55 PP Transfers	5.26	5.26	5.26	-	-	-	-	-	-	-
Line 55 Polymer Handling	185.60	185.60	185.60	-	-	-	-	-	-	-
Line 62	38.58	38.58	38.58	-	-	-	-	-	-	-
Line 63	19.62	19.62	19.62	-	-	-	-	-	-	-
Line 64	81.29	81.29	81.29	-	-	-	-	-	-	-
Line 65	42.05	42.05	42.05	-	-	-	-	-	-	-
Line 71	120.73	120.73	120.73	-	-	-	-	-	-	-
Tubular Reclaim and Secondary Processing	27.93	27.93	27.93	-	-	-	-	-	-	-
Tenter Polymer Handling	78.84	78.84	78.84	-	-	-	-	-	-	-
Tenter Reclaim	9.06	9.06	9.06	-	-	-	-	-	-	-
Compounder Line 1	126.72	37.18	37.18	-	-	-	-	-	-	-
Metalizer 94 & 95	0.46	0.13	0.13	-	-	-	-	-	-	-
Treaters	-	-	-	-	38.44	38.44	-	-	-	-
NG Boilers	0.64	3.56	3.56	0.20	26.71	1.86	28.35	0.64	0.61	Hexane
NG Heaters	0.44	1.98	1.98	0.14	18.01	1.26	19.30	0.43	0.41	Hexane
Insignificant Activities										
NG Emergency Generator	2.80E-05	3.63E-03	3.63E-03	2.14E-04	1.48	0.04	0.12	0.03	0.02	Formaldehyde
Diesel Emergency Generators	0.29	0.29	0.29	0.27	4.05	0.33	0.87	3.55E-03	1.08E-03	Formaldehyde
Cooling Towers	0.03	0.03	0.03	-	-	-	-	-	-	-
Storage Tanks	-	-	-	-	-	0.10	-	-	-	-
Total	**747.48**	**662.08**	**662.08**	**0.61**	**88.70**	**45.75**	**48.64**	**1.16**	**1.02**	**Hexane**
Fugitive Emissions										
Paved and Unpaved Roads	*14.79*	*3.08*	*0.68*	-	-	-	-	-	-	-

** PM2.5 listed is direct PM2.5*

Potential to Emit after Issuance (tons/yr)

Emission Units/Process	PM	PM10	PM2.5 *	SOx	NOx	VOC	CO	Total HAPs	Worst Single HAP	
22 Extruders of Lines 55, 62, 63, 64, 65, 71, and Tubular Reclaim and Secondary Processing	9.94	9.94	9.94	-	-	3.71	-	0.06	0.04	Formaldehyde
Line 55 PP Transfers (1),(2)	0.26	0.26	0.26	-	-	-	-	-	-	-
Line 55 Polymer Handling (1),(2),(3)	19.16	19.16	19.16	-	-	-	-	-	-	-
Line 62 (1),(2),(4)	8.63	8.63	8.63	-	-	-	-	-	-	-
Line 63 (1),(2)	0.98	0.98	0.98	-	-	-	-	-	-	-
Line 64 (1),(2),(5)	5.56	5.56	5.56	-	-	-	-	-	-	-
Line 65 (1),(2)	2.10	2.10	2.10	-	-	-	-	-	-	-
Line 71 (1),(2),(6)	26.19	26.19	26.19	-	-	-	-	-	-	-
Tubular Reclaim and Secondary Processing (1),(2),(7)	4.31	4.31	4.31	-	-	-	-	-	-	-
Tenter Polymer Handling (1),(2)	3.94	3.94	3.94	-	-	-	-	-	-	-
Tenter Reclaim (1),(2)	0.45	0.45	0.45	-	-	-	-	-	-	-
Compounder Line 1 (2),(8)	126.72	6.97	6.97	-	-	-	-	-	-	-
Metalizer 94 & 95	0.46	0.13	0.13	-	-	-	-	-	-	-
Treaters	-	-	-	-	38.44	38.44	-	-	-	-
NG Boilers	0.64	3.56	3.56	0.20	26.71	1.86	28.35	0.64	0.61	Hexane
NG Heaters	0.44	1.98	1.98	0.14	18.01	1.26	19.30	0.43	0.41	Hexane
Insignificant Activities										
NG Emergency Generator	2.80E-05	0.00	0.00	2.14E-04	1.48	0.04	0.12	0.03	0.02	Formaldehyde
Diesel Emergency Generators	0.29	0.29	0.29	0.27	4.05	0.33	0.87	3.55E-03	1.08E-03	Formaldehyde
Cooling Towers	0.03	0.03	0.03	-	-	-	-	-	-	-
Storage Tanks	-	-	-	-	-	0.10	-	-	-	-
Total	**210.11**	**94.50**	**94.50**	**0.61**	**88.70**	**45.75**	**48.64**	**1.16**	**1.02**	**Hexane**
Fugitive Emissions										
Paved and Unpaved Roads	*14.79*	*3.08*	*0.68*	-	-	-	-	-	-	-

** PM2.5 listed is direct PM2.5*

(1) Limited PM PTE based on lb/hr emission limitations to comply with 326 IAC 2-2 (PSD). All other emission units reflect the unlimited potential to emit.
(2) Limited PM10 and PM2.5 PTE based on lb/hr emission limitations to comply with 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP). All other emission units reflect the unlimited potential to emit.
(3) Line 55 Polymer Handling: EU-12 is unlimited. EU-Silos 1-12, EU-13, and EU-14 are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(4) Line 62: EU-60 through EU-67 and EU-82 PTE are unlimited. EU-68 through EU-75 PTE are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(5) Line 64: EU-123 is unlimited. All other emission units are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(6) Line 71: EU-175, EU-176, EU-177, EU-178, EU-179, EU-182, and EU-183 PTE are uncontrolled/unlimited. EU-160 through EU-166, EU-171, EU-172, EU-173, and EU-174 PTE are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(7) Tubular Reclaim and Secondary Processing: EU-CH1 through EU-CH5 are uncontrolled/unlimited. EU-08, EU-09, EU-10, and EU-FB1 through EU-FB5 are based on PM, PM10, and PM2.5 lb/hr emission limitations.
(8) Compounder Line 1: PM is not limited for any of the emission units on this line. EU-20 and EU-23 are unlimited. EU-15 through EU-19, and EU-21 are based on PM10 and PM2.5 lb/hr emission limitations.

