TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 30, 2014

Bridget Bohac, Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC 105
Austin, Texas 78711-3087

Re: Compliance History Report, Technical Review, and Draft Permit for FML Sand, Permit No. 97199

Dear Ms. Bohac:

Enclosed please find a copy of the Compliance History Report, Technical Review, and Draft Permit for FML Sand, Permit No. 97199 If you have any questions, please do not hesitate to call me at extension 1088.

Sincerely,

BNPetty

Becky Nash Petty
Staff Attorney
Environmental Law Division

Enclosure

Compliance History Report

PUBLISHED Compliance History Report for CN603148750, RN106184195, Rating Year 2012 which includes Compliance History (CH) components from September 1, 2007, through August 31, 2012.

Customer, Respondent, or Owner/Operator: CN603148750, FTS International Proppants, LLC **Classification:** HIGH **Rating:** 0.00

Regulated Entity: RN106184195, KATEMCY SAND PLANT **Classification:** UNCLASSIFIED **Rating:** -----

Complexity Points: 3 **Repeat Violator:** NO

CH Group: 14 - Other

Location: FROM BRADY HEAD S ON HWY 87 APPROXIMATELY 17.0 MI TO RR 1222 TAKE RR 1222 E APPROXIMATELY 3/4 OF A MILE THE PLANT IS ON THE N SIDE OF RR 1222 MASON, TX, MASON COUNTY

TCEQ Region: REGION 08 - SAN ANGELO

ID Number(s):
AIR NEW SOURCE PERMITS PERMIT 97199

Compliance History Period: September 01, 2007 to August 31, 2012 **Rating Year:** 2012 **Rating Date:** 09/01/2012

Date Compliance History Report Prepared: January 29, 2013

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: January 29, 2008 to January 29, 2013

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: Alex Berksan **Phone:** (512) 239-1595

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period? NO
2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
3) If YES for #2, who is the current owner/operator? N/A
4) If YES for #2, who was/were the prior owner(s)/operator(s)? N/A
5) If **YES**, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:
N/A

B. Criminal convictions:
N/A

C. Chronic excessive emissions events:
N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):
N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):
A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:
N/A

G. Type of environmental management systems (EMSs):
N/A

H. Voluntary on-site compliance assessment dates:
N/A

I. Participation in a voluntary pollution reduction program:
N/A

J. Early compliance:
N/A

Sites Outside of Texas:
N/A

Construction Permit
Source Analysis & Technical Review

Company	**FML Sand, LLC**	Permit Number	**97199**
City	**Katemcy**	Project Number	**167590**
County	**Mason**	Account Number	**N/A**
Project Type	**Initial**	Regulated Entity Number	**RN106184195**
Project Reviewer	**Alex Berksan, P.E.**	Customer Reference Number	**CN603148750**
Site Name	**Industrial Sand Plant**		

Project Overview

FML Sand, LLC applied for a permit to construct and operate an industrial sand processing plant near Katemcy. The proposed plant will process 500 tons/hour and 3,000,000 tons/year of specialty sand. At the time the application was received, the company name was listed as Proppant Specialists LLC. A change of ownership notification was received during the permit review.

Sixty-four comments were received during the comment period. These included 31 hearing requests and one public meeting request. Two hearing requests were subsequently withdrawn.

Maintenance activities will be authorized either under Permit by Rule or claimed under 30 Texas Administrative Code § 116.119, De Minimis Facilities or Sources. Emissions from planned startup and shutdown activities will be authorized by this permit.

