



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: November 23, 2011

RE: Kinder Morgan Cochin LLC – Milford Terminal and Pumping Station / 085-31013-00036

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Revocation

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-5(f) this revocation is effective fifteen (15) days after it is served. When served by U.S. mail, the order is effective eighteen (18) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition describing your intent must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-REV.dot 1/2/08



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Mr. Kent Miller
Kinder Morgan Cochin LLC - Milford Terminal and Pumping Station
13753 North 50 West
Iowa City, IA 52240

November 23, 2011

Re: 085-31013-00036
Revocation of MSOP No. M085-28320-00036

Dear Mr. Miller:

Kinder Morgan Cochin LLC - Milford Terminal and Pumping Station was issued Minor Source Operating Permit (MSOP) No. M085-28320-00036 on April 30, 2010, for a stationary petrochemical gas transportation facility, located at 13753 North 50 West, Milford, Indiana, 46542. On October 6, 2011, the Office of Air Quality (OAQ) received a letter from Kinder Morgan Cochin LLC - Milford Terminal and Pumping Station requesting that the MSOP be revoked, since based on the source determination, the type of fuel and the state of the fuel were incorrect in the MSOP application package, which resulted in overestimation of emissions from the Milford terminal and pump station.

In the application package sent to IDEM, OAQ for this facility in August 2009 several items related to the terminal and pump station were, according to the source, misapplied. This resulted in an estimate that did not accurately portray emissions from the Milford Terminal and Pumping Station. In the application package the facility process description incorrectly characterized the fuel as ethylene, ethane, propane, and butane gases when the fuel is actually a blend of only propane and ethane. In addition, the fuel is brought in by pipeline, stored, and transferred in a liquid state not a gaseous state.

Potential-to-emit calculations (PTE) have been prepared by the source and reviewed by IDEM, OAQ for the Milford operations. Calculations include fugitive emission sources, flare pilot fuel emissions, flare operation emissions, which include an estimate of liquid blowdowns per year, and GHG emissions. EPA AP-42 emission factors have been used where possible and mass balance equations show methodology. As demonstrated in the PTE, total emissions for all pollutants facility-wide are below the permitting and registration thresholds.

Pursuant to 326 IAC 2-1.1-9, any permit to construct or operate or any permit revision approval granted by the commissioner may be revoked for any cause that establishes in the judgment of the commissioner the fact that continuance of the permit or permit revision approval is not consistent with the purposes of 326 IAC 2. As a result of the source's updated information, the source's total emissions for all pollutants are below permitting and registration thresholds, therefore the MSOP is no longer required.

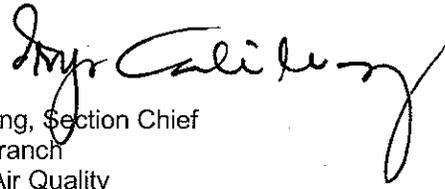
The MSOP No. M085-28320-00036 issued on April 30, 2010, is hereby revoked. Pursuant to IC 4-21.5-3-5(a) and (b), this revocation letter is effective eighteen (18) days from the date of this letter.

Please be advised that once this revocation is effective the source will no longer have approval to operate any emission units at this source. In addition, if there is a need in the future to operate any units at this source, construction and operation approval will be necessary pursuant to Indiana's New Source Review regulations. Once effective, this revocation cannot be withdrawn or rescinded.

A copy of the revocation is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

If there are any questions about this revocation, please contact Charles Sullivan, at 317-232-8422 or at 1-800-451-6027 (ext 28422).

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/cs

Attachment - Appendix A (Updated Calculations)

cc: File - Kosciusko County
Kosciusko County Health Department
Compliance and Enforcement Branch
Billing, Licensing and Training Section

**Appendix A: Emission Summary
Before Correction**

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Uncontrolled Emissions

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NOx	HAPs
Truck Loading Blowdown	0.00	0.00	0.00	0.00	72.77	0.58	0.11	0.00
Maintenance Blowdown	0.00	0.00	0.00	0.00	26.84	0.21	0.04	0.00
Paved Roads	0.51	0.10	0.10	0.00	0.00	0.00	0.00	0.00
Total	0.51	0.10	0.10	0.00	99.61	0.79	0.15	0.00

Limited Emissions

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NOx	HAPs
Truck Loading Blowdown*	0.00	0.00	0.00	0.00	13.71	0.00	0.00	0.00
Maintenance Blowdown*	0.00	0.00	0.00	0.00	11.18	0.00	0.00	0.00
Paved Roads	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	24.89	0.00	0.00	0.00

* To avoid 326 IAC 8-1-6 (BACT) , the source has agreed to limit the truck loading blowdowns and maintenance blowdowns combined to less than 25 tons per twelve (12) consecutive month.