Appendix A: Emission Calculations
Extruders

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Twenty-two (22) Extruders

Process Line No.	Emission Unit ID / Associated Bin ID	Maximum Capacity (lbs/yr)	Maximum Capacity (lbs/hr)	Maximum Capacity (tons/yr)	PM Ef * (lbs/10^6 lbs)	PM PTE (lbs/hr)	PM PTE (tons/yr)	VOC Ef * (lbs/10^6 lbs)	VOC PTE (tons/yr)	Acetaldehyde Ef * (lbs/10^6 lbs)	Acetaldehyde PTE (tons/yr)	Formaldehyde Ef * (lbs/10^6 lbs)	Formaldehyde PTE (tons/yr)
55	EU-04	8,760,000	1,000	4,380	51.40	0.05	0.23	19.17	0.08	0.123	5.39E-04	0.182	7.97E-04
62	EU-76	19,710,000	2,250	9,855	51.40	0.12	0.51	19.17	0.19	0.123	1.21E-03	0.182	1.79E-03
	EU-77	3,285,000	375	1,643	51.40	0.02	0.08	19.17	0.03	0.123	2.02E-04	0.182	2.99E-04
	EU-78	3,285,000	375	1,643	51.40	0.02	0.08	19.17	0.03	0.123	2.02E-04	0.182	2.99E-04
63	EU-94	17,958,000	2,050	8,979	51.40	0.11	0.46	19.17	0.17	0.123	1.10E-03	0.182	1.63E-03
	EU-95	3,285,000	375	1,643	51.40	0.02	0.08	19.17	0.03	0.123	2.02E-04	0.182	2.99E-04
	EU-96	3,285,000	375	1,643	51.40	0.02	0.08	19.17	0.03	0.123	2.02E-04	0.182	2.99E-04
64	EU-113	57,816,000	6,600	28,908	51.40	0.34	1.49	19.17	0.55	0.123	3.56E-03	0.182	5.26E-03
	EU-120	7,884,000	900	3,942	51.40	0.05	0.20	19.17	0.08	0.123	4.85E-04	0.182	7.17E-04
	EU-121	7,884,000	900	3,942	51.40	0.05	0.20	19.17	0.08	0.123	4.85E-04	0.182	7.17E-04
	EU-128	17,520,000	2,000	8,760	51.40	0.10	0.45	19.17	0.17	0.123	1.08E-03	0.182	1.59E-03
65	EU-137	17,520,000	2,000	8,760	51.40	0.10	0.45	19.17	0.17	0.123	1.08E-03	0.182	1.59E-03
	EU-138	17,520,000	2,000	8,760	51.40	0.10	0.45	19.17	0.17	0.123	1.08E-03	0.182	1.59E-03
	EU-139	13,140,000	1,500	6,570	51.40	0.08	0.34	19.17	0.13	0.123	8.08E-04	0.182	1.20E-03
	EU-140	13,140,000	1,500	6,570	51.40	0.08	0.34	19.17	0.13	0.123	8.08E-04	0.182	1.20E-03
	EU-146	23,652,000	2,700	11,826	51.40	0.14	0.61	19.17	0.23	0.123	1.45E-03	0.182	2.15E-03
71	EU-167	84,972,000	9,700	42,486	51.40	0.50	2.18	19.17	0.81	0.123	5.23E-03	0.182	7.73E-03
	EU-173	8,760,000	1,000	4,380	51.40	0.05	0.23	19.17	0.08	0.123	5.39E-04	0.182	7.97E-04
	EU-174	8,760,000	1,000	4,380	51.40	0.05	0.23	19.17	0.08	0.123	5.39E-04	0.182	7.97E-04
	EU-176	963,600	110	482	51.40	0.01	0.02	19.17	0.01	0.123	5.93E-05	0.182	8.77E-05
Tubular Reclaim and Secondary Processing	EU-07	23,914,800	2,730	11,957	51.40	0.14	0.61	19.17	0.23	0.123	1.47E-03	0.182	2.18E-03
	EU-11	23,914,800	2,730	11,957	51.40	0.14	0.61	19.17	0.23	0.123	1.47E-03	0.182	2.18E-03
TOTALS						**2.27**	**9.94**		**3.71**		**0.02**		**0.04**

Note: All emissions from the Extruders at the source are uncontrolled.

* Emission factors (Ef) were taken from Table 8 for Resin type LLDPE, melted at 480 degrees Fahrenheit, from the technical paper:
Volume 46 in June 1996, published by Air and Waste Mgmt. Association titled "Development of Emission Factor for Polyethylene Processing".

Methodology:
Ef = Emission factor
PM PTE (lbs/hr) = Maximum Capacity (lbs/hr) * PM Ef (lbs/10^6 lbs) / 1,000,000
PM PTE (tons/yr) = PM PTE (lbs/hr) * 8,760 (hr/yr) / 2,000 (lbs/ton)
For VOC, Acetaldehyde, and Formaldehyde:
PTE (tons/yr) = Maximum Capacity (lbs/hr) * Ef (lbs/106 lbs) / 1,000,000 * 8,760 (hr/yr) / 2,000 (lbs/ton)
It is assumed that PM emissions = PM10 and PM2.5 emissions.

