

**PART 70 OPERATING PERMIT
and Enhanced New Source Review
OFFICE OF AIR MANAGEMENT**

**Powdertech Corporation
5103 Evans Road
Valparaiso, Indiana 46383**

(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.

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 2-7 and 326 IAC 2-1-3.2 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.

Operation Permit No.: T 127-8479-00021	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary reprographic ferrite bead manufacturing source.

Responsible Official: Mr. Brian Mullen
Source Address: 5103 Evans Road Valparaiso, Indiana 46383-8387
Mailing Address: 5103 Evans Road Valparaiso, Indiana 46383-8387
SIC Code: 3499
County Location: Porter
County Status: Nonattainment for Ozone
Attainment for Remaining Criteria Pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD and Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices. The stationary facilities at the source are organized into three areas: Area "A", Area "B", Area "C" and have been subdivided into those facilities with controls that are necessary, those with controls that are not necessary, those without controls that do not comply with 326 IAC 6-3 and the coating operations.

Area "A" (facilities with controls that are necessary)

- (a) Two (2) 3-foot by 20-foot direct-fired calciners, identified as A-CS-3 and A-CS-4, each equipped with a baghouse, identified as A-DC-1, for particulate control, exhausting through vents V-ACS-3 and V-ACS-4, capacity: 600 pounds per hour of nickel-zinc ferrite, each.
- (b) One (1) 20-foot dryer, identified as A-SD-1, equipped with parallel cyclones, a baghouse, identified as A-SD-1, and cartridge dust collector, exhausting through stack V-BSD-1, capacity: 3,500 pounds per hour of nickel-zinc ferrite.
- (c) One (1) ball milling unit, identified as A-BM-7, equipped with a cartridge dust collector, capacity: 21,000 pounds per batch (1,400 pounds per hour) of nickel-zinc ferrite beads.
- (d) Six (6) green bead screening units, identified as A-GB-1, equipped with a baghouse, identified as A-GB-1, exhausting to the interior, capacity: 500 pounds per hour of reprographic powder, total.

- (e) One (1) fire bead screening operation, identified as A-FB-1, equipped with a baghouse, and cartridge dust collector, identified as A-FB-1, exhausting to the interior, capacity: 500 pounds per hour of reprographic powder.
- (f) One (1) weigh up operation, identified as A-WU-1, equipped with a baghouse, identified as A-WU-1, exhausting through V-AWU-1, capacity: 3,000 pounds per hour of nickel, zinc and iron oxides.

Area "B" (facilities with controls that are necessary)

- (g) One (1) 17.5-foot dryer, identified as B-SD-1, equipped with parallel cyclones and a cartridge dust collector, exhausting through stack V-BSD-1, capacity: 2,500 pounds per hour of copper-zinc and magnesium ferrite.
- (h) One (1) 9.5-foot anhydrous spray dryer, identified as B-SD-2, equipped with a cyclone and cartridge dust collector, exhausting through stack V-BSD-1, capacity: 580 pounds per hour of copper-zinc and magnesium ferrite beads.

Area "C" (facilities with controls that are necessary)

- (i) One (1) 16-foot spray dryer, identified as C-SD-1, equipped with three (3) parallel cyclone separators and a cartridge dust collector, exhausting through stack V-CSD-1, capacity: 1,500 pounds per hour of strontium ferrite beads.
- (j) Four (4) green bead screening units, identified as C-GB-1, equipped with a cartridge dust collector, exhausting to the interior, capacity: 500 pounds per hour of strontium ferrite, each.
- (k) One (1) sagger weigh up operation, identified as C-WU-1, equipped with two (2) cabinet dust collectors, exhausting to the interior, capacity: 2,800 pounds per hour strontium, copper and iron oxides and ferrite.
- (l) One (1) fire bead screening unit, identified as C-GB-2, equipped with a cartridge dust collector, exhausting to the interior, capacity: 500 pounds per hour of strontium ferrite.
- (m) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-6, equipped with a baghouse dust collector, exhausting through V-CCS-6 and V-CHX-6, capacity: 1,600 pounds per hour of nickel-zinc ferrite, zinc oxide and ferrite particles.

Area "A" (facilities with controls that are not necessary)

- (n) One (1) indirect-fired calciner, identified as A-CS-2 equipped with a baghouse, identified as A-DC-1, for particulate control that does not need to be operated at all times, but only at the source's discretion, exhausting through stacks V-ACS-2 and V-AHX-1, capacity: 1,600 pounds per hour of nickel-zinc ferrite.
- (o) Blending/packaging operations, identified as A-BL-1, equipped with a dust collector that does not need to be operated at all times, but only at the source's discretion, identified as A-BL-1, capacity: 2,000 pounds per hour of nickel-zinc ferrite.

- (p) Bulk handling operations, identified as A-BH-1, equipped with a dust collector, identified as A-BH-1, that does not need to be operated at all times, but only at the source's discretion, capacity: 1,600 pounds per hour of nickel-zinc ferrite.
- (q) Six (6) ball milling units, identified as A-BM-1 to A-BM-6, each equipped with a cartridge dust collector, identified as A-BM-1 to A-BM-6, that does not need to be operated at all times, but only at the source's discretion, capacity: 7,500 pounds per batch (500 pounds per hour) of nickel-zinc ferrite beads, each.

Area "B" (facilities with controls that are not necessary)

- (r) Three (3) fire bead screening units, identified as B-FB-1, equipped with a cartridge dust collector that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 500 pounds per hour of copper-zinc and magnesium ferrite, each.
- (s) Four (4) green bead screening units identified as B-GB-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 500 pounds per hour of copper-zinc and magnesium ferrite, each.
- (t) One (1) wet ball milling operation, identified as B-WB-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, capacity: 10,000 pounds per batch (666.7 pounds per hour) of copper-zinc and magnesium ferrite beads.
- (u) One (1) ball mill operation, utilizing a wet batch process, identified as B-BM-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 580 pounds per hour.

Area "B" (facilities without controls that do not comply with 326 IAC 6-3)

- (v) One (1) 5-foot by 40-foot direct-fired calciner, identified as B-C-1, exhausting through V-BCS-1, capacity: 1,500 pounds per hour of copper-zinc and manganese ferrite.

Area "C" (Coating Area)

- (w) One (1) ferrite bead coating line, identified as C-FB-1, capacity: 808 pounds per hour of ferrite beads. The ferrite bead coating line includes: coating tanks, blenders, feeders, tray loading and curing ovens, controlled by one (1) thermal oxidizer, exhausting through stack V-COD-1.

