ANALYSIS AND PRELIMINARY DETERMINATION FOR THE CONSTRUCTION PERMIT FOR THE PROPOSED CONSTRUCTION OF A SAND PROCESSING PLANT

AND

ANALYSIS AND PRELIMINARY DETERMINATION FOR THE OPERATION PERMIT FOR A SAND PROCESSING PLANT

FOR
CANADIAN SAND AND PROPPANTS, INC.,
TO BE LOCATED AT
1425 COUNTY HIGHWAY S,
CHIPPEWA FALLS, CHIPPEWA COUNTY, WISCONSIN

Construction Permit No.: 08-RAF-226
Operation Permit No.: 609072860-F01
Facility ID No. 609072860

This review was performed by the Wisconsin Department of Natural Resources, Bureau of Air Management in accordance with Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code.

Reviewed by: Roger Fritz Date: 11/17/2008

Peer review conducted by: /s/Joe Brehm Date: 11/13/2008

Preliminary Determination Approved by:	**Signature**	**Date**
Regional Supervisor or Central Office Designee:	/s/Jeffery Johnson	11/18/2008
Stationary Source Modeling Team Leader:		
Compliance Engineer (reviewed/approved):	/s/Tom Ponty	11/12/2008

cc: Tom Ponty - WCR
Chippewa Falls Public Library, 105 W. Central St., Chippewa Falls, WI 54729

INTRODUCTION

Stationary sources that are not specifically exempt from the requirement to obtain a construction permit under s. 285.60(5), Wis. Stats. or ch. NR 406, Wis. Adm. Code may not commence construction, reconstruction, replacement, relocation or modification unless a construction permit for the project has been issued by the Department of Natural Resource's (DNR's) Air Management Program. Owners or operators subject to the construction permit requirements must submit a construction and operation permit applications to the DNR. The applications are reviewed following the provisions set forth in ss. 285.60 to 285.67, Wis. Stats. The criteria for permit issuance vary depending on whether the source is major or minor and whether the source is or proposed to be located in an attainment or nonattainment area.

Subject sources are to be reviewed with respect to the equipment and facility description provided in the applications and for the resulting impact upon the air quality. The review ensures compliance with all applicable rules and statutory requirements. The preliminary determination will show why the source(s) should be approved, conditionally approved, or disapproved. It will encompass emission calculations and an air quality analysis using US EPA models, if applicable. Emissions from volatile organic compound (VOC) sources and small sources whose emissions are known to be insignificant are normally not modeled. As a precautionary note, the emission estimates are based on US EPA emission factors (AP-42) or theoretical data and can vary from actual stack test data.

The sources included in this construction permit are also required to obtain an operation permit under s. 285.60(1)(b), Wis. Stats. This review constitutes the Department's review of applications for both the construction permit and the operation permit for these units.

A final decision on the construction permit and operation permit will not be made until the public has had an opportunity to comment on the Department's analysis, preliminary determination and draft permit. The conditions proposed in the draft permit may be revised in any final permit issued based on comments received or further evaluation by the Department.

GENERAL APPLICATION INFORMATION

Owner/Operator: Canadian Sand and Proppants, Inc.
1425 County Highway S
Chippewa Falls, Wisconsin 54729

Responsible Official: Gary Stone
Plant Manager

Application Contact Person: Gary Stone, Plant Manager
(715) 723-5001

Application Submitted By: Thomas Henning, Short Elliot Hendrickson, Inc.
(920) 452-6603

Application submittal date: 9/19/2008

Additional Information Submitted: 10/13/2008, 10/30/2008, 11/4/2008

Date of Complete Application: 10/21/2008

PROJECT DESCRIPTION

Canadian Sand and Proppants, Inc. (CSP) proposes to construct a sand processing plant to be located in Chippewa Falls, Wisconsin. The plant requires a construction permit because according to the application, maximum theoretical emissions exceed the permit exemption thresholds in s. NR 406.04(2), Wis. Adm. Code, and because the plant may be subject to NSPS for non-metallic mineral processing plants and for calciners and dryers in mineral industries. The application indicates with emission controls (i.e. synthetic minor), the project potential emissions from the facility are below PSD thresholds and below Title V major source thresholds.

Other Actions:

Because this is a greenfield facility, this construction permit will also be processed as an operation permit (609072860-F01) which covers operations at the entire facility.

This is a greenfield source. The applicant has been asked (Fritz, 9/30/2008) to contact the State Historical Society to check if this project is being constructed on a historical site. According to the DNR Bureau of Facilities and Lands maps of the locations of historic properties listed in the inventories of the Wisconsin Historical Society, there are no known locations of historic structures, or of archaeological sites and burial sites in the project area. Similarly, according to Natural Heritage Inventory Portal, no element occurrences have been documented within the project section. Bald eagle and lake darner were documented in the surrounding 1-mi buffer. The applicant requested (Stone, 10/10/2008) and the Department has granted (Woletz, 10/21/2008) a construction waiver under s. 406.03(2), Wis. Adm. Code.

SOURCE DESCRIPTION

CSP proposes to construct a sand processing plant in Chippewa Falls, Wisconsin, west of the Union Pacific railway and south of County Highway S. The project includes two natural gas fired dryers each rated at 150 ton-sand/hr, each controlled with its own fabric filter; a dryer building dust collection system controlled with two baghouses; product storage silos; truck and rail receiving stations; bulk material conveyers and stackers; surge piles; a 1,000 ton/hr screen; an 800 ton/hr crusher; both paved and unpaved roads, and rail loading with a 1,000 ton/hr conveyor.

Description of New or Modified Units.

A. S01/P01/C01 & S02/P02/C02- Two natural gas fired dryers each rated at 150 ton/hr, each controlled with a fabric filter

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	P01 & P02
Unit description:	Two natural gas fired, shaking fluid bed, dryers each rated at 150 ton/hr
Control technology status:	Each controlled with a fabric filter (C01 & C02)
Maximum continuous rating (mmBTU/hr):	25.5 each
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

Control Device Information.	
Control Device identification number:	C01 & C02
Exhausting emissions unit(s):	P01 & P02
Control device type [baghouse, ESP, etc.]:	2 baghouses
Control device description:	One baghouse for each dryer using 16 oz polyester bags; air to cloth ratio of 5:1
Manufacturer and model number:	Ventilex
Date of construction:	new

Fuels and Firing Conditions.