1 year = 8,760 hours
1 ton = 2,000 lbs

Appendix A: Emissions Calculations
Particulate Emissions from Line 55 PP Transfers & Polymer Handling

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Line 55 PP Transfers					Uncontrolled			Limited*	
Emission Unit ID	Maximum Capacity (lbs/yr)	Maximum Capacity (lbs/hr)	Maximum Capacity (tons/yr)	PM/PM10/PM2.5 Emission Factor (lbs/ton)	PM/PM10/PM2.5 PTE (lbs/hr)	PM/PM10/PM2.5 PTE (tons/yr)	Control Efficiency %	PM/PM10/PM2.5 PTE (lbs/hr)	PM/PM10/PM2.5 PTE (tons/yr)
PP Transfer EU-01	8,760,000	1,000	4,380	0.8	0.40	1.75	95%	0.02	0.09
PP Transfer EU-02	8,760,000	1,000	4,380	0.8	0.40	1.75	95%	0.02	0.09
PP Transfer EU-03	8,760,000	1,000	4,380	0.8	0.40	1.75	95%	0.02	0.09
					Line 55 Total:	**5.26**			**0.26**
Line 55 Polymer Handling									
EU-Silo 1	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 2	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 3	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 4	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 5	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 6	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 7	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 8	27,375,000	3,125	13,688	0.8	1.25	5.48	95%	0.06	0.27
EU-Silo 9	54,750,000	6,250	27,375	0.8	2.50	10.95	95%	0.13	0.55
EU-Silo 10	54,750,000	6,250	27,375	0.8	2.50	10.95	95%	0.13	0.55
EU-Silo 11	54,750,000	6,250	27,375	0.8	2.50	10.95	95%	0.13	0.55
EU-Silo 12	54,750,000	6,250	27,375	0.8	2.50	10.95	95%	0.13	0.55
EU-12 (Rail Car Delivery)	52,000,000	5,936	26,000	0.8	2.37	10.40	0%	2.37	10.40
EU-13 (Polymer Conveying System feeding Silos 1 through 8)	219,000,000	25,000	109,500	0.8	10.00	43.80	95%	0.50	2.19
EU-14 (Polymer Conveying System feeding Silos 9 through 12)	219,000,000	25,000	109,500	0.8	10.00	43.80	95%	0.50	2.19
					Line 55 Polymer Handling Total:	**185.60**			**19.16**

* Limited = All PTE are limited values, except for Line 55 Polymer Handling: EU-12 (Rail Car Delivery).

Methodology:
PM, PM10, and PM2.5 Emission Factors come from permit No. 177-27338-00065, issued on March 3, 2009, for Primex Plastics Corporation in Richmond, Indiana.

Uncontrolled PTE (lbs/hr) = Maximum Capacity (lbs/hr) / 2,000 lbs * Emission Factor (lbs/ton)
Uncontrolled PTE (tons/yr) = Uncontrolled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)
Controlled PTE (lbs/hr) = Uncontrolled PTE (lbs/hr) * (1 - Control Efficiency %)
Controlled PTE (tons/yr) = Controlled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)

1 year = 8,760 hours
1 ton = 2,000 lbs

Appendix A: Emissions Calculations
Particulate Emissions from Lines 62, 63, 64, 65 Polymer Handling, and 71

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Line 62					Uncontrolled			Limited*	
Emission Unit ID	Maximum Capacity (lbs/yr)	Maximum Capacity (lbs/hr)	Maximum Capacity (tons/yr)	PM/PM10/PM2.5 Emission Factor (lbs/ton)	PM/PM10/PM2.5 PTE (lbs/hr)	PM/PM10/PM2.5 PTE (tons/yr)	Control Efficiency %	PM/PM10/PM2.5 PTE (lbs/hr)	PM/PM10/PM2.5 PTE (tons/yr)
EU-60	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-61	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-62	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-63	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-64	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-65A	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-65B	3285001	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-66	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-67	3285000	375	1643	0.8	0.15	0.66	95%	0.01	0.03
EU-68	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-69	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-70	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-71	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-72	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-73	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-74	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-75	19710000	2250	9855	0.8	0.90	3.94	95%	0.05	0.20
EU-82	5679809	648	2840	0.8	0.26	1.14	95%	0.01	0.06
					Line 62 Total:	**38.58**			**1.93**
					Only EU-60 through 67, and EU-82 Total:	**7.05**		**Only EU-68 through 75 Total:**	**1.58**
Line 63									
EU-90	24528000	2800	12264	0.8	1.12	4.91			
EU-91	24528000	2800	12264	0.8	1.12	4.91	95%	0.17	0.74
EU-93	24528000	2800	12264	0.8	1.12	4.91			
EU-92	24528000	2800	12264	0.8	1.12	4.91	95%	0.06	0.25
					Line 63 Total:	**19.62**			**0.98**
Line 64									
EU-110	57816000	6600	28908	0.8	2.64	11.56	95%	0.13	0.58
EU-111	57816000	6600	28908	0.8	2.64	11.56	95%	0.13	0.58
EU-112	57816000	6600	28908	0.8	2.64	11.56	95%	0.13	0.58
EU-113	57816000	6600	28908	0.8	2.64	11.56	95%	0.13	0.58
EU-117	57816000	6600	28908	0.8	2.64	11.56	95%	0.13	0.58
EU-118	7884000	900	3942	0.8	0.36	1.58	95%	0.02	0.08
EU-119	7884000	900	3942	0.8	0.36	1.58	95%	0.02	0.08
EU-120	7884000	900	3942	0.8	0.36	1.58	95%	0.04	0.16
EU-121	7884000	900	3942	0.8	0.36	1.58			
EU-122	7884000	900	3942	0.8	0.36	1.58	95%	0.02	0.08
EU-123	7884000	900	3942	0.8	0.36	1.58	0%	0.36	1.58
EU-125	17520000	2000	8760	0.8	0.80	3.50	95%	0.04	0.18
EU-126	17520000	2000	8760	0.8	0.80	3.50	95%	0.08	0.35
EU-129	17520000	2000	8760	0.8	0.80	3.50			
EU-127	17520000	2000	8760	0.8	0.80	3.50	95%	0.04	0.18
					Line 64 Total:	**81.29**			**5.56**
Line 65									
EU-130	23652000	2700	11826	0.8	1.08	4.73	95%	0.05	0.24
EU-131	23652000	2700	11826	0.8	1.08	4.73	95%	0.05	0.24
EU-132	23652000	2700	11826	0.8	1.08	4.73	95%	0.05	0.24
EU-133	6570000	750	3285	0.8	0.30	1.31	95%	0.02	0.07
EU-134	6570000	750	3285	0.8	0.30	1.31	95%	0.02	0.07
EU-135	17520000	2000	8760	0.8	0.80	3.50	95%	0.09	0.41
EU-136	23652000	2700	11826	0.8	1.08	4.73			
EU-137	17520000	2000	8760	0.8	0.80	3.50	95%	0.04	0.18
EU-138	17520000	2000	8760	0.8	0.80	3.50	95%	0.04	0.18
EU-139	13140000	1500	6570	0.8	0.60	2.63	95%	0.03	0.13
EU-140	13140000	1500	6570	0.8	0.60	2.63	95%	0.03	0.13
EU-141	23652000	2700	11826	0.8	1.08	4.73	95%	0.05	0.24
					Line 65 Polymer Handling Total:	**42.05**			**2.10**
Line 71									
EU-160	43800000	5000	21900	0.8	2.00	8.76	95%	0.10	0.44
EU-161	43800000	5000	21900	0.8	2.00	8.76	95%	0.10	0.44
EU-162	84972000	9700	42486	0.8	3.88	16.99	95%	0.19	0.85
EU-163	35040000	4000	17520	0.8	1.60	7.01	95%	0.08	0.35
EU-164	84972000	9700	42486	0.8	3.88	16.99	95%	0.19	0.85
EU-165	84972000	9700	42486	0.8	3.88	16.99	95%	0.19	0.85
EU-166	84972000	9700	42486	0.8	3.88	16.99	95%	0.19	0.85
EU-171	8760000	1000	4380	0.8	0.40	1.75	95%	0.02	0.09
EU-172	8760000	1000	4380	0.8	0.40	1.75	95%	0.02	0.09
EU-173	8760000	1000	4380	0.8	0.40	1.75	95%	0.02	0.09
EU-174	8760000	1000	4380	0.8	0.40	1.75	95%	0.02	0.09
EU-175	8760000	1000	4380	0.8	0.40	1.75	0%	0.40	1.75
EU-176	963600	110	481.8	0.8	0.04	0.19	0%	0.04	0.19
EU-177	8760000	1000	4380	0.8	0.40	1.75	0%	0.40	1.75
EU-178	8760000	1000	4380	0.8	0.40	1.75	0%	0.40	1.75
EU-179	8760000	1000	4380	0.8	0.40	1.75	0%	0.40	1.75
EU-182	26280000	3000	13140	0.8	1.20	5.26	0%	1.20	5.26
EU-183	43800000	5000	21900	0.8	2.00	8.76	0%	2.00	8.76
					Line 71 Total:	**120.73**			**26.19**