Area "C" (facilities with controls that are necessary)

- (x) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-7, equipped with a baghouse dust collector, exhausting through V-CCS-7 and V-CHX-7, capacity: 1,600 pounds per hour of nickel-zinc ferrite, zinc oxide and ferrite particles.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

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

- (a) One (1) heating boiler identified as C-HB-1, rated at 5.25 million British thermal units per hour, exhausting through stack V-CHB-1.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPS; brazing equipment, cutting torches, soldering equipment, welding equipment.
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following; deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

It is a major source, as defined in 326 IAC 2-7-1(22).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) 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 Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

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, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

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.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

- (1) Enforcement action;
- (2) Permit termination, revocation and reissuance, or modification; or
- (3) Denial of a permit renewal application.

- (b) 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.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (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 certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;

- (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
- (5) Any insignificant activity that has been added without a permit revision; and
- (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, 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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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 Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

- (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 2-7-16.

(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, OAM, 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 Management, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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 2-7-5(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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 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 materials of substantial economic value.

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

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, 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 2-7-9(a)(3)]

- (c) Proceedings by IDEM, OAM, 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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. 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(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) 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, OAM, on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAM, upon receiving a timely and complete 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
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 2-7 until IDEM, OAM,, 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 in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), 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 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under 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
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20 (b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in 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 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
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 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) 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.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM 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 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%), 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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (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
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.10 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

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 Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, 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, OAM, 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 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;

- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (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 take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement 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, OAM, on or before the date it is due.

C.17 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

-
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:

- (1) The date, place, and time of sampling or measurements;
- (2) The dates analyses were performed;
- (3) The company or entity performing the analyses;

- (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.

- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.20 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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Area "A"

- (a) Two (2) 3-foot by 20-foot direct-fired calciners, identified as A-CS-3 and A-CS-4, each equipped with a baghouse, identified as A-DC-1, for particulate control, exhausting through vents V-ACS-3 and V-ACS-4, capacity: 600 pounds per hour of nickel-zinc ferrite, each.
- (b) One (1) 20-foot dryer, identified as A-SD-1, equipped with parallel cyclones, a baghouse, identified as A-SD-1, and cartridge dust collector, exhausting through stack V-BSD-1, capacity: 3,500 pounds per hour of nickel-zinc ferrite.
- (c) One (1) ball milling unit, identified as A-BM-7, equipped with a cartridge dust collector, capacity: 21,000 pounds per batch (1,400 pounds per hour) of nickel-zinc ferrite beads.
- (d) Six (6) green bead screening units, identified as A-GB-1, equipped with a baghouse, identified as A-GB-1, exhausting to the interior, capacity: 500 pounds per hour of reprographic powder, total.
- (e) One (1) fire bead screening operation, identified as A-FB-1, equipped with a baghouse, and cartridge dust collector, identified as A-FB-1, exhausting to the interior, capacity: 500 pounds per hour of reprographic powder.
- (f) One (1) weigh up operation, identified as A-WU-1, equipped with a baghouse, identified as A-WU-1, exhausting through V-AWU-1, capacity: 3,000 pounds per hour of nickel, zinc and iron oxides.

Area "B"

- (g) One (1) 17.5-foot dryer, identified as B-SD-1, equipped with parallel cyclones and a cartridge dust collector, exhausting through stack V-BSD-1, capacity: 2,500 pounds per hour of copper-zinc and magnesium ferrite.
- (h) One (1) 9.5-foot anhydrous spray dryer, identified as B-SD-2, equipped with a cyclone and cartridge dust collector, exhausting through stack V-BSD-1, capacity: 580 pounds per hour of copper-zinc and magnesium ferrite beads.

Area "C"

- (i) One (1) 16-foot spray dryer, identified as C-SD-1, equipped with three (3) parallel cyclone separators and a cartridge dust collector, exhausting through stack V-CSD-1, capacity: 1,500 pounds per hour of strontium ferrite beads.
- (j) Four (4) green bead screening units, identified as C-GB-1, equipped with a cartridge dust collector, exhausting to the interior, capacity: 500 pounds per hour of strontium ferrite, each.
- (k) One (1) sagger weigh up operation, identified as C-WU-1, equipped with two (2) cabinet dust collectors, exhausting to the interior, capacity: 2,800 pounds per hour strontium, copper and iron oxides and ferrite.
- (l) One (1) fire bead screening unit, identified as C-GB-2, equipped with a cartridge dust collector, exhausting to the interior, capacity: 500 pounds per hour of strontium ferrite.
- (m) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-6, equipped with a baghouse dust collector, exhausting through V-CCS-6 and V-CHX-6, capacity: 1,600 pounds per hour of nickel-zinc ferrite, zinc oxide and ferrite particles.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the repro-graphic ferrite bead manufacturing facilities shall not exceed the following rates listed in pounds per hour when operating at process weight rates listed in tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Facility	Process Weight Rate (tons per hour)	Allowable PM Emission Rate (pounds per hour)
Direct fired calciners (A-CS-3 & 4)	0.30, each	1.83, each
20-foot dryer (A-SD-1)	1.75	5.97
Ball milling unit (A-BM-7)	0.70	3.23
Six (6) green bead screening units (A-GB-1 to A-GB-6)	0.25, total	1.62, total
Fire-bead screening unit (A-FB-1)	0.25	1.62
Weigh-up units (A-WU-1)	1.50	5.38
Spray dryer (B-SD-1)	1.25	4.76
Spray dryer (B-SD-2)	0.29	1.79
Spray dryer (C-SD-1)	0.75	3.38
Four (4) green bead screening units (C-GB-1)	0.25, each	1.62, each
Sagger weigh-up unit (C-WU-1)	1.40	5.14
One (1) indirect-fired calciners (C-CS-6)	0.80	3.53
Fire bead screening area (C-GB-2)	0.25	1.62

Compliance Determination Requirements

D.1.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the Particulate Matter limits specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.3 Particulate Matter (PM)

The control equipment for PM control shall be in operation at all times when the facilities are in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Visible Emissions Notations

- (a) Daily visible emission notations of the facilities' stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.5 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the reprographic ferrite bead manufacturing operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.6 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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 single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the facilities' stack exhausts.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Area "A"

- (n) One (1) indirect-fired calciner, identified as A-CS-2 equipped with a baghouse, identified as A-DC-1, for particulate control that does not need to be operated at all times, but only at the source's discretion, exhausting through stacks V-ACS-2 and V-AHX-1, capacity: 1,600 pounds per hour of nickel-zinc ferrite.
- (o) Blending/packaging operations, identified as A-BL-1, equipped with a dust collector that does not need to be operated at all times, but only at the source's discretion, identified as A-BL-1, capacity: 2,000 pounds per hour of nickel-zinc ferrite.
- (p) Bulk handling operations, identified as A-BH-1, equipped with a dust collector, identified as A-BH-1, that does not need to be operated at all times, but only at the source's discretion, capacity: 1,600 pounds per hour of nickel-zinc ferrite.
- (q) Six (6) ball milling units, identified as A-BM-1 to A-BM-6, each equipped with a cartridge dust collector, identified as A-BM-1 to A-BM-6, that does not need to be operated at all times, but only at the source's discretion, capacity: 7,500 pounds per batch (500 pounds per hour) of nickel-zinc ferrite beads, each.