Emission Summary

Air Contaminant	Proposed Allowable Emission Rates (tpy)
PM	19.77
PM_{10}	15.01
$PM_{2.5}$	2.88
VOC	1.57
NO_X	28.86
CO	14.75
SO_2	0.98

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	**8/4/2011 & 1/29/2013**
Compliance period:	**7/19/2011 – 7/19/2006**
Site rating & classification:	**NA, unclassified**
Company rating & classification:	**0.00, high**
If the rating is 50<RATING<55, what was the outcome, if any, based on the findings in the formal report:	**NA**
Has the permit changed on the basis of the compliance history or rating?	**NA**

Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement	
39.403	Date Application Received:	**7/19/2011**
	Date Administratively Complete:	**8/1/2011**
	Small Business Source?	**No**
	Date Leg Letters mailed:	**8/1/2011**
39.603	Date Published:	**8/17/2011**
	Publication Name:	***Mason County News***
	Pollutants:	**PM, including PM_{10}, $PM_{2.5}$, NO_x, CO, SO_2, VOC**

Rule Citation	Requirement	
	Date Affidavits/Copies Received:	**8/29/2011**
	Is bilingual notice required?	**No; applicant certified that there are no students who qualify for a bilingual education program**
	Date Certification of Sign Posting / Application Availability Received:	**10/10/2011**
39.604	Public Comments Received?	**Yes (57)**
	Hearing Requested?	**Yes (27)**
	Meeting Request?	**Yes (1)**
	Date Meeting Held:	**NA**
	Date Response to Comments sent to OCC:	
	Request(s) withdrawn?	**Two hearing requests were withdrawn**
	Date Withdrawn:	**11/23/2011, 7/5/2012**
	Consideration of Comments:	
	Is 2nd Public Notice required?	**Yes**
39.419	Date 2nd Public Notice/Preliminary Decision Letter Mailed:	**2/15/2013**
39.603	Date Published:	**3/13/2013**
	Publication Name:	***Mason County News***
	Pollutants:	**PM, including PM_{10}, $PM_{2.5}$, NO_x, CO, SO_2, VOC**
	Date Affidavits/Copies Received:	**3/28/2013**
	Is bilingual notice required?	**No; applicant certified that there are no students who qualify for a bilingual education program**
	Date Certification of Sign Posting / Application Availability Received:	**4/30/2013**
	Public Comments Received?	**Yes (7)**
	Meeting Request?	**No**
	Date Meeting Held:	**NA**
	Hearing Request?	**Yes (4)**
	Date Hearing Held:	
	Request(s) withdrawn?	**No**
	Date Withdrawn:	**NA**
	Consideration of Comments:	
39.421	Date RTC, Technical Review & Draft Permit Conditions sent to OCC:	
	Request for Reconsideration Received?	
	Final Action:	
	Are letters Enclosed?	

Construction Permit & Amendment Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement	
116.111(a)(2)(G)	Is the facility expected to perform as represented in the application?	**Yes**
116.111(a)(2)(A)(i)	Are emissions from this facility expected to comply with all TCEQ air quality Rules & Regulations, and the intent of the Texas Clean Air Act?	**Yes**
116.111(a)(2)(B)	Emissions will be measured using the following method:	**Stack sampling and record keeping of throughput, from which emissions can be calculated**
116.111(a)(2)(D)	Subject to NSPS?	**Yes**
	Subparts	**A, General Provisions** **OOO, Nonmetallic Mineral Processing Plants** **UUU, Calciners and Dryers in Mineral Industries**
116.111(a)(2)(E)	Subject to NESHAP?	**No; pollutants regulated by NESHAPS are not emitted by this facility**
116.111(a)(2)(F)	Subject to NESHAP (MACT) for source categories?	**No; sand processing is not one of the sources regulated by this section**
116.111(a)(2)(H)	Nonattainment review applicability:	**Not applicable; Mason County is attainment for all criteria pollutants.**
116.111(a)(2)(I)	PSD review applicability:	**Not applicable; not a major source or a major modification.**
116.111(a)(2)(L)	Is Mass Emissions Cap and Trade applicable to the new or modified facilities? **No; facility will not be located in the Houston-Galveston-Brazoria ozone nonattainment area**	
116.140 - 141	Permit Fee: **$48,000**	Fee certification: **R130128**

Title V Applicability - 30 TAC Chapter 122 Rules

Rule Citation	Requirement
122.10(13)	Title V applicability: **Not applicable since the facility is not major in any category.**
122.602	Periodic Monitoring (PM) applicability: **Not applicable since a Title V permit is not required.**
122.604	Compliance Assurance Monitoring (CAM) applicability: **Not applicable since a Title V permit is not required.**

Request for Comments

Received From	Program/Area Name	Reviewed By	Comments
Region:	**8**	**Greg Dannheim**	**None**
Toxicology:		**Tiffany Bredfelt, PhD**	**Please see below**
Legal:			
Comment resolution and/or unresolved issues:			**None**

Process/Project Description

FML Sand, LLC mines, crushes, washes, and classifies sand for use in the oil field industry.