* Limited = All PTE are limited values, except for Line 62: EU-60 through EU-67 and EU-82; Line 64: EU-123; and Line 71: EU-175, EU-176, EU-177, EU-178, EU-179, EU-182, and EU-183.

Methodology:
PM/PM10/PM2.5 Emission Factor comes from permit No. 177-27338-00065, issued on March 3, 2009, for Primex Plastics Corporation in Richmond, Indiana.

Uncontrolled PTE (lbs/hr) = Maximum Capacity (lbs/hr) / 2,000 lbs * Emission Factor (lbs/ton)
Uncontrolled PTE (tons/yr) = Uncontrolled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)
Controlled PTE (lbs/hr) = Uncontrolled PTE (lbs/hr) * (1 - Control Efficiency %)
Controlled PTE (tons/yr) = Controlled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)

1 year = 8,760 hours
1 ton = 2,000 lbs

Appendix A: Emissions Calculations
Particulate Emissions from
Tubular Reclaim and Secondary Processing, Tenter Polymer Handling, & Tenter Reclaim

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Tubular Reclaim and Secondary Processing					Uncontrolled			Limited*	
Emission Unit ID	Maximum Capacity (lbs/yr)	Maximum Capacity (lbs/hr)	Maximum Capacity (tons/yr)	PM/PM10/PM2.5 Emission Factor (lbs/ton)	PM/PM10/PM2.5 PTE (lbs/hr)	PM/PM10/PM2.5 PTE (tons/yr)	Control Efficiency %	PM/PM10/PM2.5 PTE (lbs/hr)	PM/PM10/PM2.5 PTE (tons/yr)
EU-08	23914800	2730	11957	0.8	1.09	4.78	95%	0.05	0.24
EU-09	23914800	2730	11957	0.8	1.09	4.78	95%	0.05	0.24
EU-10	23914800	2730	11957	0.8	1.09	4.78	95%	0.05	0.24
EU-FB1	10512000	1200	5256	0.8	0.48	2.10	95%	0.02	0.11
EU-FB2	10512000	1200	5256	0.8	0.48	2.10	95%	0.02	0.11
EU-FB3	10512000	1200	5256	0.8	0.48	2.10	95%	0.02	0.11
EU-FB4	10512000	1200	5256	0.8	0.48	2.10	95%	0.02	0.11
EU-FB5	10512000	1200	5256	0.8	0.48	2.10	95%	0.02	0.11
EU-CH1	1138000	130	569	0.296	0.02	0.08	0%	0.02	0.08
EU-CH2	10512006	1200	5256	0.296	0.18	0.78	0%	0.18	0.78
EU-CH3	8760000	1000	4380	0.296	0.15	0.65	0%	0.15	0.65
EU-CH4	10512000	1200	5256	0.296	0.18	0.78	0%	0.18	0.78
EU-CH5	10512000	1200	5256	0.296	0.18	0.78	0%	0.18	0.78
				Tubular Reclaim and Secondary Processing Total:		**27.93**			**4.31**
Tenter Polymer Handling									
EU-30 (Polymer Conveying)**	61,320,000	7000	30660	0.8	2.80	12.26	95%	0.14	0.61
EU-31 (Polymer Conveying)**	61,320,000	7000	30660	0.8	2.80	12.26	95%	0.14	0.61
EU-32 (Polymer Conveying)***	87,600,000	10000	43800	0.8	4.00	17.52	95%	0.20	0.88
EU-Silo 13	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 14	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 15	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 16	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 17	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 18	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 19	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 20	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 21	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 22	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 23	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 24	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 25	8,760,000	1000	4380	0.8	0.40	1.75	95%	0.04	0.18
EU-Silo 26	8,760,000	1000	4380	0.8	0.40	1.75			
EU-Silo 27	15,330,000	1750	7665	0.8	0.70	3.07	95%	0.04	0.15
EU-Silo 28	15,330,000	1750	7665	0.8	0.70	3.07	95%	0.07	0.31
EU-Silo 29	15,330,000	1750	7665	0.8	0.70	3.07			
EU-Silo 30	15,330,000	1750	7665	0.8	0.70	3.07	95%	0.04	0.15
				Tenter Polymer Handling Total:		**78.84**			**3.94**
Tenter Reclaim									
EU-210	3731760	426	1866	0.8	0.17	0.75	95%	0.01	0.04
EU-211	2531640	289	1266	0.8	0.12	0.51	95%	0.01	0.03
EU-212	3731760	426	1866	0.8	0.17	0.75	95%	0.01	0.04
EU-213	3731760	426	1866	0.8	0.17	0.75	95%	0.01	0.04
EU-214	9513360	1086	4757	0.8	0.43	1.90	95%	0.07	0.32
EU-215	9513360	1086	4757	0.8	0.43	1.90			
EU-216	6263400	715	3132	0.8	0.29	1.25			
EU-217	6263400	715	3132	0.8	0.29	1.25			
				Tenter Reclaim Total:		**9.06**			**0.45**