Area "B"

- (r) Three (3) fire bead screening units, identified as B-FB-1, equipped with a cartridge dust collector that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 500 pounds per hour of copper-zinc and magnesium ferrite, each.
- (s) Four (4) green bead screening units identified as B-GB-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 500 pounds per hour of copper-zinc and magnesium ferrite, each.
- (t) One (1) wet ball milling operation, identified as B-WB-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, capacity: 10,000 pounds per batch (666.7 pounds per hour) of copper-zinc and magnesium ferrite beads.
- (u) One (1) ball mill operation, utilizing a wet batch process, identified as B-BM-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 580 pounds per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the reographic ferrite bead manufacturing facilities shall not exceed the following rates listed in pounds per hour when operating at process weight rates listed in tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
 P = process weight rate in tons per hour

Facility	Process Weight Rate (tons per hour)	Allowable PM Emission Rate (pounds per hour)
Indirect fired calciner (A-CS-2)	0.80	3.53
Blending/packaging operations (A-BL-1)	1.00	4.10
Bulk handling (A-BH-1)	0.80	3.53
Six (6) ball milling units (A-BM-1 to A-BM-6)	0.25, each	1.62, each
Three (3) fire bead screening units (B-FB-1)	0.25, each	1.62, each
Four (4) green bead screening units (B-GB-1)	0.25, each	1.62, each
Wet ball milling (B-WB-1)	0.333	1.96
Ball mill operation (B-BM-1)	0.29	1.79

Compliance Determination Requirements

D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the Particulate Matter limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.3 FACILITY OPERATION CONDITIONS

<p>Facility Description [326 IAC 2-7-5(15)] Area "B" (v) One (1) 5-foot by 40-foot direct-fired calciner, identified as B-C-1, exhausting through V-BCS-1, capacity: 1,500 pounds per hour of copper-zinc and magnesium ferrite.</p>
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Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the re-graphic ferrite bead manufacturing facility shall not exceed the following rate listed in pounds per hour when operating at the process weight rate listed in tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Facility	Process Weight Rate (tons per hour)	Allowable PM Emission Rate (pounds per hour)
Direct-fired rotary calciner (B-C-1)	0.75	3.38

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Testing of this facility is required, if additional control equipment is not installed, by Powdertech Corporation within 60 - 120 days after permit issuance.
- (b) Testing of the PM emission rate shall be performed to determine compliance with 326 IAC 6-3-2. The Permittee shall perform PM and PM₁₀ testing utilizing Methods 5 or 7 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM₁₀, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.3.3 Compliance Schedule [326 IAC 2-7-6(3)]

If additional control equipment is not installed and the testing required by Condition D.3.3 does not show compliance with the limit specified in Condition D.3.1, then the Permittee:

- (a) shall submit within 165 days of permit issuance a schedule to demonstrate compliance with 326 IAC 6-3 for the direct-fired and indirect-fired calciners and within 270 days of permit issuance shall certify that the emissions from the direct-fired and indirect-fired calciners are in compliance with this rule.
- (b) shall submit certified progress reports no less frequently than every six (6) months.
- (c) shall submit a statement after compliance is demonstrated that the Permittee will continue to comply with all applicable requirements; and
- (d) shall continue to comply with such requirements that become effective during the term of this permit.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.4 Visible Emissions Notations

- (a) Daily visible emission notations of this facility shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain records of daily visible emission notations of the facility's exhaust.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain records of the results of the inspections required under Condition D.3.6 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Area "C" (Coating Area)

- (w) One (1) ferrite bead coating line, identified as C-FB-1, capacity: 808 pounds per hour of ferrite beads. The ferrite bead coating line includes: coating tanks, blenders, feeders, tray loading and curing ovens, controlled by one (1) thermal oxidizer, exhausting through stack V-COD-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Volatile Organic Compounds [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compounds (VOC) delivered to the mixing applicators from the reprographic ferrite bead coating line using silicone coatings shall be limited to 4.3 pounds per gallon of coating excluding water delivered to a coating applicator. When using a coating with 109.4 pounds of VOC per gallon of solids, this equates to 10.34 pounds of VOCs emitted per gallon of coating solids as applied with a 90.55 percent equivalent overall control efficiency.

- (b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compounds (VOC) delivered to the applicator from reprographic ferrite beads coating facility shall be limited to 3.5 pounds per gallon of coating excluding water delivered to a coating applicator. When using a coating with 42.76 pounds of VOC per gallon of solids, this equates to 6.67 pounds of VOC emitted per gallon of coating solids as applied with a 79.0 percent equivalent overall control efficiency.
- (c) That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.4.3 Thermal Oxidizer

The Permittee shall perform stack tests on the ferrite bead coating line thermal oxidizer, identified C-FB-1, within 24 to 36 months of issuing FESOP. All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures) and by methods in the approved test protocol. These tests shall be repeated once every five years.

D.4.4 Volatile Organic Compounds (VOC)

Compliance with the VOC content limitations contained in Conditions D.4.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.5 Thermal Oxidizer

- (a) When operating, the thermal oxidizer shall maintain a minimum operating temperature of 650°F or a minimum temperature determined in the most recent compliance tests to maintain at least 90.55 percent destruction of the VOC captured. One hundred (100) percent of the VOC is captured. The temperature of the exhaust from the thermal oxidizer shall be recorded continuously whenever the facility is operating. In the event of malfunction of the temperature recorder, to the extent practicable, intermittent monitoring of the parameter shall be implemented at intervals no less than one hour until such time as the continuous monitor is back in operation.
- (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.6 Volatile Organic Compound (VOC) Usage

That the Permittee shall maintain records at the source of the materials used that contain any VOCs. The records shall be complete and sufficient to establish compliance with the VOC content limits established in this permit. The records shall contain a minimum of the following:

- (a) The weight of VOC containing material used, including purchase orders and invoices necessary to verify the type and amount used;
- (b) The VOC content (weight percent) of each material used. Testing for VOC content shall be in conformance with 326 IAC 8-1-4 (Testing Procedures); and
- (c) The weight of VOCs emitted for each compliance period, considering capture and control efficiency, if applicable; and
- (d) The following operation parameters of the thermal oxidizer:
 - (1) VOC capture efficiency;
 - (2) VOC destruction efficiency of the control device;
 - (3) A description of the data used to establish the capture and destruction efficiencies; and
 - (4) Continuous or intermittent temperature and fan amperage readings.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Area "C"

- (x) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-7, equipped with a baghouse dust collector, exhausting through V-CCS-7 and V-CHX-7, capacity: 1,600 pounds per hour of nickel-zinc ferrite, zinc oxide and ferrite particles.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.2]

General Construction Conditions

- D.5.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

- D.5.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.5.3 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM, may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.
- D.5.4 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