Crushing Plant

The Crushing Plant is the part of the process that occurs prior to saturating the material with water, although the material has inherently high moisture content. Sand and sandstone are quarried on site and hauled to a feed hopper. Oversized portions of the sand are crushed in a jaw crusher, while smaller fractions are passed through the grizzly screen and combined with the crusher output. The crushed sand is transferred to a conveyor leading to the primary screen tower.

Wash Plant

The screen tower separates sand that is still too large and routes it to the vertical shaft impact (VSI) crusher. After crushing, the sand is sent back to the primary screen. Sand that passes through the screen is pumped to the scalping screen, which removes oversized material and routes it to a storage pile. Sand that passes through the scalping screen is pumped to the hydrosizer plant.

Hydrosizer
The Hydrosizer is a washing tower that separates the sand from the scalping screen into coarse and fine sand. The coarse and fine sand are transferred to radial stackers and stored in large kidney shaped stockpiles formed by the radial stackers.

Dryer No. 1
Sand is loaded into the feed hopper for Dryer No. 1. The hopper transfers the sand to the dryer. The dryer will be fueled with propane or natural gas and dries the sand via direct contact with the combustion gas. The dried sand is transferred to Screen House No. 1. Dryer No. 1 is rated for 150 tons per hour of dry sand.

Screen House 1
Screen House No. 1 receives dry sand from the Dryer. The sand is screened and separated into various grades of sand within the screen house and transferred via bucket elevator and/or conveyor to silos.

Product Loadout
The load-out area consists of 12 sand silos. These silos can load sand directly to a truck or sand from different silos can be mixed prior to loading. Loading and mixing emissions are routed back to the silos and controlled by the bin vents on the silos.

Pollution Prevention, Sources, Controls and BACT- [30 TAC 116.111(a)(2)(C)]
Crushing, conveying, material transfers, screens, and hoppers are fugitive sources of particulate matter emissions. The material will be applied water or saturated with water to control emissions.

The Dryer, Screen House, and silos are potential sources of particulate matter emissions and all will be controlled with fabric filters. The Dryer and the Screen House emissions will be controlled with fabric filter baghouses designed to meet 0.005 grains/dry standard cubic foot of air flow. Vent style fabric filter baghouses with a collection efficiency of 99% will control emissions from storage silos.

The Dryer will be fired with natural gas or propane (LPG), and in addition to particulate matter, it will also be a source of nitrogen oxides, carbon monoxide, sulfur dioxide, and organic compounds (VOC). Carbon monoxide and VOCs will be controlled by good combustion practices. LPG and natural gas have an inherently low sulfur content. There is no feasible control for NO_x emissions from sand dryers.

Plant roads, traffic areas, active work areas, and stockpiles will be watered by a water truck to minimize particulate matter emissions. The applicant notes that the use of chemical dust suppressants has been successful in controlling road emissions at other facilities owned by FML Sand and that they might also be used at the Katemcy plant. The dust suppressant is a calcium chloride solution which is marketed under a variety of names. The solution contains 20-45% calcium chloride. Calcium chloride is also commonly used as a de-icing agent on roads. The use of a calcium chloride based solution for dust control on roads does not generate air pollutant emissions.

All proposed controls meet BACT, consistent with technical feasibility and economical reasonableness.