	Fuel name	Higher heating value	Max. sulphur content (wt%)	Max. ash content (wt%)	Excess combustion air (% O2)	Moisture content as fired (%)	Max. hourly consumption	Actual yearly consumption
Primary Fuel	Natural gas	1000 Btu/CF	-	-	-	-	25.5 mmBtu	170,000 mmBtu
Backup fuel	none							

B. S03/P03 – Product storage silos, uncontrolled

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	P03
Unit description:	13 Product storage silos
Control technology status:	uncontrolled
Maximum capacity (tons/year):	2,600,000
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

C. S04/P04/C04 & S05/P05/C05- Dryer building dust collection, controlled with two baghouses.

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	P04 & P05
Unit description:	dust emissions from screen decks, elevators, conveyors, and other operations in and around the Dryer Building
Control technology status:	controlled with 2 baghouses (C04 & C05)
Maximum usage (tons/year):	2,600,000
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

Control Device Information.	
Control Device identification number:	C04 & C05
Exhausting emissions unit(s):	P04 & P05
Control device type [baghouse, ESP, etc.]:	2 baghouses
Control device description:	Two baghouses with 16 oz polyester bags; air to cloth ratio of 5:1
Manufacturer and model number:	Ventilex
Date of construction:	new

D F01 – Two 800 ton/hr truck receiving stations and one 1,000 ton/hr rail receiving station

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F01
Unit description:	Two 800 ton/hr open truck receiving stations, and one 1,000 ton/hr open rail receiving station
Control technology status:	Fugitive emission best management practices
Maximum continuous rating (tons/hr):	2,600
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

E. F02 – Twelve bulk material belt conveyors and stackers (each with capacities of 400 to 1,000 tons/hr)

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F02
Unit description:	12 bulk material conveyors and stackers
Control technology status:	Fugitive emission best management practices
Maximum continuous rating (tons/hour):	400 to 1,000 each
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

F. F03 – Surge piles of bulk materials

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F03
Unit description:	Several piles to store raw and processed material
Control technology status:	Fugitive emission best management practices
Maximum continuous rating (mmBTU/hr):	
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

G. F04 – 1,000 ton/hr Screen

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F04
Unit description:	Screen to process bulk material
Control technology status:	Fugitive emission best management practices
Maximum continuous rating (tons/hour):	1,000
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

H. F05 – 800 ton/hr Crusher

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F05
Unit description:	Crusher
Control technology status:	Fugitive emission best management practices
Maximum continuous rating (tons/hr):	800
Date of construction or last modification:	new
Construction Permit Requirements:	08-RAF-226

I. F06 – Fugitive dust from truck traffic

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F06
Unit description:	truck traffic on paved and unpaved roads

Emission Unit Information.	
Control technology status:	Fugitive emission best management practices
Vehicle trips (trips/hour):	20
Distance/trip, paved/unpaved (miles):	0.38/0.36
VMT, paved/unpaved (miles/hour):	7.6/7.2
Date of construction or last modification:	New
Construction Permit Requirements:	08-RAF-226

J. F07 – Rail loading with one 1,000 ton/hr conveyor

Emission Unit Information.	
Boiler/furnace number [or process line, etc.]:	F07
Unit description:	Rail shipping station
Control technology status:	Fugitive emission best management practices
Maximum capacity (tons/hr):	1,000
Date of construction or last modification:	New
Construction Permit Requirements:	08-RAF-226

Stack Parameter Summary.

Stack ID	Actual Exhaust Point or Fugitive	Circular or Rectangular	Discharge Direction	Exhaust Obstacle	Diameter or Width (if rect.)	Height	Temp.	Normal Flow Rate	Maximum Flow Rate
			U, D, H	True/False	ft (m)	ft (m)	°F	ACFM	ACFM
S01	Actual	Circular	U	False	3.3 ft. (1.0 m)	51 ft. 0 in. (15.5 m)	150	35,000	-
S02	Actual	Circular	U	False	3.3 ft. (1.0 m)	51 ft. 0 in. (15.5 m)	150	35,000	-
S03	Actual	Circular	U	False	1 ft. 0 in. (0.3 m)	96 ft. 0 in. (29.26 m)	100	passive	-
S04	Actual	Circular	U	False	1.67 ft. (0.5 m)	96 ft. 0 in. (29.26 m)	ambient	10,000	-
S05	Actual	Circular	U	False	1.67 ft. (0.5 m)	96 ft. 0 in. (29.26 m)	ambient	10,000	-
F01	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA
F02	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA
F03	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA
F04	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA
F05	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA
F06	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA
F07	Fugitive	NA	NA	NA	NA	NA	NA	NA	NA

NA – not applicable

Insignificant Emissions Units.

Maintenance of Grounds, Equipment, and Buildings (lawn care, painting, etc.)

Pollution Control Equipment Maintenance

Fire Control Equipment.

Janitorial Activities.

Office Activities.

Convenience Water Heating.

Convenience Space Heating (< 5 million BTU/hr Burning Gas, Liquid, or Wood).

Fuel Oil Storage Tanks (<10,000 gal.)

Sanitary Sewer and Plumbing Venting

CROSS MEDIA IMPACTS

No cross media impacts are expected.

EMISSION CALCULATIONS.

Generally, each crusher, screening operation, bucket elevator, belt conveyor or storage bin is subject to the fugitive dust control requirements of s. NR 415.076(2), Wis. Adm. Code. Also, the facility (Henning, 10/30/2008 & 11/4/2008) requested a plant production limit of 2.6 million tpy in order to cap emissions and avoid PSD. 2.6 million tpy is also the dryer capacity which limits plant output.