Controlled Emissions

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NOx	HAPs
Truck Loading Blowdown	0.00	0.00	0.00	0.00	1.46	0.58	0.11	0.00
Maintenance Blowdown	0.00	0.00	0.00	0.00	0.54	0.21	0.04	0.00
Paved Roads	0.23	0.05	0.05	0.00	0.00	0.00	0.00	0.00
Total	0.23	0.05	0.05	0.00	1.99	0.79	0.15	0.00

Limited Emissions After Flare

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NOx	HAPs
Truck Loading Blowdown	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00
Maintenance Blowdown	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00

**Appendix A: Emission Summary
After Correction**

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Summary of Emissions - Milford Terminal and Pump Station

Pollutant	Potential Emissions (TPY)	Potential Emissions (lb/yr)	Source ¹
VOC	1.25	2,495.73	Fugitives, Flare - Pilot Fuel (Propane), Flare - Operation
PM, Total	5.16E-01	1031.73	Flare - Pilot Fuel (Propane)
SO2	0.00	0.0	Flare - Pilot Fuel (Propane)
NOx	0.71	1417.4	Flare - Pilot Fuel (Propane), Flare - Operation
CO	3.06	6,119.0	Flare - Pilot Fuel (Propane), Flare - Operation
CO2e	150.24	300,477	Flare - Pilot Fuel (Propane), Flare - Operation
N2O	1.39E-03	2.78	Flare - Pilot Fuel (Propane), Flare - Operation
CH4	6.96E-03	13.91	Flare - Pilot Fuel (Propane), Flare - Operation

No Permit/Registration Required (TPY) ²	State Permitting Threshold (ton/year) ³
5	25
5	25
10	25
10	25
25	100

Notes:

- 1.) The facility may process ethane; however, as it's characteristics are similar to propane, the PTE was calculated assuming all propane
- 2.) Facilities with emissions below these levels are exempt from permitting and registration requirements; 326 IAC 2-1-1-3 Exemptions: □
- 3.) State Permitting Threshold - 326 IAC 2-5.1-3

Summary of Sources and Methodology

Fugitives

Fugitive Sources consist of VOC emissions from leaks from facility equipment components such as flanges, valves, etc.

Calculation methodology

VOC emissions = Component count (ex. # flanges) * AP-42 EF (kg VOC/type of component/hr) * Op Hours (8760) * Conversion factor (lb/kg) * Conversion factor (ton/lb)

Flare

Emissions from the flare arise from two processes- combustion of supplemental fuel (propane) in the pilot and from operation of the flare as a safety device.

The flare is operated to combust liquid propane from maintenance events (such as liquid propane from the blowdown of pipes, valves) and from cleanout of propane from the truck loading operation pipelines.

Note that the emissions from flare operation are a conservative estimate because we have assumed that the entire facility piping system is blown down to the flare once per month. The actual amount sent to the flare is significantly less than this amount.

Calculation methodology

Emissions from pilot propane

VOC, NOx, CO, PM emissions = Amount of propane sent to the flare to ignite/ maintain the pilot (1,000 gallons) * AP-42 Combustion EF (lb/1,000 gallons) * Conversion Factor (ton/lb)

CO₂ emissions = Amount of propane sent to the flare to ignite/ maintain the pilot (mmbtu) * GHG Mandatory Reporting Rule (MRR) EF (kg/mmbtu) * Conversion Factor (ton/kg)

CH₄ emissions = Amount of propane sent to the flare to ignite/ maintain the pilot (mmbtu) * GHG MRR EF (kg/mmbtu) * Conversion Factor (ton/kg)