Emissions will also be generated during startup and shutdown of the facility. Startup and shutdown emissions are virtually indistinguishable from production emissions. Although there may be minor emissions associated with startup and shutdown, particulate emission factors used to quantify production emissions are considered to have enough conservatism to include any incidental increases that may be attributed to startup and shutdown. In addition, emissions from planned startup and shutdown of combustion units should not result in any quantifiable hourly emissions change for products of combustion. Although there may be transitional and incidental spikes before units stabilize during startups (5 to 15 minutes), overall products of combustion are expected to be within hourly range limits for normal loads during production operations.

Impacts Evaluation - 30 TAC 116.111(a)(2)(J)

Was modeling conducted?	**Yes**	Type of Modeling:	**AERMOD (Version 12060) was used in a refined screening mode.**
Will GLC of any air contaminant cause violation of NAAQS?			**No**
Is this a sensitive location with respect to nuisance?			**No**
[§116.111(a)(2)(A)(ii)] Is the site within 3000 feet of any school?			**No**
Additional site/land use information: **Farming and rangeland.**			

Modeling for this application was performed and submitted by FML Sand's technical consultants Zephyr Environmental Corporation. The modeling report was audited by Dianne Anderson and Justin Cherry, Air Dispersion Modeling Team, and found to be acceptable.

Summary of Modeling Results

To demonstrate compliance with TCEQ regulations 30 TAC Chapter 112 and the NAAQS, Zephyr Environmental performed modeling for all criteria pollutants proposed to be emitted from the facility.

The results for compliance with Chapter 112 are as follows:

Table 1. Site-wide Modeling Results for State Property Line

Pollutant	Averaging Time	GLC_{max} (µg/m³)	Standard (µg/m³)
SO_2	1-hr	0.7	1021

The results of modeling for criteria pollutants for NAAQS compliance demonstration are listed in the table below.

Table 2. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLC_{max} (µg/m³)	De Minimis (µg/m³)
SO_2	1-hr	0.7	7.8
SO_2	3-hr	0.5	25
SO_2	24-hr	0.3	5
SO_2	Annual	0.03	1
PM_{10}	24-hr	5.4	5
$PM_{2.5}$	24-hr	0.7	1.2
$PM_{2.5}$	Annual	0.1	0.3
NO_2	1-hr	21.1	7.5
NO_2	Annual	0.77	1
CO	1-hr	11	2000

Pollutant	Averaging Time	GLC_{max} (µg/m³)	De Minimis (µg/m³)
CO	8-hour	6	500

Concentrations of all criteria pollutants were below their respective de minimis levels with the exception of PM_{10} (24-hour) and NO_2 (1-hour). These are the results for PM_{10} and NO_2 modeling.

Table 3. Total Concentrations for Minor NSR NAAQS (Concentrations > De Minimis)

Pollutant	Averaging Time	GLC_{max} (µg/m³)	Background (µg/m³)	Total Conc. = [Background + GLC_{max}] (µg/m³)	Standard (µg/m³)
PM_{10}	24-hr	5.4	60	65.4	150
NO_2	1-hr	21.1	64	85.1	188

A screening background concentration for 24-hr PM_{10} from Region 8 was used in the modeling demonstration. The applicant reviewed recent monitoring data to verify the conservatism of the screening background concentrations as follows:

The screening background concentration for PM_{10} was compared to EPA AIRs monitor 484530020 located at 12200 Lime Creek Road, Travis County. The applicant reviewed the highest monitored 24-hr values from 2009-2011 to compare to the screening background concentration. The use of this monitor is reasonable for Mason County since the 2010 population (1,024,266) and 2008 reported PM_{10} emissions (43,902 tons) for Travis County are greater than the 2010 population (4,012) and 2008 reported PM_{10} emissions (1,610 tons) for Mason County. In addition, the monitor is located in a rural area similar to the project site, and the two counties have a similar distribution of emission categories.

