TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 3, 2019

MR MATT MARRA
VP REGULATORY COMPLIANCE & PROJECT MANAGEMENT
LONE STAR PORTS LLC
14 BIRCHWOOD PARK PL
THE WOODLANDS TX 77382-2026

Re: Permit Number: 157150
Regulated Entity Number: RN110785011
Customer Reference Number: CN605663830

Dear Mr. Marra:

Thank you for submitting the Expedited Permitting Request form and surcharge to participate in the Texas Commission on Environmental Quality (TCEQ) Expedited Permitting Program. Your project has been accepted into the Expedited Program pursuant to Title 30 Texas Administrative Code, Chapter 101, Subchapter J.

If you have questions related to your expedited permit, you may call Ms. Kim Strong, P.E. at (512) 239-0252.

Sincerely,

Michael Wilson, P.E., Director
Air Permits Division
Office of Air

Enclosure

cc: Air Section Manager, Region 14 - Corpus Christi

Project Number: 302197

Shelia Glaspie-Felix

From:	Kim Strong
Sent:	Monday, June 3, 2019 1:46 PM
To:	MATT.MARRA@LONESTARPORTS.COM
Cc:	NNYGAARD@DISORBOCONSULT.COM; RFCAIR14
Subject:	Expedited Permitting Request
Attachments:	Expedited Permitting Request Project 302197.pdf

Mr. Marra,

Thank you for your interest in the Texas Commission on Environmental Quality (TCEQ) Expedited Permitting Program. In response to your expedited permitting request, please review the attached letter.

Form APD-EXP Expedited Permitting Request

MAY 31 2019
APIRT

I. Contact Information	
Company or Other Legal Customer Name: Lone Star Ports, LLC	
Customer Reference Number (CN): TBD	
Regulated Entity Number (RN): TBD	
Company Official or Technical Contact Name: Matt Marra	
Phone Number: 713-253-6948	
Email: Matt.Marra@lonestarports.com	
II. Project Information	
Facility Type: Harbor Island Marine Terminal	
Permit Number: TBD	
Project Number: TBD	
III. Economic Justification	
The purpose of the application associated with this request to expedite will benefit the economy of this state or an area of this state.	☒ YES ☐ NO
IV. Delinquent Fees and Penalties	
Applications will not be expedited if any delinquent fees and/or penalties are owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: www.tceq.texas.gov/agency/delin/index.html.	
V. Signature	
The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. As the applicant, I commit to fulfilling all expectations of the expedited permitting program and application requirements promptly. Failure to meet any expectation or requirement may cause my application to be removed from the expedited permitting program and possibly voided at the discretion of the TCEQ Executive Director. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.	
Name: Matt Marra	
Signature:	
Date: 5/29/19	

Return to Sharenet

06/07/2019 ----------NSR IMS - PROJECT RECORD ----------

PROJECT#: 302197 STATUS: PENDING
PROJECT ADMIN NAME: HARBOR ISLAND MARINE TERMINAL
PROJECT TECH NAME: HARBOR ISLAND MARINE TERMINAL

PROJECT ACTIONS

Permit	Action Type	Permit Type	Received Date	Permit Status	Renewal Date	Action Status	Complete Date
157150	INITIAL	CONSTRUCT	05/31/2019	PENDING		PENDING	

Assigned Team: ENERGY SECTION

STAFF ASSIGNED TO PROJECT:

GLASPIE-FELIX , SHELIA	- REVIEWR1_2 -	AP INITIAL REVIEW
ALVIREZ , RUTH	- REVIEW ENG -	ENERGY TEAM 2

COMPANY INFORMATION

Issued To	Company Name	Customer Reference Number
LONE STAR PORTS, LLC	Lone Star Ports, LLC	CN605663830

- CONTACT INFORMATION

Contact Type	Name	Title	Organization Name
RESPONSIBLE OFFICIAL	MR MATT MARRA	VP REGULATORY COMPLIANCE & PROJECT MANAGEMENT	LONE STAR PORTS LLC

Phone	FAX	Address
(713) 253-6948		14 BIRCHWOOD PARK PL, THE WOODLANDS, TX, 77382-2026

EMAIL: MATT.MARRA@LONESTARPORTS.COM

Contact Type	Name	Title	Organization Name
TECHNICAL CONTACT	MR NEAL A NYGAARD	CHIEF OPERATING OFFICER PRINCIPAL	DISORBO CONSULTING LLC