* Limited = All PTE are limited values, except for Tubular Reclaim and Secondary Processing: EU-CH1 through EU-CH5.
** Polymer conveying systems (EU-30 and EU-31) are capable of filling EU-Silos 13-26.
*** Polymer conveying system (EU-32) is capable of filling EU-Silos 27-30.

Methodology:
PM, PM10, and PM2.5 Emission Factors come from permit No. 177-27338-00065, issued on March 3, 2009, for Primex Plastics Corporation in Richmond, Indiana.
EU-CH1 through EU-CH5 are flake grinders using a different emission factor than the storage/handling/conveying units in the Tubular Reclaim and Secondary Processing operation.

Uncontrolled PTE (lbs/hr) = Maximum Capacity (lbs/hr) / 2,000 lbs * Emission Factor (lbs/ton)
Uncontrolled PTE (tons/yr) = Uncontrolled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)
Controlled PTE (lbs/hr) = Uncontrolled PTE (lbs/hr) * (1 - Control Efficiency %)
Controlled PTE (tons/yr) = Controlled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)

1 year = 8,760 hours
1 ton = 2,000 lbs

Appendix A: Emissions Calculations
Particulate Emissions from Compounder Line 1 and Metalizer 94 and 95

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Compounder Line 1

						Uncontrolled/Unlimited					Limited*			
Emission Unit ID	Maximum Capacity (lbs/yr)	Maximum Capacity (lbs/hr)	Maximum Capacity (tons/yr)	PM Emission Factor (lbs/ton)	PM10/PM2.5 Emission Factor (lbs/ton)	PM PTE (lbs/hr)	PM10/PM2.5 PTE (lbs/hr)	PM PTE (tons/yr)	PM10/PM2.5 PTE (tons/yr)	Control Efficiency %	PM PTE (lbs/hr)	PM10/PM2.5 PTE (lbs/hr)	PM PTE (tons/yr)	PM10/PM2.5 PTE (tons/yr)
EU-15	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	95%	0.21	0.06	0.90	0.26
EU-16	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	95%	0.21	0.06	0.90	0.26
EU-17	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	95%	0.21	0.06	0.90	0.26
EU-18	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	95%	0.21	0.06	0.90	0.26
EU-19	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	95%	0.21	0.06	0.90	0.26
EU-20	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	0%	4.12	1.21	18.06	5.30
EU-21	28960560	3306	14480	2.495	0.732	4.12	1.21	18.06	5.30	95%	0.21	0.06	0.90	0.26
EU-23	434500	50	217	2.495	0.732	0.06	0.02	0.27	0.08	95%	3.09E-03	9.08E-04	0.01	3.98E-03
						Compounder 1 Total:		**126.72**	**37.18**				**23.50**	**6.89**
						Only EU-20 and EU-23:			5.38	**Only EU-15, 16, 17, 18, 19, and 21:**				1.59

Metalizer 94 and 95

						Uncontrolled					Unlimited			
Emission Unit ID	Maximum Capacity (lbs/yr)	Maximum Capacity (lbs/hr)	Maximum Capacity (tons/yr)	PM Emission Factor (lbs/ton)	PM10/PM2.5 Emission Factor (lbs/ton)	PM PTE (lbs/hr)	PM10/PM2.5 PTE (lbs/hr)	PM PTE (tons/yr)	PM10/PM2.5 PTE (tons/yr)	Control Efficiency %	PM PTE (lbs/hr)	PM10/PM2.5 PTE (lbs/hr)	PM PTE (tons/yr)	PM10/PM2.5 PTE (tons/yr)
EU-MT94	367920	42.00	183.96	2.495	0.732	0.05	0.02	0.23	0.07	0%	0.05	0.02	0.23	0.07
EU-MT95	367920	42.00	183.96	2.495	0.732	0.05	0.02	0.23	0.07	0%	0.05	0.02	0.23	0.07
						Metalizer 94 and 95 Total:		**0.46**	**0.13**				**0.46**	**0.13**

* Limited = PM10/PM2.5 PTE are limited values, except for Compounder Line 1: EU-20 (Extruder and Vapor Extraction) and EU-23 (Powder Mixing Station).
PM is not limited for any of the emission units in Compounder Line 1.