A background concentration for 1-hr NO_2 was obtained from the EPA AIRS monitor 484530020 located at 12200 Lime Creek Road, Travis County. The applicant used a three-year average (2009-2011) of the H1H monitored concentrations. Using a three-year average of the H1H monitored concentrations is conservative. The use of this monitor is reasonable for Mason County since the 2010 population (1,024,266) and 2008 reported NO_x emissions (20,588 tons) for Travis County are greater than the 2010 population (4,012) and 2008 reported NO_x emissions (197 tons) for Mason County. In addition, the monitor is located in a rural area similar to the project site, and the two counties have a similar distribution of emission categories.

Zephyr Environmental also performed modeling for silica, to compare the results against the short- and long-term ESLs.

Table 4. Minor NSR Site-wide Modeling Results for Health Effects

Pollutant & CAS#	Averaging Time	GLC_{max} (µg/m³)	ESL (µg/m³)
Silica, Crystalline (quartz) 14808-60-7	1-hr	47.5	14
Silica, Crystalline (quartz) 14808-60-7	Annual	0.14	0.27

Since the 1-hour GLC_{max} exceeded the ESL, the consultant determined the frequency of the exceedance.

Table 5. Minor NSR Hours of Exceedance for Health Effects

Pollutant	Averaging Time	1 X ESL GLC_{max}	2 X ESL GLC_{max}
Silica, Crystalline (quartz)	1-hr	32	3

The GLC_{max} for 1-hr and annual silica is located along the property line. The applicant assumed all receptors to be non-industrial.

A health effects review was requested from the Toxicology Division to evaluate the exceedances of silica. The review was done by Tiffany Bredfelt, Ph.D.

The model showed that the maximum off-property ground level concentration (GLC_{max}) will occur along the south property line next to a road that parallels the fence. Since the area surrounding the proposed facility is farm and range land, all receptors were assumed to be nonindustrial and the GLC_{max} was evaluated as if it were a maximally effected nonindustrial ground level concentration (GLC_{ni}).

Ms. Bredfelt noted that the short-term health based Effects Screening Level for silica is very conservative and exceedance by a magnitude of 3.39 times would not be of concern. She concluded that considering the conservatism inherent to the crystalline silica ESL and the fact that the long-term ESL is not exceeded at any receptor; the proposed silica emissions were allowable. She added that the Toxicology Division does not anticipate adverse health effects to occur among the general public.

Permit Concurrence and Related Authorization Actions

Is the applicant in agreement with special conditions?	**Yes**
Company representative(s):	**Kevin Ellis, Zephyr Environmental for Proppant Specialists**
Contacted Via:	**Email**
Date of contact:	**1/28/2013**
Other permit(s) or permits by rule affected by this action:	**None**
List permit and/or PBR number(s) and actions required or taken:	**NA**

Project Reviewer Date Team Leader/Section Manager/Backup Date

Special Conditions

Permit Number 97199

Emission Limitations

1. This permit authorizes only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the table. In addition, this permit authorizes all emissions from planned startup and shutdown activities associated with facilities or groups of facilities that are authorized by this permit.

Fuel Specifications

2. Fuel for the dryer shall be propane or sweet natural gas. Use of any other fuel will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).

3. Upon request by the Executive Director of the TCEQ or the TCEQ Regional Director or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel(s) used in these facilities or shall allow air pollution control program representatives to obtain a sample for analysis.

Federal Applicability

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) Regulations on Standards of Performance for New Stationary Sources (NSPS) promulgated in Title 40 Code of Federal Regulations (40 CFR) Part 60, specifically the following:

   A. Subpart A - General Provisions;

   B. Subpart OOO - Nonmetallic Mineral Processing Plants; and

   C. Subpart UUU - Calciners and Dryers in Mineral Industries.

Opacity/Visible Emission Limitations

5. The permit holder shall ensure that no visible fugitive emissions leave the property. In addition, once quarterly that the plant is in operation, the permit holder shall determine during normal operation whether visible emissions are occurring at the downwind property line for a 6-minute period. If the permit holder determines that visible emissions are occurring at the downwind property line, within 15 minutes the permit holder shall perform an evaluation in accordance with U.S. Environmental Protection Agency (EPA) Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method (TM) 22, using the criteria that visible emissions shall not exceed a cumulative 30 seconds during a 6-minute period. If visible emissions exceed the TM 22 criteria, the permit holder shall take immediate action to eliminate the visible emissions at the downwind property line and, by the end of the next operating day, shall document the corrective actions taken.