A. S01/P01/C01 and S02/P02/C02 – Two natural gas fired dryers each rated at 150 ton/hr, each controlled with a fabric filter. The dryers are subject to the NSPS requirements for Calciners And Dryers In Mineral Industries, 40 CFR 60, Subpart UUU (s. NR 440.73), and the particulate matter emission limits of s. NR 415.05(2), Wis. Adm. Code. The emission limit from the NSPS is 0.057 grams/dscm (0.025 grains/dscf) as measured using Method 5 (only filterable emissions). At an exhaust flow rate of 35,000 acfm at 150 ºF, and 10 % moisture[1], the maximum allowable emission rate for each dryer is:

0.025 gr/dscf * 35,000 acfm * (528)/(460+150) * (1-0.10) * 60 min/hr * lb/7000 gr = 5.84 lb-PM/hr

This is more stringent than either the process weight rate equation of NR 415.05(2) (i.e. 38.6 lb/hr), and the 0.20 lb/1000 lb of gas limit of NR 415.05(1)(m) (i.e. 27.3 lb/hr). Particulate matter limits under ch. NR 415 includes condensible emissions (Method 202) as well as filterable emissions (Method 5). Modeling emissions at the allowable emission rate did not meet ambient air quality standards (AAQS). The applicant requested an emission rate (PTE) of 1.3 lb-PM/hr for these stacks in order to meet AAQS.

AP-42 does not have emission factors for PM/PM_{10} emissions from sand dryers. If the fabric filer proved 95% control and emissions are 5.84 lb-PM/hr, then maximum theoretical emissions (MTE) would be on the order of 5.84/(1-95%) = 117 lb-PM/hr. From the PM and PM_{10} emission factors that are in table 11.19.2-2 (8/04) of AP-42, PM_{10} emissions could be up to roughly one-third to one-half the uncontrolled PM emissions. After controls, all PM would be PM_{10}.

The following table estimates emissions from the combustion of natural gas (1000 mmBTU/CF6) for each 25.5 mmBTU/hr dryer based on AP-42 emission factors and information from the manufacturer as provided in the application. The sand itself is not expected to emit VOCs or other pollutants other than PM.

[1] The applicant estimated (Henning email, 10/13/2008) stack moisture of 11 to 16% based on drying sand at 3.5% to 5.5% moisture.

Pollutant	Emission factor		PTE	
	lb/CF6	lb/mmBTU	each, lb/hr	each, tpy
PM	7.6	0.0076	0.19	0.85
SO2	0.6	0.0006	0.015	0.07
NOx	100	0.1	2.55	11.17
VOC	5.5	0.0055	0.14	0.61
CO	84	0.24	6.12	26.81
formaldehyde	0.075	0.000075	0.0019	0.01
benzene	0.0021	2.1E-06	0.00005	0.00
hexane	1.8	0.0018	0.046	0.20
dichlorobenzene	0.0012	1.2E-06	0.00003	0.00
toluene	0.0034	3.4E-06	0.00009	0.00

Visible emissions are limited to 10% opacity under s. NR 440.73(3)(b), Wis. Adm. Code.

B. S03/P03 – Product storage silos, uncontrolled. The silos are uncontrolled and therefore are subject to the 10% opacity limits of the NSPS at s. NR 440.688(3)(b), Wis. Adm. Code. The process conveys sand to the silos at a rate of 400 tph. Loose dry sand typically has a density of 90 lb/CF.

Under s. NR 415.05(2), Wis. Adm. Code, emissions are limited to $17.31 * (400 \text{ tons/hr})^{0.16} = 45.15$ lb/hr

Under s. NR 415.05(1)(m), Wis. Adm. Code, emissions are limited to 0.20 lb-PM per 1000 pounds of gas. Sand loaded at 400 tph would displace at least 400*2000/90 * 60 = 148 acfm displaced out of the silo vent. Assuming displaced air at a temperature of 100 ºF, allowable emissions would be:

0.20/1000 * 148 acfm * 60 min/hr * 0.075 lb/scf *(460+68)/(460+100) = 0.13 lb-PM/hr

Modeling emissions at the allowable emission rate did not meet ambient air quality standards (AAQS). The applicant requested an emission rate (PTE) of 0.12 lb-PM/hr for this stack in order to meet AAQS.

C. S04/P04/C04 and S05/P05/C05- Dryer building dust collection, controlled with two baghouses. The dryer building includes transfer points and therefore is subject to the NSPS requirements for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688), and the particulate matter emission limits of s. NR 415.05(2), Wis. Adm. Code. The emission limit from the NSPS is 0.05 grams/dscm (0.022 grains/dscf). At an exhaust flow rate of 10,000 acfm at 100 ºF, and 0 % moisture, the maximum allowable emission rate is:

0.022 gr/dscf * 10,000 acfm * (528)/(460+100) * (1-0) * 60 min/hr * lb/7000 gr = 1.78 lb-PM/hr

This is more stringent than either the process weight rate equation of s. NR 415.05(2), and the 0.20 lb/1000 lb of gas limit of s. NR 415.05(1)(m). Modeling emissions at the allowable emission rate did not meet ambient air quality standards (AAQS). The applicant requested an emission rate (PTE) of 1.00 lb-PM/hr for these stacks in order to meet AAQS.

To determine the MTE for the building dust collection system, we work backwards from the NSPS standard for this source. We do this because there are no emission factors for the source and the application provided no design information for the dust collection system. This approach is reasonable because fabric filter baghouses provide the same level of control independent of particulate loading, and the accuracy of the MTE estimate only needs to be close enough to determine whether a permit application is required. Assuming 95% emission control, MTE emissions would be roughly 1.78/(1-95%) = 36 lb-PM/hr. Emission factors for this industry suggest PM_{10} is roughly 1/3 to ½ the uncontrolled PM emission. For the building exhausts, we would expect PM emissions after controls to be all PM_{10}.

The building is subject to the 7% opacity limits for the vent, and no visible fugitive emissions under the NSPS at s. NR 440.688(3)(e), Wis. Adm. Code.

D. F01 – Two 800 ton/hr truck receiving stations and one 1,000 ton/hr rail receiving station. Truck dumping is exempt from the NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO, under s. NR 440.688(3)(d), Wis. Adm. Code.