Methodology:
PM, PM10, and PM2.5 Emission Factors come from the FESOP Renewal No. F167-34228-00030, issued on October 20, 2014, for Ampacet Corporation.

Uncontrolled PTE (lbs/hr) = Maximum Capacity (lbs/hr) / 2,000 lbs * Emission Factor (lbs/ton)
Uncontrolled PTE (tons/yr) = Uncontrolled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)
Controlled PTE (lbs/hr) = Uncontrolled PTE (lbs/hr) * (1 - Control Efficiency %)
Controlled PTE (tons/yr) = Controlled PTE (lbs/hr) * 8,760 (hrs/yr) / 2,000 (lbs/ton)

1 year = 8,760 hours
1 ton = 2,000 lbs

Appendix A: Emissions Calculations
Ozone (NOx & VOC) Emissions from
Film Treaters

Company Name: **Taghleef Industries, Inc.**
Address City IN Zip: **3600 East Head Avenue, Rosedale, Indiana 47874**
Permit No.: **F167-39727-00045**
Reviewer: **Joshua Levering**

Process Line	Emission Unit ID	Maximum Electricity Used to Heat Film*	Emission Factor**	Ozone Emissions (NOx & VOC)	
		kW/hr	lb/Kw-hr	lb/hr	tons/year
Line 55	EU-06	68	0.0138	0.94	4.11
Line 62	EU-81	40	0.0138	0.55	2.42
Line 63	EU-99	40	0.0138	0.55	2.42
Line 64	EU-116	104	0.0138	1.44	6.29
Line 65	EU-145	192	0.0138	2.65	11.61
Line 71	EU-170	192	0.0138	2.65	11.61
Total				**8.78**	**38.44**

* Electricity used by each film treater to heat the plastic film. There are no combustion emissions from the film treaters.
All NOx and VOC emissions are produced from heating of plastic film so the film can be stretched/extruded.
All treaters exhaust outdoors.
** Emission Factor from equipment manufacturer.

Methodology
Ozone Emissions (NOx & VOC) (lb/hr) = Maximum Electricity Used to Heat Film (kW/hr) * Emission Factor (lb/kW-hr)
Ozone Emissions (NOx & VOC) (ton/year) = Ozone Emissions (NOx & VOC) (lb/hr) * 8760 hr/1 year * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion - Boilers
MM BTU/HR <100

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Emission Unit ID	Emission Unit	MMBtu/hr
EU-191	Steam Boiler	35.5
EU-192	Steam Boiler	19
	TOTAL	54.5

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
54.5	1020	468.1

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.44	1.78	1.78	0.14	23.40	1.29	19.66

Emission Unit ID	Emission Unit	MMBtu/hr
EU-193	Low NOx Steam Boiler	24.1

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
24.1	1020	207.0

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	32 **see below	5.5	84
Potential Emission in tons/yr	0.20	1.78	1.78	0.06	3.31	0.57	8.69

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	7.1E-04	4.1E-04	2.5E-02	0.61	1.1E-03	**0.64**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.7E-04	3.7E-04	4.7E-04	1.3E-04	7.1E-04	**1.8E-03**
					Total HAPs	**0.64**
					Worst HAP	**0.61**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion - Process Heaters, Space Heaters, and Ovens
MM BTU/HR <100

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Emission Unit ID	Emission Unit	MMBtu/hr
EU-129	Flame Treater	3.09
EU-169	Flame Treater	0.51
EU-203	Hot Water Heater	2.97
EU-148	Space Heater	3.8
EU-149	Space Heater	3.8
EU-150	Space Heater	3.8
EU-200	Space Heater	0.075
EU-201	Space Heater	5.31
EU-218	Space Heater	3.5
EU-219	Space Heater	3.5
	TOTAL	30.4

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
30.4	1020	260.7

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.25	0.99	0.99	0.08	13.03	0.72	10.95

Low NOx Burners

Emission Unit ID	Emission Unit	MMBtu/hr
EU-115	Oven	6.3
EU-144	Tenter Oven	6.35
EU-180	Tenter Oven	10.5
	TOTAL	23.2

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
23.2	1020	198.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	50 **see below	5.5	84
Potential Emission in tons/yr	0.19	0.99	0.99	0.06	4.97	0.55	8.35

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	4.8E-04	2.8E-04	1.7E-02	0.41	7.8E-04	**0.43**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.1E-04	2.5E-04	3.2E-04	8.7E-05	4.8E-04	**1.3E-03**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Total HAPs	**0.43**
Worst HAP	**0.41**

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Natural Gas
4-Stroke Lean-Burn (4SLB) Engines

Company Name: **Taghleef Industries, Inc.**
Address City IN Zip: **3600 East Head Avenue, Rosedale, Indiana 47874**
Permit No.: **F167-39727-00045**
Reviewer: **Joshua Levering**

Emission Unit	Emission Unit ID	Output Horsepower Rating (hp)
Emergency Generator	EU-199	194

Maximum Output Horsepower Rating (hp)	194
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)	7500
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	728
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/yr)	0.71

	Pollutant						
Criteria Pollutants	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	7.71E-05	9.99E-03	9.99E-03	5.88E-04	4.08	0.12	0.32
Potential Emissions (tons/yr)	2.80E-05	3.63E-03	3.63E-03	2.14E-04	1.48	0.04	0.12

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.
PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	8.36E-03	3.04E-03
Acrolein	5.14E-03	1.9E-03
Benzene	4.40E-04	1.6E-04
Biphenyl	2.12E-04	7.7E-05
1,3-Butadiene	2.67E-04	9.7E-05
Formaldehyde	5.28E-02	0.02
Methanol	2.50E-03	9.1E-04
Hexane	1.10E-03	4.0E-04
Toluene	4.08E-04	1.5E-04
2,2,4-Trimethylpentane	2.50E-04	9.1E-05
Xylene	1.84E-04	6.7E-05
	Total	**0.03**

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2.