6. Opacity from the dryer baghouse (Emission Point Number [EPN] Dryer-1), Screen House 1 baghouse (EPN SH-1), and sand storage silo bin vent baghouses (EPNs Silo-1 through Silo-6) shall not exceed 5 percent averaged over a 6-minute period. In addition, once quarterly that the plant is in operation, the permit holder shall determine during normal operation whether any emissions are visible from the central baghouse. Observations shall be made as follows: 1) approximately perpendicular to plume direction, 2) with the sun behind the observer, and 3) at least two stack heights, but not more than five stack heights, from the emission point. If emissions are visible, the owner or operator shall perform one of the following:

   A. Take immediate action to eliminate emissions that are visible from the central baghouse, and, by the end of the next operating day, document the corrective actions taken. In addition, comply with any applicable requirements in 30 Texas Administrative Code (TAC) §101.201, Emissions Event Reporting and Record Keeping Requirements; or

   B. Conduct an opacity evaluation using 40 CFR Part 60, Appendix A, TM 9 within 14 days after first observing emissions that are visible from a baghouse. If opacity is determined to exceed 5 percent averaged over a 6-minute period, the permit holder shall take immediate action to reduce opacity to 5 percent averaged over a 6-minute period, and, by the end of the next operating day, document the corrective actions taken. In addition, the permit holder shall comply with applicable requirements in 30 TAC §101.201, Emissions Event Reporting and Record Keeping Requirements. Requests for additional time to accomplish the opacity evaluation shall be submitted to the TCEQ Regional Office with jurisdiction.

7. In accordance with 40 CFR Part 60, Appendix A, Test Method 9 or equivalent, and except for those periods described in 30 Texas Administrative Code (30 TAC) § 101.201 and § 101.211, opacity of emissions from screening operations, transfer points on belt conveyors, and storage bins shall not exceed 7 percent; and from the crushers shall not exceed 12 percent averaged over a six-minute period.

Operational Limitations, Work Practices, and Plant Design

8. Total throughput at this facility is limited to 500 tons per hour and 3,000,000 tons per year of sand in any rolling 12-month period.

9. The facilities are authorized to operate up to 8,760 hours per year.

10. All stockpiles and active work areas shall be watered by area-type water sprays or by a water truck. All water spray systems shall be operated as necessary to maintain compliance with TCEQ rules and regulations.

11. A fabric filter baghouse (EPN Dryer-1), designed to meet an outlet grain loading of 0.005 grains per dry standard cubic foot of air flow (gr/dscf), properly installed and in good working order, shall control particulate matter emissions from Dryer No. 1.

12. A fabric filter baghouse (EPN SH-1), designed to meet an outlet grain loading of 0.005 gr/dscf, properly installed and in good working order, shall control particulate matter emissions from Screen House No. 1.

13. Bin vent fabric filter baghouses, designed to meet a capture efficiency of 99%, properly installed and in good working order, shall control particulate matter emissions from each sand storage silo (EPNs SILO-1 through SILO-6).

14. All in-plant roads and traffic areas, active work areas, and aggregate stockpiles shall be sprayed with water or chemical dust suppressants upon detection of visible particulate matter emissions to maintain compliance with all applicable TCEQ rules and regulations.

15. Stockpile heights shall not exceed 45 feet in height unless approved by the TCEQ Regional Director or any local air pollution control program having jurisdiction.

Initial Determination of Compliance

16. To demonstrate compliance with NSPS requirements, the holder of this permit shall perform stack sampling and/or other testing as required by NSPS Subparts A, OOO, and UUU. Sampling shall be accomplished within 60 days of achieving maximum throughput but not later than 180 days after start of operations. Sampling must be conducted in accordance with the TCEQ Sampling Procedures Manual and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling.

