

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



November 16, 2015

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 Port of
Corpus Christi Authority, Permit No. 47881

Dear Ms. Bohac:

Enclosed please find a copy of the Compliance History Report, Technical Review, and Draft Permit for the Port of Corpus Christi Authority, Permit No. 47881. If you have any questions, please do not hesitate to call me at extension 1088.

Sincerely,

A handwritten signature in black ink that reads "PN Petty".

Becky Nash Petty
Attorney
Environmental Law Division

Enclosure

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

Permit Renewal Source Analysis & Technical Review

Company	Port of Corpus Christi Authority of Nueces County	Permit Number	47881
City	Corpus Christi	Project Number	179726
County	Nueces	Account Number	NE-0095-E
Project Type	Renewal	Regulated Entity Number	RN102506250
Project Reviewer	Blake Stewart	Customer Reference Number	CN600885248
Site Name	Bulk Material Handling Facility		

Project Overview

The Port of Corpus Christi Authority of Nueces County (POCCA) has applied for a renewal of the permit for their bulk material handling operation located at 4820 East Navigation Boulevard (Bulk Dock 1), Corpus Christi, Nueces County. An application to renew their permit was received on July 3, 2012 which also included an amendment request. On December 19, 2014, the company requested that the renewal and amendment projects be “de-coupled” and to proceed with the amendment review. The amendment was issued on February 27, 2015. This renewal does not include any increase or change in character of emissions.

Emission Summary

Air Contaminant	Current Allowable Emission Rates (tpy)	Proposed Allowable Emission Rates (tpy)	Change in Allowable Emission Rates (tpy)
PM	4.00	4.00	0.00
PM ₁₀	1.95	1.95	0.00
PM _{2.5}	0.29	0.29	0.00
H ₂ S	0.06	0.06	0.00

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	June 22, 2015
Site rating & classification:	0.89 / Satisfactory
Company rating & classification:	0.20 / Satisfactory
If the rating is 50<RATING<55, what was the outcome, if any, based on the findings in the formal report:	N/A
Has the permit changed on the basis of the compliance history or rating?	No

Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement	
39.403	Date Application Received:	July 3, 2012
	Date Administratively Complete:	July 12, 2012
	Small Business Source?	No
	Date Leg Letters mailed:	July 12, 2012
39.603	Date Published:	August 10, 2012 and May 19, 2015
	Publication Name:	Corpus Christi Caller-Times
	Pollutants:	Particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less and hydrogen sulfide
	Date Affidavits/Copies Received:	June 12, 2015

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Rule Citation	Requirement
	Is bilingual notice required? Yes, however the applicant verifies that a diligent search was conducted for a publication of general circulation in the municipality and county in the language required by the bilingual program for Corpus Christi ISD and no publication was found.
	Date Certification of Sign Posting / Application Availability Received: June 12, 2015
39.604	Public Comments Received? Yes
	Hearing Requested? Yes
	Meeting Request? Yes
	Date Meeting Held: No meeting was held since the closest requester was over 6 miles from the facility.
	Date Response to Comments sent to OCC: August 18, 2015
	Request(s) withdrawn? No
	Date Withdrawn: N/A
	Consideration of Comments: Yes
	Is 2nd Public Notice required? No
39.419	If no, give reason: Renewals with no increases, no new contaminants, and a satisfactory compliance history do not require 2nd Public Notice as per 30 TAC §39.419(e)(1).
39.421	Request for Reconsideration Received? No
	Final Action: Issuance of the renewal
	Are letters Enclosed? N/A

Renewal Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement
116.315(a)	Date of permit expiration: December 31, 2012
116.310	Date written notice of review was mailed: December 1, 2011
116.315(a)	Date application for Renewal (PI-1R) received: July 3, 2012
116.311(a)(1)	Do dockside vessel emissions associated with the facility comply with all regulations? Yes
116.311(a)(2)	Is the facility being operated in accordance with all requirements and conditions of the existing permit, including representations in the application for permit to construct and subsequent amendments, and any previously granted renewal, unless otherwise authorized for a qualified facility? Yes
	If no, explain: N/A
116.311(a)(3)	Subject to NSPS? No, there is not a subpart that applies material handling operations
116.311(a)(4)	Subject to NESHAPS? No, pollutants regulated by this rule are not emitted at this site
116.311(a)(5)	Subject to NESHAPS (MACT) for source categories? No, this is not one of the source types subject to this rule
116.311(a)(6)	Does this project require case-by-case MACT? No, the site is not a new major source of HAPs.
116.311(b)	Was there a condition of air pollution that had to be addressed during this project review? No