N₂O emissions = Amount of propane sent to the flare to ignite/ maintain the pilot (mmbtu) * GHG MRR EF (kg/mmbtu) * Conversion Factor (ton/kg)

CO₂e emissions = CO₂ emissions (tons) + [CH₄ emissions (tons) * GWP (21)] + [(N₂O emissions (tons) * GWP (310)]

Flare Operation Emissions

VOC, NOx, CO emissions = (Amount of propane from process sent to be combusted by the flare (1,000 gallons) * Conversion factor (mmbtu/ 1,000 gallon) * AP-42 EF for Flare Operation (lb/mmbtu) * Conversion Factor (ton/lb)

CO₂ emissions = Amount of propane from process sent to be combusted by the flare (scf/year) * 3 carbon atoms in propane * Flare Efficiency * Density of CQ (kg/cu feet) * Conversion Factor (tons/kg)

Note CO₂ emissions calculation from flare operations conservatively assumes all carbon in flared propane is converted to CO₂

Appendix A: Emission Summary

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Reference:

USEPA, "Protocol for Equipment Leak Emission Estimates", Nov 1995
 Table 2-3, "Marketing Terminal Average Emission Factors"

Emission Factors

<u>Equipment Type</u>	<u>Service</u>	<u>Emission Factor</u>	<u>Units</u>	<u>Number of Equipment**</u>	<u>Assumptions for KM Terminals</u>
Valves	Light Liquid	4.30E-05	kg/hr/source	227	including storage tank valve(s) that vents to atmosphere and excluding pressure relief valves that vent to flare
Pump seals	Light Liquid	5.40E-04	kg/hr/source	0	
Other (compressors and other*)	Light Liquid	1.30E-04	kg/hr/source	2	including truck loading rack arm(s)
Fittings (Connectors and flanges)	Light Liquid	8.00E-06	kg/hr/source	215	

* Other applies to any component that is not a valve, pump, or fitting

** Facility design is identical to Bensen Terminal and Pump Station; therefore, component counts from Bensen are used

Emissions

0.01 kg/hr
 0.03 lb/hr
 8,760 hours/year
 0.11 tons/year of VOC

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Reference:

AP-42 1.5, Table 1.5-1 "Emission Factors for LPG Combustion"

Emission Factors

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Unit</u>	<u>Assumptions</u>
PM, Total	0.7	lb/10 ³ gallon	Heat input capacity is less than 10 MMBTU
SO ₂	0	lb/10 ³ gallon	Sulfur Content = 0 since pilot gas is pure propane
NO _x	13	lb/10 ³ gallon	
CO	7.5	lb/10 ³ gallon	
TOC	1	lb/10 ³ gallon	

Other Data

600 barrels/year
 42 gallons/barrel
 25.2 10³ gallon/year
 8760 hr/year
 assumed flare is operated the same as Mankato Terminal

Emissions

<u>Pollutant</u>		
PM, Total	2.01E-03 lb/hr	8.82E-03 tons/year
SO ₂	0.00 lb/hr	0.00 tons/year
NO _x	3.74E-02 lb/hr	1.64E-01 tons/year
CO	2.16E-02 lb/hr	9.45E-02 tons/year
TOC	2.88E-03 lb/hr	1.26E-02 tons/year

Appendix A: Emission Summary

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Reference:

AP-42 13.5, Table 13.5-1 "Emission Factors for Flare Operations"

Total Emissions

<u>Pollutant</u>	
VOC	1.12 tons/year
CO	2.97 tons/year
NOx	0.54 tons/year

Emission Factors

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Unit</u>
VOC	0.14	lb/MMBTU
CO	0.37	lb/MMBTU
NOx	0.068	lb/MMBTU

Other Data

98 %	Flare Control Efficiency (assumed)
91.5 MMBtu/10 ³ gal	AP-42, Section 1.5
0.68 MMBtu/cu ft	

Pressure Relief Valves

There are 3 different sizes of pressure relief valves. Below are the diameter, heights, and calculated volumes

<u>Diameter (feet)</u>	<u>Height (feet)</u>	<u>Volume (cf)</u>	<u>Number of Valves</u>
0.04	0.04	5.68E-05	25
0.06	0.08	2.56E-04	4
0.33	0.17	0.01	4