The application estimated total PM emissions as triple the PM_{10} emission factor from AP-42 Table 11.19.2, (3 * 0.00010 lb/ton). 2 * 800 ton/hr * 0.00030 lb/ton = 0.48 lb-PM/hr
1000 ton/hr * 0.00030 lb/ton = 0.30 lb-PM/hr

E. F02 – Twelve bulk material conveyors and stackers (each with capacities of 400 to 1,000 tons/hr). The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 10% opacity limit under s. NR 440.688(3)(b), Wis. Adm. Code, for conveyors not enclosed in the building.

The application estimated total PM emissions using emission factors from AP-42 Table 11.19.2 (0.003 lb/ton), for 12 conveyors averaged at 600 tons/hr for each. 12 * 600 tons/hr * 0.003 lb/ton = 21.6 lb-PM/hr. For PM_{10} : 12*600*0.0011 = 7.92 lb-PM_{10}/hr

As mentioned previously, the applicant requested a plant production limit of 2.6 million tpy in order to cap emissions and avoid PSD. Annual emissions were calculated based on this production cap.

F. F03 – Surge piles of bulk materials. Fugitive dust regulations under s. NR 415.04, Wis. Adm. Code, require the permittee to take precautions to prevent particulate matter from becoming airborne. The application acknowledged this requirement and did not provide an estimate of wind blown emissions from the surge piles.

G. F04 – 1,000 ton/hr screen. The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 10% opacity limit under s. NR 440.688(3)(b), Wis. Adm. Code, for affected facilities.

The application estimated total PM emissions using an emission factor from AP-42 Table 11.19.2 (0.025 lb/ton), for screening. 1000 tons/hr * 0.025 lb/ton = 25.0 lb-PM/hr. For PM_{10} : 1000*0.0087= 8.7 lb-PM_{10}/hr

H. F05 – 800 ton/hr crusher. The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 15% opacity limit under s. NR 440.688(3)(c), Wis. Adm. Code, for crushers.

The application estimated total PM emissions using an emission factor from AP-42 Table 11.19.2 (0.0054 lb/ton), for tertiary crushing (no values available for primary crusher). 800 tons/hr * 0.0054 lb/ton = 4.32 lb-PM/hr. For PM_{10} : 800*0.0024 = 1.92 lb-PM_{10}/hr

I. F06 – Fugitive dust from truck traffic. Fugitive dust regulations under s. NR 415.04, Wis. Adm. Code, require the permittee to take precautions to prevent particulate matter from becoming airbourne. The application estimated emissions using AP-42, Section 13.2.1 for paved roads and 13.2.2 for unpaved roads to estimate emissions. The applicant assumes watering can reduce fugitive emissions by 75%. Using the silt loading for sand & gravel processes instead of for quarries, and not adjusting the days of precipitation for frozen conditions, and using 20 vehicle trips per hour, 0.4 miles on paved roads and 0.1 miles on unpaved roads, hourly uncontrolled emissions of PM would be 155 lb-PM/hr, and with watering, 38.8 lb-PM/hr. PM_{10} emissions would be 30.8 and 7.7 lb-PM_{10}/hr. See the calculation sheet for details.

J. F07 – Rail loading with one 1,000 ton/hr conveyor. The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 10% opacity limit under s. NR 440.688(3)(b), Wis. Adm. Code, for affected facilities.

As with truck receiving, the application estimated total PM emissions as triple the PM_{10} emission factor from AP-42 Table 11.19.2 (0.0003 lb/ton), for the conveyor at 1000 tons/hr. 1000 tons/hr * 0.0003 lb/ton = 0.30 lb-PM/hr. For PM_{10} : 0.10 lb-PM_{10}/hr

WISCONSIN HAZARDOUS AIR POLLUTANT (NR 445) REVIEW

There are several pollutants expected to be emitted from the operation of the facility. These pollutants are regulated by Chapter NR 445, Wis. Adm. Code. The emissions are expected from the combustion of natural gas for the two 150 tph dryers (P01 & P02). Products of incomplete combustion includes hazardous air pollutants such as formaldehyde and benzene. However, natural gas is a virgin fossil fuel and its combustion emissions are exempt from the requirements of ch. NR 445.

COMPLIANCE AND TECHNOLOGY REVIEW

A. S01/P01/C01 and S02/P02/C02 – Two natural gas fired dryers each rated at 150 ton/hr, each controlled with a fabric filter. The dryers are subject to the NSPS requirements for Calciners And Dryers In Mineral Industries, 40 CFR 60, Subpart UUU (s. NR 440.73), and the particulate matter emission limits of s. NR 415.05(2), Wis. Adm. Code. The emission limit from the NSPS is 0.057 grams/dscm (0.025 grains/dscf) as measured using Method 5 (filterable PM). The dryers are <u>not</u> rotary dyers, are controlled by a dry control device and therefore are subject to the monitoring requirements of s. NR 440.73(5), Wis. Adm. Code. The NSPS limits opacity to 10%, and requires a continuous opacity monitoring system (COMS); or for industrial sand fluid bed dryers, the NSPS allows using a certified visible emissions observer using Method 9 with three 6-minute averages for each day of operation in lieu of the COMS. An initial stack test is required under s. NR 440.08, Wis. Adm. Code, to demonstrate compliance with the NSPS PM limit, and s. NR 440.11(5) requires concurrent opacity observations. Stack testing is also requested to demonstrate compliance with the hourly emission rate established by modeling to meet the AAQS. This test would include condensible emissions.

B. S03/P03 – Product storage silos, uncontrolled. The silos are uncontrolled and therefore are subject to the 10% opacity limits of the NSPS at s. NR 440.688(3)(b), Wis. Adm. Code. The draft permit requires the applicant prepare a Fugitive Dust Plan to manage the various fugitive dust sources, and an initial performance test is required under s. NR 440.11(5), Wis. Adm. Code, to demonstrate compliance with the opacity limit.

C. S04/P04/C04 and S05/P05/C05- Dryer building dust collection, controlled with two baghouses. The dryer building includes transfer points and therefore is subject to the NSPS requirements for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688), and the particulate matter emission limits of s. NR 415.05(2), Wis. Adm. Code. The emission limit from the NSPS is 0.05 grams/dscm (0.022 grains/dscf).