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Rule Citation	Requirement	
	If yes, explain:	N/A
116.314(a)	Does the facility meet all permit renewal requirements?	Yes
116.313	Permit Renewal Fee: \$632.97 Fee certification:	Yes
	Applicable Outstanding Fees:	None as of June 26, 2015

Title V Applicability - 30 TAC Chapter 122 Rules

Rule Citation	Requirement	
122.10(14)	Title V applicability: N/A, the site is not a major source nor is it an area source subject to Title V.	
122.10(14)(A)	Is the site a major source under FCAA Section 112(b)?	No
	Does the site emit 10 tons or more of any single HAP?	No
	Does the site emit 25 tons or more of a combination?	No
122.10(14)(C)	Does the site emit 100 tons or more of any air pollutant?	No
122.10(14)(D)	Is the site a non-attainment major source?	No
122.602	Periodic Monitoring (PM) applicability: Not Applicable, since the site is not subject to Title V	
122.604	Compliance Assurance Monitoring (CAM) applicability: Not Applicable, since the site is not subject to Title V	

Request for Comments

Received From	Program/Area Name	Reviewed By/Date	Comments
Region:	14	Cindy Smith	No objections to the renewal
Comment resolution and/or unresolved issues:			No concerns/unresolved issues

Process/Project Description

Permitted operations at this facility include material loading, unloading, and stockpiling. Loading and unloading operations cannot occur simultaneously as they require the use of some of the same material handling components. There is only one gantry crane that handles all material received or loaded out.

Ship Unloading to Railcar Loading or to Truck Loading

Product can be unloaded from a ship's hold and sent to either a railcar or a truck. These two processes follow nearly identical operations. Material is unloaded from the freight vessels by a grab clamshell attached to an overhead gantry. Material is then dropped into a hopper. The material falls from the hopper to a pair of feeder belts in series before dropping down into either an awaiting truck or railcar.

Ship Loading via Stockpile

Bulk material can also be delivered by trucks directly onto the stockpile. Freight vessels may be loaded with product from the on-site stockpile near the gantry. The material in these stockpiles is limited to fuels and aggregates and it is loaded by a grab clamshell attached to the gantry which transports the material directly from the stockpile into the ship's hold.

Railcar Unloading to Truck or Ship

Material from railcars is transferred to either awaiting trucks or marine vessels. To load trucks with this material, railcars will be unloaded via the gantry grab clamshell. The material will then be dropped into the hopper and on to the feeder belts and dropped into an awaiting truck. To load ships with material from railcars, the grab clamshell will collect material directly from the railcars and it will deposit the material directly into the ship's hold.

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Pollution Prevention, Sources, and Controls - [30 TAC 116.311(b)(2)]

Material transfer points, conveyor belts and stockpiles are sources of fugitive emissions. Transfer points are equipped with water sprays that provide a control efficiency of at least 70%. The feeder belts and feeder hopper are completely enclosed and the enclosures provide a minimum of 90% control. All loadout devices are fitted with drop socks and/or water (mineral oil during grain handling) spray bars to minimize emissions that provide a control efficiency of at least 90%. The gantry truck and railcar loadout is equipped with plastic sheeting installed to block wind from the southeast, the prevailing wind direction. No additional control efficiency is included for the plastic curtains. Stockpiles are sprayed with water as necessary, enclosed on at least two sides, and limited to 1 acre in size. The estimated control efficiency for the partial enclosure and water sprays is at least 50%.

The handling of chunky and prilled sulfur has the potential to emit hydrogen sulfide. Based on process knowledge of the sulfur prilling operation, the company made a determination that a maximum of 75 parts per million by weight (ppmw) hydrogen sulfide (H₂S) would remain in the sulfur. The emissions were calculated based on the assumption that 0.25% of the H₂S would be released as fugitive emissions during transport. During the previous permit review, it was determined that no add-on control of H₂S at this concentration is economically reasonable or technically practical.