Demonstration of Continuous Compliance

17. Upon request by the TCEQ Executive Director or the TCEQ Regional Director having jurisdiction, the holder of this permit shall perform stack sampling and/or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere to demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions and/or otherwise prove satisfactory equipment performance. Sampling must be conducted in accordance with the TCEQ Sampling Procedures Manual and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director or the appropriate TCEQ Regional Director prior to conducting sampling.

Sampling Requirements

18. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their own expense. Sampling ports and platforms shall be incorporated into the design of the stack(s) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities"

prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Office with jurisdiction.

19. Sampling shall be conducted in accordance with the TCEQ Sampling Procedures Manual and EPA Test Methods in 40 CFR Part 60, Appendix A, and 40 CFR Part 51, Appendix M, as follows:

    A. Test Method 5 or 17 for the filterable concentration of PM (front-half catch);

    B. Test Method 5 or 201A, for the filterable concentration of PM_{10} (front-half catch);

    C. Test Method 9 for opacity; and

    D. Test Method 22 for fugitive emissions from materials sources.

20. A pretest meeting shall be held with personnel from the TCEQ before the required tests are performed. The TCEQ Regional Office with jurisdiction shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include:

    A. Date for pretest meeting;

    B. Date sampling will occur;

    C. Points or sources to be sampled;

    D. Name of firm conducting sampling;

    E. Type of sampling equipment to be used; and

    F. Method or procedure to be used in sampling.

    The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

21. Alternate sampling methods and representative unit testing may be proposed by the permit holder. A written proposed description of any deviation from sampling procedures or emission sources specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. Such a proposal must be approved by the TCEQ Regional Office with jurisdiction at least two weeks prior to sampling.

22. Requests to waive testing for any pollutant specified shall be submitted, in writing, for approval to the TCEQ Office of Air, Air Permits Division in Austin.

23. During stack sampling emission testing, the facilities shall operate at maximum represented throughput rates. Primary operating parameters that enable determination of throughput rates shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting.

If the plant is unable to operate at the maximum represented throughput rates during testing, then additional stack testing shall be required when the throughput rate exceeds the previous stack test throughput rate by +10 percent unless otherwise determined, in writing, by the TCEQ Executive Director.

24. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office with jurisdiction. Additional time to comply with the applicable federal requirements requires EPA approval, and requests shall be submitted to the TCEQ Regional Office with jurisdiction.

25. Copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

    One copy to the TCEQ Regional Office with jurisdiction.

    One copy to the TCEQ Office of Air, Air Permits Division in Austin.

    One copy to each appropriate local air pollution control program with jurisdiction.

26. If, as a result of stack sampling, compliance with the permitted emission rates cannot be demonstrated, the holder of this permit shall adjust any operating parameters so as to comply with Special Condition No. 1 and the permitted emission rates.

27. If the holder of this permit is required to adjust any operating parameters for compliance, then beginning no later than 60 days after the date of the test conducted, the holder of this permit shall submit to the TCEQ, on a monthly basis, a record of adjusted operating parameters and daily records of throughput sufficient to demonstrate compliance with the permitted emission rates. Daily records of throughput and operating parameters shall be distributed as follows:

    One copy to the TCEQ Regional Office with jurisdiction.

    One copy to the TCEQ Office of Air, Air Permits Division in Austin.

Recordkeeping Requirements

28. In addition to the recordkeeping requirements specified in 30 Texas Administrative Code §116.115(b)(2)(E) and 40 CFR Part 60, Subparts A, OOO, and UUU, the following records shall be maintained at this facility site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction to demonstrate compliance with permit limitations. These records shall be totaled for each calendar month, retained for a rolling 24-month period, and include the following:

    A. Quarterly observations for visible emissions and/or opacity observations;

B. Daily, monthly, and annual amounts of materials processed, summarized in tons per hour, tons per month, and tons per year;

C. Records of road cleaning, application of road dust control, or road maintenance for dust control;

D. Inspections, malfunctions, repairs, and maintenance of abatement equipment, which includes the manufacturer's suggested cleaning and maintenance schedule; and