Methodology
Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
Potential Fuel Usage (MMBtu/yr) = [Maximum Output Horsepower Rating (hp)] * [Brake Specific Fuel Consumption (Btu/hp-hr)] * [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu]
Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
CO2 = Cabon Dioxide
CH4 = Methane
N2O = Nitrous Oxide
CO2e = CO2 equivalent emissions

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)

Company Name: **Taghleef Industries, Inc.**
Address City IN Zip: **3600 East Head Avenue, Rosedale, Indiana 47874**
Permit No.: **F167-39727-00045**
Reviewer: **Joshua Levering**

Emission Unit	Emission Unit ID	Output Horsepower Rating (hp)
Emergency Generator	EU-190	268
Fire Pump	EU-194	255
	TOTAL	**523**

Output Horsepower Rating (hp)	523.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	261,500

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.00205	0.0310	0.0025	0.00668
Potential Emission in tons/yr	0.29	0.29	0.29	0.27	4.05	0.33	0.87

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	8.54E-04	3.74E-04	2.61E-04	3.58E-05	1.08E-03	7.02E-04	8.47E-05	1.54E-04

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	**3.55E-03**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.3-1 and 3.3-2.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

Appendix A: Emission Calculations
Cooling Towers - Particulate PTE

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Emission Unit ID	Emission Unit Description	Maximum Water Circulation Rate (gal/min)	Maximum Total Dissolved Solids Content (PPM)	PM EF (lb/kgal)	PM10 EF (lb/kgal)	PM2.5 EF (lb/kgal)	Uncontrolled PM PTE (tons/yr)	Uncontrolled PM10 PTE (tons/yr)	Uncontrolled PM2.5 PTE (tons/yr)
EU-195	Tenter Plant Cooling Tower	10,383	1000	7.92E-05	7.92E-05	7.92E-05	0.02	0.02	0.02
EU-196	Line 71 Cooling Tower	3,000	1000	7.92E-05	7.92E-05	7.92E-05	0.01	0.01	0.01
EU-198	Tubular Plant Cooling Tower	5,000	1000	7.92E-05	7.92E-05	7.92E-05	0.01	0.01	0.01
						Total:	**0.03**	**0.03**	**0.03**

Notes
Emission Factors are from AP 42, Chapter 13.4, Table 13.4-1 (Induced draft (SCC 3-85-001-01))
Lb/Drift per 1,000 gallons recirculated = 1.7
Lb PM/PM10/PM2.5 per 1,000 gallons recirculated = 0.0000792
From AP-42, Table 13.4-1, Footnote c, (1/1995 version), implied content of TDS in circulating water is 12,000 parts per million (ppm).

Methodology
Uncontrolled Emissions (tons/yr) = Maximum Water Circulation Rate (gal/min) x 60 (min/hr) x EF (lb/kgal) x 1 kgal/1,000 gal x Maximum Total Dissolved Solids (ppm) x 1/12,000 ppm x 8,760 hr/yr x 1 ton/2,000 lbs

Appendix A: Emission Calculations

Storage Tanks
VOC Emissions

Company Name: **Taghleef Industries, Inc.**
Address City IN Zip: **3600 East Head Avenue, Rosedale, Indiana 47874**
Permit No.: **F167-39727-00045**
Reviewer: **Joshua Levering**

Emission Unit ID	Material	Storage Capacity (gallons)	Total VOC emissions (lb/year)*	Total VOC emissions (tpy)
DT1	Diesel	300	64.71	0.03
DT2	Diesel	300	54.85	0.03
DT3	Diesel	300	22.34	0.01
GT1	Gasoline	550	63.09	0.03
	TOTAL			**0.10**

* Total VOC emissions (lb/year) values as calculated by the source using TANKS 4.0.9d.

Methodology

Total VOC emissions (tpy) = Total VOC emissions (lb/year) / 2,000 lbs

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Taghleef Industries, Inc.
Address City IN Zip: 3600 East Head Avenue, Rosedale, Indiana 47874
Permit No.: F167-39727-00045
Reviewer: Joshua Levering

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Semi-Trailer Shuttle: Entering, one-way trip, Loaded	16.0	1.0	16.0	36.2	579.2	2640	0.500	8.0	2920.0
Semi-Trailer Shuttle: Leaving, one-way trip, Empty	16.0	1.0	16.0	15.4	246.4	2640	0.500	8.0	2920.0
Semi-Trailer Spotter: Entering, one-way trip, Loaded	7.0	1.0	7.0	36.2	253.4	2640	0.500	3.5	1277.5
Semi-Trailer Spotter: Leaving, one-way trip, Empty	7.0	1.0	7.0	15.4	107.8	2640	0.500	3.5	1277.5
Semi-Trailer Delivery: Entering, one-way trip, Loaded	9.0	1.0	9.0	36.2	325.8	2640	0.500	4.5	1642.5
Semi-Trailer Delivery: Leaving, one-way trip, Empty	9.0	1.0	9.0	15.4	138.6	2640	0.500	4.5	1642.5
Truck: Entering, one-way trip, Loaded	1.0	1.0	1.0	8.8	8.8	2640	0.500	0.5	182.5
Truck: Leaving one-way trip, Empty	1.0	1.0	1.0	4.3	4.3	2640	0.500	0.5	182.5
Delivery Van: Entering, one-way trip	1.0	1.0	1.0	6.3	6.3	2640	0.500	0.5	182.5
Delivery Van: Leaving, one-way trip	1.0	1.0	1.0	3.8	3.8	2640	0.500	0.5	182.5
		Totals	**68.0**		**1674.4**			**34.0**	**12410.0**

Average Vehicle Weight Per Trip = 24.6 tons/trip
Average Miles Per Trip = 0.50 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	24.6	24.6	24.6	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.283	0.457	0.1121	lb/mile
Mitigated Emission Factor, Eext =	2.088	0.418	0.1025	lb/mile