The controls are economically reasonable and technically practicable considering the age of the facility and the impact of its emissions on the surrounding area.

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.

Permit Concurrence and Related Authorization Actions

Is the applicant in agreement with special conditions?	Yes
Company representative(s):	Sarah Garza
Contacted Via:	Email
Date of contact:	June 24, 2015
Other permit(s) or permits by rule affected by this action:	None
List permit and/or PBR number(s) and actions required or taken:	N/A

Project Reviewer

Date

Team Leader/Section Manager/Backup

Date

Emission Sources - Maximum Allowable Emission Rates

Permit Number 47881

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	Hopper (5)	PM	0.67	1.30
		PM ₁₀	0.32	0.62
		PM _{2.5}	0.05	0.09
FB-1 & FB-2	Feeder Belts 1 and 2 (5)	PM	0.22	0.43
		PM ₁₀	0.11	0.21
		PM _{2.5}	0.02	0.03
TR-1	Truck Loadout (5)	PM	0.22	0.43
		PM ₁₀	0.11	0.21
		PM _{2.5}	0.02	0.03
RC-1	Railcar Loadout (5)	PM	0.22	0.43
		PM ₁₀	0.11	0.21
		PM _{2.5}	0.02	0.03
CSD-1	Grab Clamshell to Marine Vessel (5)	PM	0.50	0.21
		PM ₁₀	0.24	0.10
		PM _{2.5}	0.04	0.02
SP-1	Stockpile (5)	PM	-.-	1.20
		PM ₁₀	-.-	0.60
		PM _{2.5}	-.-	0.09
H ₂ STPORT1	H ₂ S Fugitives from Transport (5)	H ₂ S	0.30	0.06

- (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) PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - PM₁₀ - 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
 - H₂S - hydrogen sulfide

Emission Sources - Maximum Allowable Emission Rates

- (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: September 7, 2015

Special Conditions

Permit Number 47881

Emission Standards

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 rates 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.

Opacity/Visible Emission Limitations

2. Visible fugitive emissions from material handling operations and drop points (hopper, feeder belts, truck and railcar loadout, and grab clamshell) at this facility shall not leave the property for more than 30 cumulative seconds in any six-minute period.

Operational Limitations, Work Practices, and Plant Design

3. This facility shall not handle more than the following amount of materials:

Table 1:

Category	Example Cargo	Handling Rate (tons/hour)	Handling Rate (tons/year)
Unloading: Fuel and aggregates from marine vessel	Coal, furnace slag, metallurgical coke, petroleum coke, sand	800	3,100,000
Unloading: Metallic minerals and ores from marine vessel	Barite, chrome ore, copper concentrate, manganese ore, magnesite	800	
Loading: Fuel and aggregates into trucks and/or railcars	Coal, furnace slag, metallurgical coke, petroleum coke, sand	800	3,100,000
Loading: Metallic minerals and ores into trucks and/or railcars	Barite, chrome ore, copper concentrate, manganese ore, magnesite	800	
Unloading: Fuel and aggregates from trucks and/or railcars	Coal, furnace slag, metallurgical coke, petroleum coke, sand	600	500,000
Loading: Fuel and aggregates into marine vessels	Coal, furnace slag, metallurgical coke, petroleum coke, sand	600	500,000