The building is subject to the 7% opacity limits for the vent, and no visible fugitive emissions under the NSPS at s. NR 440.688(3)(e), Wis. Adm. Code. An initial stack test is required under s. NR 440.08, Wis. Adm. Code, to demonstrate compliance with the NSPS PM limit, and s. NR 440.11(5) requires concurrent opacity observations. Stack testing is also requested to demonstrate compliance with the

hourly emission rate established by modeling to meet the AAQS. This test would include condensible emissions.

D. F01 – Two 800 ton/hr truck receiving stations and one 1,000 ton/hr rail receiving station. Truck dumping is exempt from the NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO, under s. NR 440.688(3)(d), Wis. Adm. Code. The general limitations for PM and visible emissions apply to this source. Compliance demonstrated for PM also provides the demonstration for visible emissions. The draft permit requires the applicant prepare a Fugitive Dust Plan to manage the various fugitive dust sources, and to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan.

E. F02 – Twelve bulk material conveyors and stackers (each with capacities of 400 to 1,000 tons/hr). The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 10% opacity limit under s. NR 440.688(3)(b), Wis. Adm. Code, for conveyors not enclosed in the building. Specific provisions of ch. NR 415.076(2) apply to PM emissions from this source. The draft permit requires the applicant to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan. Section NR 440.11(5), Wis. Adm. Code, requires an initial performance test.

F. F03 – Surge piles of bulk materials. Fugitive dust regulations under s. NR 415.04, Wis. Adm. Code, require the permittee to take precautions to prevent particulate matter from becoming airbourne. The application acknowledged this requirement and did not provide an estimate of wind blown emissions from the surge piles. The draft permit requires the applicant to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan. Compliance demonstrated for PM also provides the demonstration for visible emissions.

G. F04 – 1,000 ton/hr screen. The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 10% opacity limit under s. NR 440.688(3)(b), Wis. Adm. Code, for conveyors not enclosed in the building. The draft permit requires the applicant to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan. Section NR 440.11(5), Wis. Adm. Code, requires an initial performance test.

H. F05 – 800 ton/hr crusher. The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 15% opacity limit under s. NR 440.688(3)(c), Wis. Adm. Code, for conveyors not enclosed in the building. The draft permit requires the applicant to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan. Section NR 440.11(5), Wis. Adm. Code, requires an initial performance test.

I. F06 – Fugitive dust from truck traffic. Fugitive dust regulations under s. NR 415.04, Wis. Adm. Code, require the permittee to take precautions to prevent particulate matter from becoming airbourne. The compliance demonstration requirements for particulate matter shall also be used as to demonstrate compliance with the opacity limit. The draft permit requires the applicant to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan, including precipitation data.

J. F07 – Rail loading with one 1,000 ton/hr conveyor. The NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688) provides a 10% opacity limit under s. NR 440.688(3)(b), Wis. Adm. Code, for conveyors not enclosed in a building. The draft permit requires the applicant to keep daily records of all precautions taken to prevent fugitive dust under the Fugitive Dust Plan. Section NR 440.11(5), Wis. Adm. Code, requires an initial performance test for conveyors not enclosed in a building.

ZZZ. The production limit and initial performance test. The applicant proposed (Henning, 11/4/2008) proposes to monitor the in-coming sand to demonstrate compliance with the 2.6 million ton/year production limit on a dry weight basis. Performance tests are required under s. NR 440.08 and

NR 440.11(5), and to demonstrate compliance with the emissions limits for PM established to meet the AAQS.

AIR QUALITY REVIEW

An air dispersion analysis was completed by Jeff Sims on November 10, 2008. This dispersion analysis for a New Source construction permit compares model results to National Ambient Air Quality Standards (NAAQS) for the 5 criteria pollutants. The facility is located at 1425 County Highway S, Chippewa Falls, Chippewa County, Wisconsin. PSD baselines HAVE been set for Chippewa County.

MODELING ANALYSIS

- Roger Fritz supplied the emission parameters used in this analysis. Building dimensions were determined using USEPA's Building Profile Input Program Prime (BPIP-Prime) with measurements taken on plot plans provided with the application. Please refer to the source parameter table.

- Five years (1998-2002) of preprocessed meteorological data was used in this analysis. The surface data was collected in Eau Claire, and the upper air meteorological data originated in Minneapolis, MN.

- The AMS/EPA Regulatory Model (AERMOD) was also used in the analysis. The model used rural dispersion coefficients with the regulatory default options. These allow for calm wind correction, buoyancy induced dispersion, and building downwash.

- The receptors used in this analysis consisted of a grid conforming to the physical layout of the building and grounds about the facility (459 receptors) with 25-meter resolution near the facility and extending some 300 meters from a point identified as (0,0) of the Cartesian axis on which this facility was placed via supplied plot plans. Points within known fences or on top of buildings were not considered. Terrain is a factor in the area, so receptor elevations were considered.

- All sources vent vertically and without obstruction except as noted elsewhere within this document.
- The increment-consuming devices are as noted elsewhere within this document..
- There is no other source in the area that consumes increment.
- CSP proposes to construct a sand processing plant in Chippewa Falls, Wisconsin, west of the Union Pacific railway and south of County Highway S. The project includes two natural gas fired dryers each rated at 150 ton/hr, controlled with a fabric filter; a dryer building dust collection system controlled with two baghouses; product storage silos; truck and rail receiving stations; bulk material conveyers and stackers; surge piles; a 1,000 ton/hr screen; an 800 ton/hr crusher; both paved and unpaved roads, and rail loading with a 1,000 ton/hr conveyor

MODEL RESULTS

NAAQS Analysis	TSP 24-hr	PM_{10} 24-hr	PM_{10} Annual
Facility Impact	31.8	28.6	8.9
Background	41.8	27.4	9.2
Total	73.6	56.0	18.1
NAAQS	150.0	150.0	50.0
% NAAQS	49	37	36

Increment Analysis	PM_{10} 24-hr	PM_{10} Annual
Facility Impact	28.6	8.9
PSD Increment	30.0	17.0
% Consumed	95	52

NAAQS Analysis	SO_2 3-hr	SO_2 24-hr	SO_2 Annual
Facility Impact	0.4	0.3	0.1
Background	128.3	33.5	7.9
Total	128.7	33.8	8.0
NAAQS	1300	365	80
% NAAQS	10	9	10

NAAQS Analysis	CO 1-hr	CO 8-hr	NOx Annual
Facility Impact	237.2	137.2	9.9
Background	3188	890.4	4.7
Total	3425.2	1027.6	14.6
NAAQS	40000	10000	100
% NAAQS	9	10	15

Increment Analysis	NOx Annual
Facility Impact	9.9
PSD Increment	25
% Consumed	40

SO_2 baseline has not been established for Chippewa county.