- D.5.5 This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.6 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the re-prographic ferrite bead manufacturing facility shall not exceed the following rate listed in pounds per hour when operating at process weight rate listed in tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
 P = process weight rate in tons per hour

Facility	Process Weight Rate (tons per hour)	Allowable PM Emission Rate (pounds per hour)
One (1) indirect-fired calciners (C-CS-7)	0.80	3.53

Compliance Determination Requirements

D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter limit specified in Condition D.5.6 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.5.8 Particulate Matter (PM)

The control equipment for PM control shall be in operation at all times when the facility is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.9 Visible Emissions Notations

- (a) Daily visible emission notations of the facility's stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.5.10 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the reographic ferrite bead manufacturing operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.5.11 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. 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 single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.12 Record Keeping Requirements

- (a) To document compliance with Condition D.5.9, the Permittee shall maintain records of daily visible emission notations of the facility's stack exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

- (a) One (1) heating boiler identified as C-HB-1, rated at 5.25 million British thermal units per hour, exhausting through stack V-CHB-1.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPS; brazing equipment, cutting torches, soldering equipment, welding equipment.
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following; deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Particulate Matter (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 5.25 million British thermal units per hour heat input boiler shall be limited to 0.6 pounds per million British thermal units heat input.

This limitation is based on the following equation:

$$P_t = 0.87/Q^{0.16}$$

where:

Q is the heat input in million British thermal units per hour and,
P_t is the particulate matter emission limit in pounds per million British thermal units and can not exceed 0.6 pounds per million British thermal units.

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the grinding and machining as well as brazing equipment, cutting torches, soldering equipment, welding equipment shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.6.3 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Compliance Determination Requirement

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter limits specified in Conditions D.6.1 and D.6.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Powdertech Corporation
Source Address: 5103 Evans Road, Valparaiso, Indiana 46383
Mailing Address: 5103 Evans Road, Valparaiso, Indiana 46383
Part 70 Permit No.: T 127-8479-00021

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:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 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 MANAGEMENT
 COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
 SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: Powdertech Corporation
 Source Address: 5103 Evans Road, Valparaiso, Indiana 46383
 Mailing Address: 5103 Evans Road, Valparaiso, Indiana 46383
 Part 70 Permit No.: T 127-8479-00021

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of Each Deviation

Form Completed By: _____
 Title/Position: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Powdertech Corporation
Source Address: 5103 Evans Road, Valparaiso, Indiana 46383
Mailing Address: 5103 Evans Road, Valparaiso, Indiana 46383
Part 70 Permit No.: T 127-8479-00021

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2
<input checked="" type="radio"/> 1. This is an emergency as defined in 326 IAC 2-7-1(12) <input type="checkbox"/> The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and <input type="checkbox"/> The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<input checked="" type="radio"/> 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) <input type="checkbox"/> The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? 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/deviation:
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 Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Background and Description

Source Name: Powdertech Corporation
Source Location: 5103 Evans Road, Valparaiso, Indiana 46383-8387
County: Porter
SIC Code: 3499
Operation Permit No.: T 127-8479-00021
Permit Reviewer: Frank P. Castelli

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Powdertech Corporation relating to the operation of a reprographic ferrite bead manufacturing facility. This source received a FESOP (F127-5559-00021) on December 12, 1996 and applied to convert this FESOP into a Part 70 Operating Permit on April 18, 1997. The issuance of this Part 70 Operating Permit will supersede the existing FESOP.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following approvals (permits, registrations, exemptions, etc.) with the following emission units and pollution control devices:

The stationary facilities at the source are organized into three areas: Area "A", Area "B", Area "C" and have been subdivided into those facilities with controls that are necessary, those with controls that are not necessary, those without controls that do not comply with 326 IAC 6-3 and the coating operations. The baghouse for C-CS-6 was installed in 1998.

Area "A" (facilities with controls that are necessary)

- (a) Two (2) 3-foot by 20-foot direct-fired calciners, identified as A-CS-3 and A-CS-4, each equipped with a baghouse, identified as A-DC-1, for particulate control, exhausting through vents V-ACS-3 and V-ACS-4, capacity: 600 pounds per hour of nickel-zinc ferrite, each.
- (b) One (1) 20-foot dryer, identified as A-SD-1, equipped with parallel cyclones, a baghouse, identified as A-SD-1, and cartridge dust collector, exhausting through stack V-BSD-1, capacity: 3,500 pounds per hour of nickel-zinc ferrite.
- (c) One (1) ball milling unit, identified as A-BM-7, equipped with a cartridge dust collector, capacity: 21,000 pounds per batch (1,400 pounds per hour) of nickel-zinc ferrite beads.
- (d) Six (6) green bead screening units, identified as A-GB-1, equipped with a baghouse, identified as A-GB-1, exhausting to the interior, capacity: 500 pounds per hour of reprographic powder, total.

- (e) One (1) fire bead screening operation, identified as A-FB-1, equipped with a baghouse, and cartridge dust collector, identified as A-FB-1, exhausting to the interior, capacity: 500 pounds per hour of reprographic powder.
- (f) One (1) weigh up operation, identified as A-WU-1, equipped with a baghouse, identified as A-WU-1, exhausting through V-AWU-1, capacity: 3,000 pounds per hour of nickel, zinc and iron oxides.

Area "B" (facilities with controls that are necessary)

- (g) One (1) 17.5-foot dryer, identified as B-SD-1, equipped with parallel cyclones and a cartridge dust collector, exhausting through stack V-BSD-1, capacity: 2,500 pounds per hour of copper-zinc and magnesium ferrite.
- (h) One (1) 9.5-foot anhydrous spray dryer, identified as B-SD-2, equipped with a cyclone and cartridge dust collector, exhausting through stack V-BSD-1, capacity: 580 pounds per hour of copper-zinc and magnesium ferrite beads.

Area "C" (facilities with controls that are necessary)

- (i) One (1) 16-foot spray dryer, identified as C-SD-1, equipped with three (3) parallel cyclone separators and a cartridge dust collector, exhausting through stack V-CSD-1, capacity: 1,500 pounds per hour of strontium ferrite beads.
- (j) Four (4) green bead screening units, identified as C-GB-1, equipped with a cartridge dust collector, exhausting to the interior, capacity: 500 pounds per hour of strontium ferrite, each.
- (k) One (1) sagger weigh up operation, identified as C-WU-1, equipped with two (2) cabinet dust collectors, exhausting to the interior, capacity: 2,800 pounds per hour strontium, copper and iron oxides and ferrite.
- (l) One (1) fire bead screening unit, identified as C-GB-2, equipped with a cartridge dust collector, exhausting to the interior, capacity: 500 pounds per hour of strontium ferrite.
- (m) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-6, equipped with a baghouse dust collector, exhausting through V-CCS-6 and V-CHX-6, capacity: 1,600 pounds per hour of nickel-zinc ferrite, zinc oxide and ferrite particles.