E. A copy of the manufacturer's suggested cleaning and maintenance schedule for abatement equipment.

Emission Sources - Maximum Allowable Emission Rates

Permit Number 97199

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (6)	
			lbs/hour	TPY (4)
H-1	Feed Hopper (5)	PM	0.92	2.76
		PM_{10}	0.44	1.31
		$PM_{2.5}$	0.067	0.20
S-1	Grizzly Feeder (5)	PM	1.10	3.30
		PM_{10}	0.37	1.11
		$PM_{2.5}$	0.06	0.17
CR-1	Primary Crusher (jaw)(5)	PM	0.05	0.16
		PM_{10}	0.03	0.08
		$PM_{2.5}$	<0.01	0.01
T-1A	Transfer to Screen Tower Conveyor (5)	PM	0.07	0.21
		PM_{10}	0.02	0.07
		$PM_{2.5}$	<0.01	0.01
SC-2	Primary Screen Tower (5)	PM	0.18	0.53
		PM_{10}	0.06	0.18
		$PM_{2.5}$	0.01	0.03
T-2	Transfer from Screen Tower (5)	PM	0.02	0.06
		PM_{10}	0.01	0.02
		$PM_{2.5}$	<0.01	<0.01
T-2A	Transfer to VSI Feed Conveyor (5)	PM	0.01	0.02
		PM_{10}	<0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (6)	
			lbs/hour	TPY (4)
		$PM_{2.5}$	<0.01	<0.01
CR-2	VSI Crusher (5)	PM	0.01	0.03
		PM_{10}	0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
T-2B	Recycle Transfer to Tower Conveyor (5)	PM	0.01	0.02
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
SC-3	Scalping Screen (5)	PM	0.13	0.38
		PM_{10}	0.04	0.13
		$PM_{2.5}$	0.01	0.02
T-3	Transfer from Scalping Screen (5)	PM	0.01	0.03
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
T-3A	Transfer to Oversize Pile (5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
SC-4	Wash Tower Screen (5)	PM	0.03	0.10
		PM_{10}	0.011	0.03
		$PM_{2.5}$	<0.01	0.01
T-4A	Transfer to Coarse Pile Conveyor (5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
T-4B	Transfer to Fines Pile Conveyor (5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (6)	
			lbs/hour	TPY (4)
		$PM_{2.5}$	<0.01	<0.01
T-4C	Transfer to Coarse Pile Radial Stacker (5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
T-4D	Transfer to Fines Pile Radial Stacker (5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
H-2	Front-End-Loader to Hopper (5)	PM	0.05	0.14
		PM_{10}	0.02	0.07
		$PM_{2.5}$	<0.01	0.01
T-5A	Hopper to Conveyor (5)	PM	0.01	0.01
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
T-5B	Conveyor to Dryer Conveyor (5)	PM	0.01	0.01
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
SH-1	Screen House 1 Baghouse Stack	PM	2.14	6.43
		PM_{10}	2.14	6.43
		$PM_{2.5}$	0.32	0.97
LO-1	Truck Loadout Area 1 (5)	PM	0.07	0.05
		PM_{10}	0.04	0.02
		$PM_{2.5}$	0.01	<0.01
SILO-1	Silo 1 Baghouse Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (6)	
			lbs/hour	TPY (4)
		$PM_{2.5}$	<0.01	<0.01
SILO-2	Silo 2 Baghouse Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
SILO-3	Silo 3 Baghouse Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
SILO-4	Silo 4 Baghouse Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
SILO-5	Silo 5 Baghouse Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
SILO-6	Silo 6 Baghouse Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
DRYER-1	Dryer No. 1 Baghouse Stack	PM	1.81	5.44
		PM_{10}	1.81	5.44
		$PM_{2.5}$	0.46	1.38
		NO_x	9.62	28.86
		CO	4.92	14.75
		SO_2	0.33	0.98
		VOC	0.52	1.57

Emission Sources - Maximum Allowable Emission Rates

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: _____