CONCLUSION

The results of the modeling analysis demonstrate that the applicable air quality standards will be met assuming the emissions rates, stack parameters and all other restrictions listed in this document.

Stack Parameters

ID	Descripton	LOCATION		
		UTM NAD83 Zone 15		
		X	Y	Z
S01	Dryer with baghouse #1 41K75005	628075	4979954	282.72
S02	Dryer with baghouse #2 41K75006	628088.5	4979954	282.36
S03	Product Silos FZ4TF000	628137.9	4979928	280.57
S04	Dryer Area Baghouse #1 41K75007	628073	4979926	282.06
S05	Dryer Area Baghouse #2 41K75008	628073	4979909	281.83

EMISSION RATES

Grams per Second (lbs/hr)

ID	PM	SO2	NOX	CO	PM_{10}
S01	0.1638	0.0019	0.3213	0.7711	0.1638
	1.3000	0.0151	2.5500	6.1199	1.3000
S02	0.1638	0.0019	0.3213	0.7711	0.1638
	1.3000	0.0151	2.5500	6.1199	1.3000
S03	0.0151	0.0000	0.0000	0.0000	0.0100
	0.1198	0.0000	0.0000	0.0000	0.0794
S04	0.1247	0.0000	0.0000	0.0000	0.1300
	0.9897	0.0000	0.0000	0.0000	1.0318
S05	0.1247	0.0000	0.0000	0.0000	0.1252
	0.9897	0.0000	0.0000	0.0000	0.9937

ID	PHYSICALS			
	Height	Temp	Vel	Dia
	(m)	(K)	(m/s)	(m)
S01	15.5448	338.71	20.78806	1.0058
S02	15.5448	338.71	20.78806	1.0058
S03	29.2608	310.93	0.1	0.3048
S04	29.2608	Ambiant	23.19492	0.509
S05	29.2608	Ambiant	23.19492	0.509

EMISSIONS FROM NEW EQUIPMENT OR MODIFICATION

A. Stack Emissions

S01/P01/C01 and S02/P02/C02 — Criteria Pollutants Emissions (Stack Height - 51 feet).

	Potential to Emit (PTE) for each stack	
Pollutant	Pounds per hour	Tons per year
PM	1.3	5.69
PM_{10}	1.3	5.69
SO_2	0.015	0.07
NOx	2.55	11.17
VOC	0.14	0.61
CO	6.12	26.81

Stack S01/P01/C01 and S02/P02/C02 — Hazardous Air Pollutant Emissions (Stack Height - 51 feet)

	Potential to Emit (PTE) for each stack		
Pollutant	Pounds per hour	Pounds per year	Tons per year
formaldehyde	0.0019	16.644	0.01
benzene	0.00005	0.438	0.00
hexane	0.046	402.96	0.20
dichlorobenzene	0.00003	0.2628	0.00
toluene	0.00009	0.7884	0.00

Stack S03/P03 — Criteria Pollutants Emissions (Stack Height - 96 feet).

	Potential to Emit (PTE)	
Pollutant	Pounds per hour	Tons per year*
PM	0.12	0.39
PM_{10}	0.12	0.39

*based on production limits of 2,600,000 tpy

Stack S04/P04/C04 and S05/P05/C05 — Criteria Pollutants Emissions (Stack Height - 96 feet).

	Potential to Emit (PTE) for each stack	
Pollutant	Pounds per hour	Tons per year
PM	1.00	4.38
PM_{10}	1.00	4.38

Stack F01 — Criteria Pollutants Emissions.

	Potential to Emit (PTE)	
Pollutant	Pounds per hour	Tons per year*
PM	0.78	0.39
PM_{10}	0.26	0.13

*based on production limits of 2,600,000 tpy

Stack F02 — Criteria Pollutants Emissions.

	Potential to Emit (PTE)	
Pollutant	Pounds per hour	Tons per year*
PM	21.6	47.3
PM_{10}	7.2	15.8

*based on production limits of 2,600,000 tpy

Stack F03 — Criteria Pollutants Emissions (fugitive for PSD).

	Potential to Emit (PTE)	
Pollutant	Pounds per hour	Tons per year
PM	-	-

Stack F04 — Criteria Pollutants Emissions.

	Potential to Emit (PTE)	
Pollutant	Pounds per hour	Tons per year*
PM	25.0	32.85
PM_{10}	8.3	10.95

*based on production limits of 2,600,000 tpy

Stack F05 — Criteria Pollutants Emissions.

Pollutant	Potential to Emit (PTE)	
	Pounds per hour	Tons per year*
PM	4.32	7.02
PM_{10}	1.44	2.34

*based on production limits of 2,600,000 tpy

Stack F06 — Criteria Pollutants Emissions (fugitive for PSD).

Pollutant	Potential to Emit (PTE)	
	Pounds per hour	Tons per year
PM	30.8	134.9

Stack F07 — Criteria Pollutants Emissions.

Pollutant	Potential to Emit (PTE)	
	Pounds per hour	Tons per year*
PM	0.30	0.39
PM_{10}	0.10	0.13

*based on production limits of 2,600,000 tpy

B. Total Facility Emissions From New Equipment or Modification

Under s. NR 407.02(4), Wis. Adm. Code, the fugitive emissions of a stationary source may not be considered in determining whether it is a major source, unless the source belongs to one of the 27 listed categories of stationary sources. A sand processing plant is not one of those listed. Under s. NR 405.02(15), Wis. Adm. Code, "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Only F03 and F06 are fugitive for PSD and Title V purposes.