Area "A" (facilities with controls that are not necessary)

- (n) One (1) indirect-fired calciner, identified as A-CS-2 equipped with a baghouse, identified as A-DC-1, for particulate control that does not need to be operated at all times, but only at the source's discretion, exhausting through stacks V-ACS-2 and V-AHX-1, capacity: 1,600 pounds per hour of nickel-zinc ferrite.
- (o) Blending/packaging operations, identified as A-BL-1, equipped with a dust collector that does not need to be operated at all times, but only at the source's discretion, identified as A-BL-1, capacity: 2,000 pounds per hour of nickel-zinc ferrite.

- (p) Bulk handling operations, identified as A-BH-1, equipped with a dust collector, identified as A-BH-1, that does not need to be operated at all times, but only at the source's discretion, capacity: 1,600 pounds per hour of nickel-zinc ferrite.
- (q) Six (6) ball milling units, identified as A-BM-1 to A-BM-6, each equipped with a cartridge dust collector, identified as A-BM-1 to A-BM-6, that does not need to be operated at all times, but only at the source's discretion, capacity: 7,500 pounds per batch (500 pounds per hour) of nickel-zinc ferrite beads, each.

Area "B" (facilities with controls that are not necessary)

- (r) Three (3) fire bead screening units, identified as B-FB-1, equipped with a cartridge dust collector that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 500 pounds per hour of copper-zinc and magnesium ferrite, each.
- (s) Four (4) green bead screening units identified as B-GB-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 500 pounds per hour of copper-zinc and magnesium ferrite, each.
- (t) One (1) wet ball milling operation, identified as B-WB-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, capacity: 10,000 pounds per batch (666.7 pounds per hour) of copper-zinc and magnesium ferrite beads.
- (u) One (1) ball mill operation, utilizing a wet batch process, identified as B-BM-1, equipped with a cartridge dust collector, that does not need to be operated at all times, but only at the source's discretion, exhausting to the interior, capacity: 580 pounds per hour.

Area "B" (facilities without controls that do not comply with 326 IAC 6-3)

- (v) One (1) 5-foot by 40-foot direct-fired calciner, identified as B-C-1, exhausting through V-BCS-1, capacity: 1,500 pounds per hour of copper-zinc and magnesium ferrite.

Area "C" (Coating Area)

- (w) One (1) ferrite bead coating line, identified as C-FB-1, capacity: 808 pounds per hour of ferrite beads. The ferrite bead coating line includes: coating tanks, blenders, feeders, tray loading and curing ovens, controlled by one (1) thermal oxidizer, exhausting through stack V-COD-1.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

The application includes information relating to the construction and operation of the following equipment:

- (x) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-7, equipped with a baghouse dust collector, exhausting through V-CCS-7 and V-CHX-7, capacity: 1,600 pounds per hour of nickel-zinc ferrite, zinc oxide and ferrite particles.

Insignificant Activities

The source also includes the following insignificant activities:

- (a) One (1) lab type pilot facility, identified as B-PS-1, which includes three (3) ball mills, a spray dryer (7 foot diameter), two (2) lab calciners, and three (3) small kilns.
- (b) One (1) heating boiler identified as C-HB-1, rated at 5.25 million British thermal units per hour, exhausting through stack V-CHB-1.
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour which include:

Area "A"

- (1) three (3) air makeup units with input rating per unit of two (2) million British thermal units per hour.
- (2) eleven (11) space heaters with input ratings per unit of 0.3 million British thermal units per hour.
- (3) one (1) space heater with an input rating per unit of 0.03 million British thermal units per hour.
- (4) two (2) space heaters with input rating per unit of 0.33 million British thermal units per hour.

Area "B"

- (1) one (1) air heater with an input rating of 2.475 million British thermal units per hour.
- (2) eleven (11) space heaters with input rating per unit of 0.3 million British thermal units per hour.
- (3) two (2) space heaters with input ratings per unit of 0.075 million British thermal units per hour.

Area "C"

- (1) one (1) hot water heater with an input rating of 0.72 million British thermal units per hour.
- (2) one (1) hot water heater with an input rating of 0.42 million British thermal units per hour.

- (3) one (1) air makeup unit with an input rating of 1.65 million British thermal units per hour.
 - (4) two (2) space heaters with input rating per unit of 0.3 million British thermal units per hour.
 - (5) three (3) space heaters with input rating per unit of 0.075 million British thermal units per hour.
 - (6) one (1) space heater with an input rating of 0.625 million British thermal units per hour.
 - (7) one (1) space heater with an input rating of 0.938 million British thermal units per hour.
- (d) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 million British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour which includes one (1) 200 horsepower generator with a heat input of 0.68 million British thermal units per hour.
- (e) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons which includes two (2) tanks of equal volume holding methanol controlled by a 95% efficiency catalytic oxidizer.
- (f) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (g) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (h) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (i) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (j) Cleaners and solvents characterized as follows:
- (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters mercury; or 0.3 pounds per square inch measured at 38 degrees Celsius (100 degrees Fahrenheit) or;
 - (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters mercury; or 0.1 pounds per square inch measured at 20 degrees Celsius (68 degrees Fahrenheit); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (k) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

- (l) Infrared cure equipment.
- (m) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume.
- (n) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (o) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (p) Paved and unpaved road and parking with public access.
- (q) Blowdown for any of the following: sight glass, boiler, compressors; pumps; and cooling tower.
- (r) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
- (s) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following; deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (t) Filter or coalescer media changeout.
- (u) A laboratory as defined in 326 IAC IAC 2-7-11 (20)(C).

Existing Approvals

The source has been operating under the following approval:

FESOP F127-5559-00021 issued on December 12, 1996.

Air Pollution Control Justification as Integral Part of the Process

Powdertech Corporation has requested that all the particulate matter control devices be considered as integral parts of all the PM generating operations at this source for the following reasons:

All particulate matter emissions are made up of the product that Powdertech is producing (not waste) and therefore, it is in their best interest to capture and reprocess as much of the product as possible using the existing dust collectors. The cost of the capturing and reprocessing of the PM emissions is considerably less than the cost of purchasing new product which are the PM emissions.

IDEM, OAM has evaluated this justification and agrees that the dust collectors will be considered as an integral part of the manufacturing processes. Therefore, the permitting level will be determined using the potential emissions after the dust collectors.

However, the thermal oxidizer installed on the coating line will not be considered an integral part of the coating operations and potential emissions will be calculated both before and after controls.

Enforcement Issue

There are no Enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on June 24, 1997. Additional information was received on September 15, 1997, October 30, 1997, November 4, 1997, July 31, 1998 and August 20, 1998.

Emission Calculations

See pages 1 - 2 of 2 of Appendix A of this document for detailed emissions calculations.