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)
Semi-Trailer Shuttle: Entering, one-way trip, Loaded	3.05	0.61	0.15
Semi-Trailer Shuttle: Leaving, one-way trip, Empty	3.05	0.61	0.15
Semi-Trailer Spotter: Entering, one-way trip, Loaded	1.33	0.27	0.07
Semi-Trailer Spotter: Leaving, one-way trip, Empty	1.33	0.27	0.07
Semi-Trailer Delivery: Entering, one-way trip, Loaded	1.71	0.34	0.08
Semi-Trailer Delivery: Leaving, one-way trip, Empty	1.71	0.34	0.08
Truck: Entering, one-way trip, Loaded	0.19	0.04	0.01
Truck: Leaving one-way trip, Empty	0.19	0.04	0.01
Delivery Van: Entering, one-way trip	0.19	0.04	0.01
Delivery Van: Leaving, one-way trip	0.19	0.04	0.01
Totals	**12.95**	**2.59**	**0.64**

Methodology

Total Weight driven per day (ton/day)	= [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip)	= [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day)	= [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip)	= SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip)	= SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr)	= [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (Before Control) (tons/yr)	= [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (After Control) (tons/yr)	= [Mitigated PTE (Before Control) (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: **Taghleef Industries, Inc.**
Address City IN Zip: **3600 East Head Avenue, Rosedale, Indiana 47874**
Permit No.: **F167-39727-00045**
Reviewer: **Joshua Levering**

Unpaved Roads at Industrial Site
The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Semi-Trailer Shuttle: Entering Truck, one-way trip, Loaded	4.0	1.0	4.0	36.2	144.8	528	0.100	0.4	146.0
Semi-Trailer Shuttle: Leaving Truck, one-way trip, Empty	4.0	1.0	4.0	15.4	61.6	528	0.100	0.4	146.0
Semi-Trailer Spotter: Entering, one-way trip, Loaded	5.0	1.0	5.0	36.2	181.0	528	0.100	0.5	182.5
Semi-Trailer Spotter: Leaving, one-way trip, Empty	5.0	1.0	5.0	15.4	77.0	528	0.100	0.5	182.5
Delivery Van: Entering, one-way	1.0	1.0	1.0	6.3	6.3	528	0.100	0.1	36.5
Delivery Van: leaving, One way	1.0	1.0	1.0	3.8	3.8	528	0.100	0.1	36.5
		Totals	**20.0**		**474.5**			**2.0**	**730.0**

Average Vehicle Weight Per Trip = 23.7 tons/trip
Average Miles Per Trip = 0.10 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	6.0	6.0	6.0	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	23.7	23.7	23.7	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	7.65	2.04	0.20	lb/mile
Mitigated Emission Factor, Eext =	5.03	1.34	0.13	lb/mile

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)
Semi-Trailer Shuttle: Entering Truck, one-way trip, Loaded	0.37	0.10	0.01
Semi-Trailer Shuttle: Entering Truck, one-way trip, Empty	0.37	0.10	0.01
Semi-Trailer Spotter: Entering, one-way trip, Loaded	0.46	0.12	0.01
Semi-Trailer Spotter: Leaving, one-way trip, Empty	0.46	0.12	0.01
Delivery Van: Entering, one-way	0.09	0.02	0.00
Delivery Van: leaving, One way	0.09	0.02	0.00
Totals	**1.84**	**0.49**	**0.05**

Methodology

Total Weight driven per day (ton/day)	= [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip)	= [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day)	= [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip)	= SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip)	= SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Mitigated PTE (Before Control) (tons/yr)	= (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (After Control) (tons/yr)	= (Mitigated PTE (Before Control) (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

July 31, 2018

Rob Slinker
Taghleef Industries, Inc.
3600 E Head Ave
Rosedale, IN 47874-9124

Re: Public Notice
Taghleef Industries, Inc.
Permit Level: FESOP with NSR
Permit Number: 167-39727-00045

Dear Mr. Slinker:

Enclosed is a copy of your draft FESOP with New Source Review, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Tribune Star in Terre Haute, IN publish the abbreviated version of the public notice no later than August 3, 2018. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Vigo County Public Library, 1 Library Square in Terre Haute, IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Joshua Levering, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-6543 or dial (317) 234-6543.

Sincerely,

Theresa Weaver

Theresa Weaver
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

July 31, 2018

Tribune Star
P.O. Box 149
Terre Haute, Indiana 47808

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Taghleef Industries, Vigo County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than August 3, 2018.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Theresa Weaver at 800-451-6027 and ask for extension 4-5256 or dial 317-234-5256.

Sincerely,

Theresa Weaver

Theresa Weaver
Permit Branch
Office of Air Quality

Permit Level: FESOP with New Source Review
Permit Number: 167-39727-00045

Enclosure

PN Newspaper Letter 1/9/2017

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

July 31, 2018

To: Vigo County Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Taghleef Industries, Inc.
Permit Number: 167-39727-00045

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library 1/9/2017

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

Notice of Public Comment

July 31, 2018
Taghleef Industries, Inc.
167-39727-00045

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover Letter 1/9/2017

Mail Code 61-53

IDEM Staff	TAWEAVER 7/31/2018 Taghleef Industries Inc 167-39727-00045 (draft)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Rob Slinker Taghleef Industries Inc 3600 E Head Ave Rosedale IN 478749124 (Source CAATS)									
2		Vigo County Board of Commissioners County Annex, 121 Oak Street Terre Haute IN 47807 *(Local Official)*									
3		Terre Haute City Council and Mayors Office 17 Harding Ave Terre Haute IN 47807 *(Local Official)*									
4		Vigo County Health Department 147 Oak Street Terre Haute IN 47807 *(Health Department)*									
5		Vigo County Public Library 1 Library Square Terre Haute IN 47807-3609 *(Library)*									
6		J.P. Roehm PO Box 303 Clinton IN 47842 *(Affected Party)*									
7		Linda Bobo Patriot Engineering and Environmental, Inc. 6150 East 75th Street Indianapolis IN 46250 *(Consultant)*									
8		Kendra Gutowski Patriot Engineering and Environmental, Inc. 6150 E 75th Street Indianapolis IN 46250 *(Consultant)*									
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877