Criteria Pollutants Emissions.

Pollutant	Potential to Emit (PTE) *(non-fugitive emissions only)*	
	Pounds per hour	Tons per year*
PM	56.45	105.37
PM_{10}	22.02	50.0
SO_2	0.03	0.13
NOx	5.10	22.34
VOC	0.28	1.23
CO	12.24	53.61

* based on production limits of 2,600,000 tpy

Hazardous Air Pollutant Emissions.

Pollutant	Potential to Emit (PTE)		
	Pounds per hour	Pounds per year	Tons per year
formaldehyde	0.0038	33.29	0.02
benzene	0.00010	0.88	0.00
hexane	0.092	805.92	0.40
dichlorobenzene	0.00006	0.53	0.00
toluene	0.00018	1.58	0.00

FACILITY AND PROJECT CLASSIFICATION

1. Existing Facility Status.

This is a new facility. No facility currently exists.

2. Project Status.

The project is not included in a PSD source category, therefore the PSD major source threshold is 250 tpy. Based on the emission estimates in this review which only considers F03 and F06 as fugitive sources, the project MTE may exceed PSD major source thresholds for particulate matter (PM_{10}) emissions. However, the requested emission caps and production limit would keep the PTE below the major source threshold. Therefore, the project is synthetic minor for PSD and a synthetic minor non-part 70 source for Title V since PM_{10} is less than the major source threshold of 100 tons per year.

3. Facility Status after Completion of the Project.

The project is not included in a PSD source category, therefore the PSD major source threshold is 250 tpy. The facility has requested emission caps and operating limits that would keep the PTE below the PSD major source threshold for criteria pollutants. The project is synthetic minor for PSD and a synthetic minor non-part 70 source for Title V.

4. Summary.

NSR Applicability	Proposed Project		Facility After Project	
	Major	Minor	Major	Minor
PSD	-	X	-	X
Non-Attainment	-	-	-	-
Federal HAP	-	X	-	X

Part 70 Applicability	Facility After Project		
	Part 70	FESOP (Syn. Minor)	non-part 70
Status	-	X	-

ENVIRONMENTAL ANALYSIS

The proposed project is a Type III action under Chapter NR 150, Wis. Adm. Code, because there is a potential increase in hazardous emissions and the potential to emit of the project is less than 100 TPY for each criteria pollutant.

A news release is required for this proposal and is included in the public comment notice. It is proposed that an environmental assessment not be completed.

RULE APPLICABILITY

Construction Permits. The proposed project does not qualify for an exemption from new source review under chapter NR 406, Wis. Adm. Code. The two dryers are rated at 300 tons/hour combined which is greater than the 25 ton/hour threshold in section NR 406.04(1)(za), Wis. Adm. Code to qualify for a specific exemption from a construction permit. The maximum theoretical emissions of particulate matter from the proposed project exceeds the general exemption levels in section NR 406.04(2), Wis. Adm. Code. As a result, a construction permit is required for the construction of the proposed facility.

NR 405.02(15) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. While the application proposes that 7 sources be fugitive emissions, the test of whether an emission is fugitive for determining PSD applicability is whether those emissions could reasonably pass through a stack, chimney or vent. The following reviews F01 through F07 to determine how each source is considered for determining PSD applicability.
F01 – Two 800 ton/hr truck receiving stations and one 1,000 ton/hr rail receiving station. This source could be enclosed and therefore is not considered fugitive for determining the major source status.
F02 – Several bulk material conveyors and stackers (each with capacities of 400 to 1,000 tons/hr). This source could be enclosed and therefore is not considered fugitive for determining the major source status.
F03 – Surge piles of bulk materials. Material storage piles are routinely considered fugitive.
F04 – 1,000 ton/hr screen. This source could be enclosed and therefore is not considered fugitive for determining the major source status.
F05 – 800 ton/hr crusher. NR 440.688(3)(c) applies to crushers that do not have a capture system, which implies crushers could reasonably have a capture system and therefore crusher emissions are not considered fugitive for determining PSD applicability.
F06 – Fugitive dust from truck traffic. Traffic emissions are routinely considered as fugitive.
F07 – Rail Loading with one 1,000 ton/hr conveyor. This source could be enclosed and therefore is not considered fugitive for determining the major source status.

Title V Permits. The NSPS limitations on particulate matter emissions makes the source a synthetic minor non-Part 70 source. While the facility has the potential to emit substantial amount of fugitive emissions, under s. NR 407.02(4), Wis. Adm. Code, the fugitive emissions of a stationary source may not be considered in determining whether it is a major source, unless the source belongs to one of the 27 listed categories of stationary sources. A sand processing plant is not one of those categories listed.

New Source Performance Standards. The facility is subject to the NSPS for Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688), and the dryers are subject to the NSPS for Calciners And Dryers In Mineral Industries, 40 CFR 60, Subpart UUU (s. NR 440.73).

National Emission Standards for Hazardous Air Pollutants (NESHAP, also known as MACT). Facility emissions are below the major source threshold for MACT standards (10/25 tpy of HAP). Therefore the facility is not subject to a MACT. EPA has not promulgated an area source NESHAP for contact dryers. Therefore, no NESHAPs apply to this facility.

State Hazardous Air Emissions. Refer to the **WISCONSIN HAZARDOUS AIR POLLUTANT (NR 445) REVIEW** section above.

Particulate Matter Emissions. Chapter NR 415 emission limitations for particulate matter (PM) emissions from processes were previously addressed in the EMISSION CALCULATIONS section where the allowable emissions are calculated. Fugitive dust emissions are regulated under ch. NR 415, Wis. Adm. Code, and require the applicant to take precautions to prevent emissions of fugitive dust from the roadway, parking areas and storage areas, and to meet opacity and emission limitations for material handling operations and processes. Also refer to the PM and opacity limitations of the applicable NSPSs.

The primary emission sources for the proposed facility (dryer system and process building) will have air pollution control equipment (fabric filter baghouses) to reduce the particulate matter emissions from these sources and allow the permittee to meet the applicable particulate matter emission limits on these sources. The draft permit includes compliance demonstration requirements to use the control equipment, monitor specified operating parameters, and perform initial stack testing.