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM ₁₀	greater than 250
SO ₂	less than 100
VOC	greater than 100 & less than 250
CO	less than 100
NO _x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Potential Emissions (tons/year)
Nickel Compounds	less than 10
Manganese Compounds	less than 10
Toluene	greater than 10
Methanol	greater than 10
TOTAL	greater than 25

- (a) The potential emissions (as defined in the Indiana Rule) of volatile organic compounds are equal to or greater than 25 tons per year. The potential emissions (as defined in the Indiana Rule) of PM₁₀ are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in Indiana Rule) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in Indiana Rule) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects 1995 OAM emission data for the criteria pollutants and estimates of "typical" controlled emissions provided by the applicant for the HAPs.

Pollutant	Actual Emissions (tons/year)
PM	0.021
PM ₁₀	2.41
SO ₂	0.00
VOC	0.00
CO	0.035
NO _x	3.24
Nickel Compounds	0.123
Manganese Compounds	0.123
Toluene	5.33
MEK	0.28
Methanol	2.56
Glycol Ether	0.93
Dimethylethanolamine	0.07
Formaldehyde	0.07

Limited Potential to Emit

The table below summarizes the total limited potential to emit of the significant emission units.

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Direct fired calciners (A-CS-3 & 4)	7.10 (16.0)	7.10 (16.0)	0.00	0.00	0.00	0.00	0.710
Indirect fired calciner (A-CS-2)	0.991 (30.9) 22.0*	0.991 (30.9) 22.0*	0.00	0.00	0.00	0.00	0.099
20-foot dryer (A-SD-1)	1.59 (26.1)	1.59 (26.1)	0.00	0.00	0.00	0.00	0.159
Blending/packaging operations (A-BL-1)	0.0045 (18.0) 4.46*	0.0045 (18.0) 4.46*	0.00	0.00	0.00	0.00	0.000
Bulk handling (A-BH-1)	0.011 (15.5) 10.7*	0.011 (15.5) 10.7*	0.00	0.00	0.00	0.00	0.001
Six (6) ball milling units (A-BM-1 to A-BM-6)	0.012 (42.6) 11.7*	0.012 (42.6) 11.7*	0.00	0.00	0.00	0.00	0.001
Ball milling unit (A-BM-7)	3.30 (14.1)	3.30 (14.1)	0.00	0.00	0.00	0.00	0.330
Six (6) green bead screening units (A-GB-1)	0.011 (7.10)	0.011 (7.10)	0.00	0.00	0.00	0.00	0.000
Fire-bead screening unit (A-FB-1)	0.011 (7.10)	0.011 (7.10)	0.00	0.00	0.00	0.00	0.000
Weigh up units (A-WU-1)	0.151 (23.6)	0.151 (23.6)	0.00	0.00	0.00	0.00	0.015
Direct-fired rotary calciner (B-C-1)	19.7 (14.8)	19.7 (14.8)	0.00	0.00	0.00	0.00	1.97
Spray dryer (B-SD-1)	0.657 (20.8)	0.657 (20.8)	0.00	0.00	0.00	0.00	0.066
Three (3) fire bead screening units (B-FB-1)	0.00003 6 (21.3) 0.04*	0.000036 (21.3) 0.04*	0.00	0.00	0.00	0.00	0.000

	Limited Potential to Emit (tons/year)						
Four (4) green bead screening units (B-GB-1)	0.000036 (28.4) 0.04*	0.000036 (28.4) 0.04*	0.00	0.00	0.00	0.00	0.000
Wet ball milling (B-WB-1)	0.000036 (8.59) 0.04*	0.000036 (8.59) 0.04*	0.00	0.00	0.00	0.00	0.000
Ball mill operation (B-BM-1)	0.000035 (7.84) 0.03*	0.000035 (7.84) 0.03*	0.00	0.00	0.00	0.00	0.000
Spray dryer (B-SD-2)	0.241 (7.84)	0.241 (7.84)	0.00	0.00	0.00	0.00	0.024
Spray dryer (C-SD-1)	0.527 (14.8)	0.527 (14.8)	0.00	0.00	0.00	0.00	0.053
Four (4) green bead screening units (C-GB-1)	0.035 (28.4)	0.035 (28.4)	0.00	0.00	0.00	0.00	0.004
Sagger weigh-up unit (C-WU-1)	0.026 (22.5)	0.026 (22.5)	0.00	0.00	0.00	0.00	0.003
Indirect calciner (C-CS-6)	0.022 (15.5)	0.022 (15.5)	0.00	0.00	0.00	0.00	0.004
Indirect calciner (C-CS-7)	0.022 (15.5)	0.022 (15.5)	0.00	0.00	0.00	0.00	0.004
Fire bead screening area (C-GB-2)	0.022 (7.10)	0.022 (7.10)	0.00	0.00	0.00	0.00	0.002
Ferrite bead coating line (C-FB-1)	0.00	0.00	0.00	7.16	0.00	0.00	9.84
Combustion (Insignificant)	1.0	1.0	0.500	0.500	2.0	10.0	Neg.
VOC Storage Tanks (Insignificant)	0.00	0.00	0.00	1.0	0.00	0.00	1.0
Degreasing (Insignificant)	0.00	0.00	0.00	1.0	0.00	0.00	1.0
Paved & Unpaved (Insignificant)	1.0	1.0	0.00	0.00	0.00	0.00	0.00
5.25 MMBtu/hr Boiler (Insignificant)	0.276	0.276	0.014	0.122	0.483	2.30	Neg.

	Limited Potential to Emit (tons/year)						
Total Emissions	80.47 [111]	80.47 [111]	2.51	9.78	2.48	12.3	24.00

The first value listed for each facility represents the potential emissions after controls. Values in parentheses are the allowable PM emissions pursuant to 326 IAC 6-3-2. For the facilities where controls are not required, the values with asterisks represent the potential PM emissions before controls which are less than the allowable PM emission pursuant to 326 IAC 6-3-2. Those operations indicated in the equipment list that must operate with controls coupled with the potential before controls from all other facilities assure that the PSD threshold level of 250 tons per year will not be exceeded since the total PM emissions is only 111 tons per year. Therefore, the requirements of the PSD rules, 326 IAC 2-2, are not applicable to this source.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
TSP	attainment
PM ₁₀	attainment
SO ₂	attainment
NO ₂	nonattainment
Ozone	nonattainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as non-attainment for ozone.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (2) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12)40 CFR Part 60 or NESHAPS 40CFR Part 63 applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The total source potential emissions of all attainment pollutants (PM, SO₂ and CO) are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 do not apply.