*site is identical in configuration to Bensen Terminal/Pump Station

0.06 cu feet/year	total annual volume of all pressure relief valves
0.04 MMBTU/year	propane sent to flare

Appendix A: Emission Summary

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Emissions

<u>Pollutant</u>		
VOC	6.63E-07 lb/hr	2.90E-06 tons/year
CO	1.75E-06 lb/hr	7.67E-06 tons/year
NOx	3.22E-07 lb/hr	1.41E-06 tons/year

Truck Loading Blowdown

Assumed truck loading is the same as at the Mankato Terminal

0.17 feet	diameter of arm (from the Mankato permit application, October 2007)
1.5 feet	length of arm (from the Mankato permit application, October 2007)
2 dimensionless	number of arms (from the Mankato permit application, October 2007)
3 trucks/hr/arm	(from the Mankato permit application, October 2007)
8760 hr/year	operating hours
0.03 cu feet	volume of arm each time a truck loads
52560 trucks/year	for both arms
1,719.15 cu feet/year	propane sent to flare
1,176.70 MMBTU/year	propane sent to flare

Emissions

<u>Pollutant</u>		
VOC	0.02 lb/hr	0.08 tons/year
CO	0.05 lb/hr	0.22 tons/year
NOx	0.01 lb/hr	0.04 tons/year

Appendix A: Emission Summary

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Maintenance Event

Maintenance Areas

Description	Number of Times	Gallons/blowdown
	Performed/Year	(sent to flare)
TBV 8" G-12 Gate Valve Body	12	15.1775
TBV inlet to filter	12	945.9828
Filter	12	273.0000
Meter Skid (Filter to D/S Meter Iso. Valve)	12	73.3320
Meter Skid Bypass Line	12	87.9984
Meter Prover, Inlet, & Outlet Piping	12	0.6720
Tank Feed Header (Includes 17 Tank Inlets)	12	1298.7912
Dock # 1 pump	12	7.0468
Dock # 2 pump	12	7.0468
Dock # 1 discharge line - pump to prover	12	293.3280
Dock # 2 discharge line - pump to prover	12	293.3280
Dock # 1 discharge line - prover to dock	12	388.6596
Dock # 2 discharge line - prover to dock	12	388.6596
Dock # 1	12	33.7651
Dock # 2	12	33.7651
Ground Vapor Header	12	4.8118
Elevated Vapor Header	12	7.0458
Suction Header (Tank Outlets to Pumps)	12	3013.9452
U/S Fire Valve to Receiver Trap	12	1906.6320
Receiver Trap	12	245.0918
Receiver Trap to SSV	12	309.6240
SSV to U/S Filter Isolation Valve	12	109.9980
Filter/Meter Bypass Header	12	134.9309
Filter	12	734.0340
D/S Filter Iso. Valve to Meter Iso. Valve	12	161.6563
D/S Meter Iso. Valve to USV	12	65.1840
Pump - UDV to USV	12	294.0000
UDV to SDV	12	480.7320
SDV to Launcher Trap	12	264.8100
Launcher Trap	12	153.1824
Launcher Trap to Downstream Check Valve	12	1407.9744
12" G-12 Gate Valve Body	12	42.0000
10" G-12 Gate Valve Body	12	29.0699
8" G-12 Gate Valve Body	12	15.1775
8" G-4 Gate Valve Body	12	4.4156

Pump Station

Assumed maintenance on the above areas are performed once a month
 162,298.42 gallons/year Total volume of the above maintenance areas sent to flare
 91.5 MMBtu/10³gal AP-42, Section 1.5
 14,850 MMBTU/year

Emissions

Pollutant		
VOC	0.24 lb/hr	1.04 tons/year
CO	0.63 lb/hr	2.75 tons/year
NOx	0.12 lb/hr	0.50 tons/year

Appendix A: Emission Summary

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Reference:

Tables C-1 and C-2 of 40 CFR Part 98 Subpart C
 40 CFR Part 98 Subpart W

Emission Factors

Pollutant	Emission Factor	Units	Fuel Type
CO2	62.98	kg/MMBTU	Liquefied Petroleum Gas (LPG)
CH4	0.0030	kg/MMBTU	Liquefied Petroleum Gas (LPG)
N2O	0.0006	kg/MMBTU	Liquefied Petroleum Gas (LPG)

Other Data

0.092 MMBTU/gallon	Default High Heat Value for Propane
25,200.00 gallons/year	propane used as pilot fuel in flare
3,368.75 cu feet/year	propane used as pilot fuel in flare
23,415.36 cu feet/year	propane sent to flare for safety
3 dimensionless	carbon atoms in propane
98% percent	flare efficiency
40.33 F	Temperature at standard conditions
40.33 F	Temperature at actual emission conditions
14.70 psia	absolute pressure at standard conditions
14.70 psia	absolute pressure at actual conditions
68,841.14 cu feet/year	carbon sent to flare during operation at standard temperature and pressure conditions
0.0530 kg/cu feet	density of CO2
0.0193 kg/cu feet	density of CH4
0.0530 kg/cu feet	density of N2O
1	global warming potential for CO2
21	global warming potential for CH4
310	global warming potential for N2O

Emissions

Pollutant	Emissions from Pilot Fuel		Emissions from Operation	
	lb/hr	tons/year	lb/hr	tons/year
CO2	33.34	146.01	0.83	3.65
CH4	1.59E-03	6.96E-03		
N2O	3.18E-04	1.39E-03		
CO2e	33.47	146.59	0.83	3.65

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads**

Company Name: Kinder Morgan Cochin LLC - Milford Terminal & Pumping Station
Source Address: 13753 N 50 W, Milford, Indiana 46542
Permit No: M085-31013-00036
Reviewer: Charles Sullivan
Date: November 2011

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	22.0	1.0	22.0	20.0	440.0	500	0.095	2.1	760.4
Vehicle (leaving plant) (one-way trip)	22.0	1.0	22.0	20.9	459.8	500	0.095	2.1	760.4
Total			44.0		899.8			4.2	1520.8

Average Vehicle Weight Per Trip =

20.5	tons/trip
------	-----------

Average Miles Per Trip =

0.09	miles/trip
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Unmitigated Emission Factor, Ef = [k * (sL/2)^{0.65} * (W/3)^{1.5} - C] (Equation 1 from AP-42 13.2.1)

	PM	PM10	
where k =	0.082	0.016	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	20.5	20.5	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
sL =	0.6	0.6	g/m ² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]

Mitigated Emission Factor, Eext = $E_f * [1 - (p/4N)]$
where p =

125	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
-----	---

N =

365	days per year
-----	---------------

	PM	PM10	
Unmitigated Emission Factor, Ef =	0.67	0.13	lb/mile
Mitigated Emission Factor, Eext =	0.61	0.12	lb/mile
Dust Control Efficiency =	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM ₁₀ (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM ₁₀ (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM ₁₀ (tons/yr)
Vehicle (entering plant) (one-way trip)	0.25	0.05	0.23	0.05	0.12	0.02
Vehicle (leaving plant) (one-way trip)	0.25	0.05	0.23	0.05	0.12	0.02
	0.51	0.10	0.46	0.09	0.23	0.05

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Kent Miller
Kinder Morgan Cochin LLC -Milford Terminal & Pumpi
2959 Sierra Ct SW
Iowa City, IA 52240

DATE: November 23, 2011

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Revocation
085-31013-00036

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 11/23/2011 Kinder Morgan Cochin LLC 085-31013-00036 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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											Remarks
1		Kent Miller Kinder Morgan Cochin LLC -Milford Terminal & Pumpi 2959 Sierra Ct SW Iowa City IA 52240 (Source CAATS)									
2		Mr. Charles L. Berger Attorney Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)									
3		Kosciusko County Board of Commissioners 100 W. Center St, Room 220 Warsaw IN 46580 (Local Official)									
4		Mr. Tim Thomas c/o Boilermakers Local 374 6333 Kennedy Ave. Hammond IN 46333 (Affected Party)									
5		Kosciusko County Health Department 100 W. Center Street, 3rd Floor Warsaw IN 46580-2877 (Health Department)									
6		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)									
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