Visible Emissions. Visible emissions are subject to the 20% opacity limitation of s. NR 431.05, Wis. Adm. Code, as well as more stringent requirements of the NSPS. Visible emissions are generally caused by filterable and/or condensible particulate matter present in the exhaust gas stream from air pollution sources. As a result, any methods used to control or limit particulate matter emissions also control visible emissions.

Volatile Organic Compounds. The dryer system is <u>not</u> subject to the requirements of section NR 424.03(2), Wis. Adm. Code because the potential to emit from each dryer system is not more than 15 pounds of organic compounds per day.

NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

For proposed construction of a source:

1. Is the proposed source in a source category for which there is an existing or proposed NSPS?
   ☒ Yes ☐ No ☐ Not applicable. (If yes, identify the source category.)

   Non-Metallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (s. NR 440.688)
   Calciners And Dryers In Mineral Industries, 40 CFR 60, Subpart UUU (s. NR 440.73)
2. Is the proposed source an affected facility?
   ☒ Yes ☐ No ☐ Not applicable. (Explain if necessary to clarify.)

For the proposed modification of an existing source:

1. Is the existing source, which is being modified, in a source category for which there is an existing or proposed NSPS?
   ☐ Yes ☐ No ☒ Not applicable. (If yes, identify the source category.)

2. Is the existing source, which is being modified, an affected facility (prior to modification)?
   ☐ Yes ☐ No ☒ Not applicable. (Explain if necessary to clarify here and in the following items)

3. Does the proposed modification constitute a modification **under NSPS** to the existing source?
   ☐ Yes ☐ No ☒ Not applicable.

4. Will the existing source be an affected facility after modification?
☐ Yes ☐ No ☒ Not applicable.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) APPLICABILITY

Part 61 NESHAPS:

1. Will the proposed new or modified source emit a pollutant controlled under an existing or proposed NESHAPS?
☐ Yes ☒ No (if yes, identify the pollutant).

2. Is the proposed new or modified source subject to an existing or proposed NESHAPS?
☐ Yes ☒ No (if yes, identify NESHAPS).

Part 63 NESHAPS:

1. Will the proposed new or modified source emit a pollutant controlled under an existing Part 63 NESHAPS?
☐ Yes ☒ No (if yes, identify the pollutant).

2. Is the proposed new or modified source subject to an existing Part 63 NESHAPS?
☐ Yes ☒ No (if yes, identify NESHAPS).

3. Is the proposed project subject to s. 112(g) of the Clean Air Act?
☐ Yes ☒ No.

The section 112(g) rules only apply to case-by-case MACT standards that are developed for new construction or reconstruction of sources that (by themselves) constitutes a new major source of federal hazardous air pollutants (for source categories not covered under an existing Part 63 MACT standard).

CAM – COMPLIANCE ASSURANCE MONITORING.

The facility does not have MTE above the major source threshold and therefore is not subject to CAM.

CRITERIA FOR PERMIT APPROVAL

Section 285.63, Wis. Stats., sets forth the specific language for permit approval criteria. The Department finds that:

1. The source will meet emission limitations.
2. The source will not cause nor exacerbate a violation of an air quality standard or ambient air increment.
3. The source is operating or seeks to operate under an emission reduction option. Not Applicable.
4. The source will not preclude the construction or operation of another source for which an air pollution control permit application has been received.

PRELIMINARY DETERMINATIONS FOR CONSTRUCTION PERMIT NO. 08-RAF-226 AND OPERATION PERMIT NO. 609072860-F01

The Wisconsin Department of Natural Resources has reviewed the construction permit application and other materials submitted by Canadian Sand and Proppants, Inc and hereby makes a preliminary determination that this project, when constructed and operated consistent with the application and subsequent information submitted, will be able to meet the emission limits and conditions included in the attached Draft Permit. Furthermore, the Department hereby makes a preliminary determination that an operation permit may be issued with the following Draft Applicable Limits and Draft Permit Conditions. A final decision regarding emission limits and conditions will be made after the Department has reviewed and evaluated all comments received during the public comment period. The proposed emission limits and other proposed conditions in the Draft Permit are written in the same form that they will appear in the construction permit and the operation permit. These proposed conditions may be changed as a result of public comments or further evaluation by the Department. The United States Environmental Protection Agency will be given the opportunity to comment on the operation permit of any Part-70 source prior to the Department making a final decision on the operation permit.

PERMIT FEE CALCULATION

Basic Fees.

Other Fees Billed (construction waiver)	$300.00
Construction or replacement of a PSD or NAA minor source or the PSD or NAA minor modification of a Part 70 minor source. [$2,300]	$2,300.00
Total Basic Fees	$2,600.00

Additional Fees.

The permit application is for a PSD or NAA minor source or minor modification to a major PSD or NAA source whose projected air quality impact requires a detailed air quality modeling analysis. [$700]	$700.00
The application for an indirect source and the applicant requested in writing and received the permit in 60 days or less. [$3,000]	$3,000.00
The application is for a source which requires specific permit conditions to limit the facility potential to emit in order to make the source or modification a PSD, NAA or Part 70 minor source or a PSD or NAA minor modification. [$2,150]	$2,150.00
The permit application required the review and analysis of 2 basic emissions unit(s). [$400 per basic emission unit, 2 basic emissions unit(s).] [$400.00 per basic emission unit; 2 units]	$800.00
The permit application is for a source which requires a stack test. [$1,350 for a single air contaminant test plus $950 for each additional air contaminant, not to exceed $4,200.] [$1,350.00 for a single air contaminant test plus $950.00 for each additional air contaminant, not to exceed $4,200.00; PM & PM_{10} at 4 sources]	$4,200.00
Total Additional Fee	$10,850.00
Total Fees (Total Basic Fees + Total Additional Fees)	$13,450.00

Credit(s).

Other Application Fees Collected.	-$300.00
The initial fee submitted with the application. [$1,350]	-$1,350.00
Total Credits	$1,650.00
TOTAL AMOUNT DUE (Total Fee + Total Credit)	$11,800.00