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

5. All in-plant roads and traffic areas shall be paved with a cohesive hard surface that can be cleaned by sweeping or washing. All roads, active work areas, and stockpiles shall be sprayed with water upon detection of visible particulate matter emissions to maintain compliance with all applicable TCEQ rules and regulations.
6. Spillage of any raw products, finished products, or waste products shall be cleaned up on a daily basis.
7. The feeder belts at this facility shall be completely enclosed and shall be maintained free of holes, cracks, and other conditions that would reduce the control efficiency of the enclosure.
8. 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. The stockpile authorized by this permit shall be enclosed on two sides and shall not exceed one acre.
9. All loadout devices (augers, drop spouts, etc.) shall be equipped with drop socks and/or permanently mounted spray bars at the drop point as necessary to minimize fugitive emissions from loadout areas. A drop sock shall not be necessary if compliance with visible emissions requirements of this permit can be achieved without the drop sock. Permanently mounted spray bars shall be installed at all other material transfer points. All water spray systems shall be operated as necessary to maintain compliance with TCEQ rules and regulations. During handling of grain, the use of mineral oil in the spray systems is authorized.
10. The holder of this permit shall perform monthly inspections to verify proper operation of the drop socks and/or permanently mounted spray bars. If the results of the inspections indicate that the capture system is not operating properly, the permit holder shall promptly take necessary corrective actions.
11. Emissions from the gantry area shall be controlled by best management practices which may include (but not limited to) not unloading during times of high winds, operational procedures that produce less disturbance of the material, clam shell bucket design (tight seals, rubber covered edges, etc.), or any other program approved by the TCEQ and local air pollution control programs with jurisdiction.

Material Flexibility

12. Handling and storage of other materials are authorized, provided the following criteria are met:
 - A. The new material shall be handled in the same manner and the emissions shall be emitted from the same locations as the previously authorized materials.
 - B. The maximum hourly throughput of any new material that is being loaded or unloaded shall be determined by the following:
$$TP2 \leq TP1 \times (ESL2 / ESL1)$$
Where: TP2 is the throughput of the replacement material in tons per hour

TP1 is the throughput of the worst case authorized material of the same classification (fuels and aggregates or metallic minerals and ores) and operation (loading or unloading) in tons per hour

ESL2 is the short term Effects Screening Level (ESL) of the replacement bulk material ($\mu\text{g}/\text{m}^3$)

ESL1 is the short term ESL of the worst case authorized material of the same classification ($\mu\text{g}/\text{m}^3$)

The maximum hourly throughput of the new material shall not exceed the limits stated in Special Condition No. 3 for the corresponding material classification and operation.

- C. If the most recent version of the TCEQ ESL list does not include the replacement material, an ESL derived by the TCEQ Toxicology Section shall be used. The ESL shall be obtained in writing prior to the handling or storage of the replacement material.
- D. This condition allows for changes in materials handled or stored and does not allow an increase in emissions from any emission point.
- E. Chunky sulfur and prilled sulfur may be handled at this facility at the rates for fuel and aggregates listed in Special Condition No. 3.

Demonstration of Continuous Compliance

- 13. Upon request by the TCEQ Executive Director or the TCEQ Regional Director having jurisdiction, the holder of this permit shall perform ambient air monitoring 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 Maximum Allowable Emission Rates Table (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*. Any deviations from those procedures must be approved by the TCEQ Executive Director or the appropriate TCEQ Regional Director prior to conducting sampling.
- 14. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the visible emissions limitation specified in this permit. This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), 5) at least 15 feet, but not more than 0.25 mile, from the plume, and 6) in accordance with EPA 40 CFR Part 60, Appendix A, Test Method 22, except where stated otherwise in this condition. If visible emissions exceed 30 cumulative seconds in any six-minute period, the owner or operator shall take immediate action (as appropriate) to eliminate the excessive visible emissions. The corrective action shall be documented within 24 business hours of completion.

Recordkeeping Requirements

- 15. 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;
- B. Annual and monthly quantities of loading and unloading of fuel/aggregates, and metallic minerals/ores in tons;
- C. Hourly average quantities of loading and unloading of fuel/aggregates, and metallic minerals/ores for each vessel in tons;
- D. Total time for loading and unloading of each vessel in hours;
- E. Weight of material unloaded and loaded on each vessel in tons;
- F. Records of road cleaning, application of road dust control, or road maintenance for dust control;
- G. Inspections, malfunctions, repairs, and maintenance of abatement equipment (drop socks and water sprays) as actions occur;
- H. Records of any replacement material handled or stored as outlined in the Material Flexibility condition, including the following:
 - (1) Safety Data Sheet of the material;
 - (2) Classification of the material (fuel and aggregates, metallic minerals and ores, or grains);
 - (3) The TCEQ ESL of the material or an ESL derived by the TCEQ Toxicology Section; and
 - (4) The maximum allowable loading/unloading rate of the material in tons per hour, as calculated by the formula in the Material Flexibility Condition.

Date: September 7, 2015