326 IAC 2-3 (Emission Offset)

The total source potential emissions after controls of VOC and NO_x are less than 25 tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year in Porter County of volatile organic compounds Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-2 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(a))

The boiler constructed in 1971, deemed as an insignificant activity, is subject to the PM limits as specified by the equation: $Pt = 0.87/Q^{0.16}$. Q is the heat input in million British thermal units per hour, 5.25 million British thermal units per hour. Therefore, Pt = 0.67 pounds per million British thermal units which is truncated according to the rule to 0.60 pounds per million British thermal units. This natural gas-fired boiler complies with this limit

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions for the listed facilities and operations shall be limited as follows:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

Process	Process Weight (tons per hour)	Allowable PM Emission Rate (pounds per hour)
Direct fired calciners (A-CS-3 & 4)	0.30, each	1.83, each
Indirect fired calciner (A-CS-2)	0.80	3.53
20-foot dryer (A-SD-1)	1.75	5.97
Blending/packaging operations (A-BL-1)	1.00	4.10
Bulk handling (A-BH-1)	0.80	3.53
Six (6) ball milling units (A-BM-1 to A-BM-6)	0.25, each	1.62, each
Ball milling unit (A-BM-7)	0.70	3.23
Six (6) green bead screening units (A-GB-1 to A-GB-6)	0.25, total	1.62, total
Fire-bead screening unit (A-FB-1)	0.25	1.62
Weigh-up units (A-WU-1)	1.50	5.38
Direct-fired rotary calciner (B-C-1)	0.75	3.38
Spray dryer (B-SD-1)	1.25	4.76
Three (3) fire bead screening units (B-FB-1)	0.25, each	1.62, each
Four (4) green bead screening units (B-GB-1)	0.25, each	1.62, each
Wet ball milling (B-WB-1)	0.333	1.96
Ball mill operation (B-BM-1)	0.29	1.79
Spray dryer (B-SD-2)	0.29	1.79
Spray dryer (C-SD-1)	0.75	3.38
Four (4) green bead screening units (C-GB-1)	0.25, each	1.62, each

Sagger weigh-up unit (C-WU-1)	1.40	5.14
Two (2) indirect-fired calciners (C-CS-6 & 7)	0.80, each	3.53, each
Fire bead screening area (C-GB-2)	0.25	1.62

All facilities comply with this rule with the use of baghouses and/or cyclones or cartridge dust collectors, except the 40-foot direct-fired calciner (B-C-1). This issue was incorrectly addressed in the FESOP for this facility. "Compliance with this condition (326 IAC 2-8-4, FESOP) will also satisfy [the] requirements of 326 IAC 6-3)". The 40-foot direct-fired calciner (B-C-1), which does not have PM controls, has a potential PM emission rate (see page 1 of 2 of Appendix A) of 4.5 pounds per hour. The allowable PM emission rate for this calciner is 3.38 pounds per hour and therefore it does not comply with the rule.

In order to comply with 326 IAC 6-3-2 and Part 70, Powdertech Corporation can either perform compliance testing of the 40-foot direct-fired calciner (B-C-1) or install controls. If the Powdertech Corporation chooses to test and the tests do not show compliance with 326 IAC 6-3-2, then Powdertech Corporation shall prepare and submit within 165 days of permit issuance a schedule to demonstrate compliance with 326 IAC 6-3 for this unit and within 270 days of permit issuance shall certify that the emissions from these facilities are in compliance with this rule or install additional controls on the 40-foot direct-fired calciner (B-C-1) to show compliance.

326 IAC 6-3-2 (Process Operations Insignificant Activities)

The insignificant grinding and machining as well as the welding and cutting activities shall comply with 326 IAC 6-3-2(c). The 326 IAC 6-3-2 equations are as follows: $E = 4.10 P^{0.67}$, where P equals process weight in tons per hour for process weights up to and including sixty thousand (60,000) pounds per hour and E equals the allowable emission rate in pounds per hour. For process weights in excess of sixty thousand (60,000) pounds per hour, $E = 55.0 P^{0.11} - 40$. Compliance for the spray operation is shown by the use of dry filters for overspray control.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compounds (VOC) content of the silicone coating used in the reprographic ferrite bead coating line shall be limited to 4.3 pounds per gallon of coating less water after controls for the clear coating. This is equivalent to 10.34 pounds of VOC per gallon of coating solids as-applied which requires a 90.55 percent equivalent overall control efficiency. The silicone coating will comply with the rule by using the thermal oxidizer. An October 1993 stack test of the thermal oxidizer showed a 100 percent capture and 99.0 percent destruction.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coatings used in the reprographic ferrite bead coating facility shall be limited to 3.5 pounds per gallon of coating less water after controls. This is equivalent to 6.67 pounds of VOC per gallon of coating solids as-applied which requires a 79.0 percent equivalent overall control efficiency. The acrylic coatings will comply with this rule by using the thermal oxidizer. An October 1993 stack test of the thermal oxidizer showed a 100 percent capture and 99.0 percent destruction.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the information provided by the applicant, the 95% control efficiency of the thermal oxidizer (to be verified by stack testing), and the calculations on page 2 of 2 of Appendix A, the reprographic ferrite bead coating facility is in compliance with these requirements.

326 IAC 8-3-2 (Cold Cleaner Operations) or 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)

The insignificant degreasing activities shall comply with the appropriate rule that requires work place standards in the operation of degreasing facilities.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (1) The baghouse, cyclone and/or the cartridge dust collector controls on the following listed facilities have applicable compliance monitoring conditions as specified below:

Area "A"

- (a) Two (2) 3-foot by 20-foot direct-fired calciners, identified as A-CS-3 and A-CS-4, each equipped with a baghouse, identified as A-DC-1.
- (b) One (1) 20-foot dryer, identified as A-SD-1, equipped with parallel cyclones, a baghouse, identified as A-SD-1, and cartridge dust collector.
- (c) One (1) ball milling unit, identified as A-BM-7, equipped with a cartridge dust collector.

- (d) Six (6) green bead screening units, identified as A-GB-1, equipped with a baghouse, identified as A-GB-1.
- (e) One (1) fire bead screening operation, identified as A-FB-1, equipped with a baghouse, and cartridge dust collector, identified as A-FB-1.
- (f) One (1) weigh up operation, identified as A-WU-1, equipped with a baghouse, identified as A-WU-1.

Area "B"

- (g) One (1) 17.5-foot dryer, identified as B-SD-1, equipped with parallel cyclones and a cartridge dust collector.
- (h) One (1) 9.5-foot anhydrous spray dryer, identified as B-SD-2, equipped with a cyclone and cartridge dust collector.

Area "C"

- (i) One (1) 16-foot spray dryer, identified as C-SD-1, equipped with three (3) parallel cyclone separators and a cartridge dust collector.
- (j) Four (4) green bead screening units, identified as C-GB-1, equipped with a cartridge dust collector.
- (k) One (1) sagger weigh up operation, identified as C-WU-1, equipped with two (2) cabinet dust collectors.
- (l) One (1) fire bead screening unit, identified as C-GB-2, equipped with a cartridge dust collector.
- (m) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-6, equipped with a baghouse.
- (n) One (1) 3-foot by 26-foot indirect-fired calciner unit, identified as C-CS-7, equipped with a baghouse dust collector.

Daily visible emissions observations at all stack exhausts shall be performed. The observer shall note whether emissions are normal or abnormal.

These monitoring conditions are necessary because the PM control devices for the reprographic ferrite bead manufacturing process must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

- (2) The ferrite bead coating process has applicable compliance monitoring conditions as specified below:
 - (a) The amount of VOCs delivered to the applicator, the amount of any single HAP delivered to the applicator, and the amount of any combinations of HAPs delivered to the applicator must be monitored and recorded on a monthly basis.

- (b) The Permittee shall perform stack tests on the ferrite bead coating line thermal oxidizer, identified C-FB-1 as specified in the permit to demonstrate compliance with the applicable rule or permit condition. All testing shall be performed according to the provisions of 326 IAC IAC 3-2.1 (Source Sampling Procedures) and by methods in the approved test protocol.

These monitoring conditions are necessary to show compliance with compliance with 326 IAC 8-2-9 326 IAC 6-3-2 and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to the Clean Air Act.
- (b) See attached calculations for detailed air toxic calculations on pages 1 and 2 of 2 of Appendix A.

Conclusion

The operation of this reprographic ferrite bead manufacturing source shall be subject to the conditions of the attached proposed **Part 70 Permit No. T 127-8479-00021**.

**Appendix A: Emission Calculations
Baghouse Operations**

Company Name: Powdertech Corporation
Address City IN Zip: 5103 Evans Road, Valparaiso, Indiana 46383
Part 70: T127-8479
Plt ID: 127-00021
Reviewer: Frank P. Castelli
Date: April 18, 1997

Control ID	Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)	HAPS Emissions after Controls	HAPS Emissions after Controls
									Nickel (tons/yr)	Manganese (tons/yr)
A-DC-1 (a)	A-CS-3 & 4	95.5%	0.086	2200.0	36.0	157.85	1.622	7.10	0.710	0.000
A-DC-1 (b)	A-CS-2	95.5%	0.012	2200.0	5.0	22.03	0.226	0.991	0.099	0.000
A-SD-1 (c)	A-SD-1	99.9%	0.005	8450.0	362.9	1589.36	0.363	1.59	0.159	0.000
A-BL-1	A-BL-1	99.9%	0.000022	5400.0	1.0	4.46	0.001	0.0045	0.000	0.000
A-BH-1	A-BH-1	99.9%	0.000053	5400.0	2.45	10.74	0.002	0.011	0.001	0.000
A-BM-1-6	A-BM-1-6	99.9%	0.000052	6000.0	2.7	11.71	0.003	0.012	0.001	0.000
A-BM-7	A-BM-7	99.9%	0.040	2200.0	754.3	3303.77	0.754	3.30	0.330	0.000
A-GB-1	A-GB-1	99.9%	0.000053	5400.0	2.5	10.74	0.002	0.011	0.000	0.000
A-FB-1	A-FB-1	99.9%	0.000053	5400.0	2.5	10.74	0.002	0.011	0.000	0.000
A-WU-1	A-WU-1	99.9%	0.002	2200.0	34.5	151.15	0.035	0.151	0.015	0.000
None	B-C-1	0.0%	N/A	N/A	4.5	19.71	4.50	19.7	0.000	1.971
B-SD-1	B-SD-1	99.9%	0.007848	2230.0	150.0	657.04	0.150	0.657	0.000	0.066
B-FB-1	B-FB-1	99.9%	0.00000025	3800.0	0.00814	0.04	0.000008	0.000036	0.000	0.000
B-GB-1	B-GB-1	99.9%	0.00000025	3800.0	0.00814	0.04	0.000008	0.000036	0.000	0.000
B-WB-1	B-WB-1	99.9%	0.00000025	3800.0	0.00814	0.04	0.000008	0.000036	0.000	0.000
B-BM-1	B-BM-1	99.9%	0.000000093	10000.0	0.008	0.03	0.00001	0.000035	0.000	0.000
B-SD-2	B-SD-2	99.9%	0.0015	4400.0	55.1	241.18	0.055	0.241	0.000	0.024
C-SD-1	C-SD-1	99.9%	0.0027	5200.0	120.3	527.10	0.120	0.527	0.053	0.000
C-GB-1	C-GB-1	99.9%	0.00018	5200.0	8.0	35.14	0.008	0.035	0.004	0.000
C-WU-1	C-WU-1	99.9%	0.00018	3900.0	6.0	26.36	0.006	0.026	0.003	0.000
C-CS-6	C-CS-6	99.9%	0.00015	3900.0	5.0	21.96	0.005	0.0220	0.002	0.002
C-CS-7	C-CS-7	99.9%	0.00015	3900.0	5.0	21.96	0.005	0.0220	0.002	0.002
C-GB-2	C-GB-2	99.9%	0.000167	3500.0	5.0	21.94	0.005	0.022	0.002	0.000
Totals						6845.1		34.4	1.38	2.07

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

HAPs based on 10% of PM as Nickel or Manganese

**Appendix A: Potential Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: **Powdertech Corporation**
 Address City IN Zip: **5103 Evans Road, Valparaiso, Indiana 46383**
 Part 70: **T127-8479**
 Plt ID: **127-00021**
 Reviewer: **Frank P. Castelli**
 Date: **April 18, 1997**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential tons per year	lb VOC /gal solids	Transfer Efficiency
C-FB-1 (Worst Case Acrylic)	7.24	83.32%	2.64%	80.68%	2.50%	13.30%	0.0080	700	5.99	5.84	32.71	785.1	143.3	0.00	43.9	100%
State Potential Emissions											32.7	785.1	143.3	0.00		
Add worst case coating to all solvents																

Control Technology Emissions (Combustion)			Emission Factors								Emissions					
Type	Number	Capacity MMBtu/hr	Gas usage MMCF/yr	PM lb/MMCF	PM10 lb/MMCF	SO2 lb/MMCF	NOx lb/MMCF	VOC lb/MMCF	CO lb/MMCF	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	
Catalytic	1		0.0	3.0	3.0	0.6	100.0	5.3	35.0	0.0	0.0	0.0	0.0	0.0	0.0	
Thermal			0.0	3.0	3.0	0.6	140.0	2.8	20.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total			0.0							0.0	0.0	0.0	0.0	0.0	0.0	
										Control Efficiency	Controlled	Controlled	Controlled	Controlled		
										VOC	VOC pounds	VOC pounds	VOC	Particulate		
										0.95	0	per hour	per day	tons/yr	tons/yr	

Controlled Emissions due to Surface Coating Operations and Controls

1.64 39.3 7.16 0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

Air Toxics Emissions Calculations

	pounds/hour	hours/year	pounds/year	tons year before control	Control Efficiency	tons/year after control
Acrylic Mixtures (Worst Case)						
Methanol	27.7	8760	242652	121.326	95%	6.07
Silicone Mixtures (worst case)						
Toluene	17.2	8760	150672	75.336	95%	3.77
				Total		9.84