Phone	FAX	Address
(713) 955-1221	(713) 955-1201	1001 LOUISIANA ST STE 3250, HOUSTON, TX, 77002-5089

EMAIL: NNYGAARD@DISORBOCONSULT.COM

PERMIT INFORMATION

REGULATED ENTITY NUMBER: **RN110785011**

Permit	Account	Permittee Name	County	Region	City	State	Location
157150		HARBOR ISLAND MARINE TERMINAL	NUECES	REGION 14 - CORPUS CHRISTI	PORT ARANSAS	TEXAS	ADJACENT TO HWY 361 & NE OF FERRY LANDING

- PERMIT AFFILIATION:

Permit1	Related Permit 2	Relationship Type	Start Date

PROJECT NOTES:

06/07/2019	EXPEDITE PROJECT (APPLICATION POSTMARKED PRIOR TO 6/1/19)- SOS/DFC DONE 6/3/19 - NOT ON APWL - SENT TO ENERGY FOR REVIEW 6/3/19 - RETURNED TO APIRT 6/3/19 - PN1 DOCUMENT #618251
06/07/2019	RECEIVED ELECTRONIC EMEW AND FIGURES 1-3 ON 6/2/19 - FORWARDED UPON TRANSFER TO TECHNICAL AREA ON 6/7/19 - ALTERNATIVE IS NOT REQUIRED BUT CONSULTANT REQUESTED THE SPANISH SIGNS PER APPLICANT

- PERMIT NOTES:

- FEE

Permit	Action Type	Reference	Fee Receipt Number	Fee Amount Paid	Fee Refund Amount	Fee Receipt Date	Fee Payment Type
157150	INITIAL	421207	582EA000347819	75000.00		05/30/2019	ePAY

PUBLIC NOTICE:

Public Hearing Req Number	Public Meeting Req Number	Comment Count	Alternative Languages
0	0	0	NO ALT LANGUAGE

- TRACKING ELEMENTS:

TE Name	Start Date	Complete Date
APIRT RECEIVED PROJECT (DATE)	05/31/2019	
ENHANCED ADMINISTRATIVE OR APPLICATIONS REVIEW (EAR)	06/03/2019	06/03/2019
EXPEDITED PERMITTING	06/03/2019	
PUBLIC NOTICE DRAFT SENT TO COMPANY (DATE)	06/05/2019	
APIRT TRANSFERRED PROJECT TO TECHNICAL STAFF (DATE)	06/07/2019	
COMPANY APPROVED DRAFT PUBLIC NOTICE (DATE)	06/07/2019	
LEGISLATORS NOTIFIED OF APPLICATION RECEIVED (DATE)	06/07/2019	
PROJECT DECLARED ADMIN COMPLETE (DATE)	06/07/2019	
SITE REVIEW RFC SENT TO REGION (DATE)	06/07/2019	
1ST NOTICE OCC COMPLETE (DATE)		
2ND NOTICE OCC COMPLETE (DATE)		
2ND PUBLIC NOTICE FINALIZED AND SENT (DATE)		
COMPLIANCE HISTORY REVIEW COMPLETED (DATE)		
DEFICIENCY CYCLE		
EMISSIONS MODELING CYCLE DONE BY APPLICANT		
EMISSIONS MODELING CYCLE DONE BY TCEQ		
FINAL PACKAGE REWORK CYCLE		
FINAL PACKAGE TO SECTION MANAGER FOR REVIEW (DATE)		
FINAL PACKAGE TO TEAM LEADER OR SUPERVISOR FOR REVIEW (DATE)		
INITIAL MODELING SUMMARY REVIEW CYCLE		
LEGISLATORS NOTIFIED OF DRAFT PERMIT		
MODELING AUDIT CYCLE		
MODELING REQUEST FOR INFORMATION CYCLE		
POSTED TO EXECUTIVE DIRECTOR'S AGENDA (DATE)		
PROJECT RECEIVED BY ENGINEER (DATE)		
PROJECT RECEIVED BY TECHNICAL STAFF FROM APIRT (DATE)		
PUBLIC NOTICE COMMENT PERIOD (NSR 1ST NOTICE)		
PUBLIC NOTICE COMMENT PERIOD (NSR 1ST NOTICE) - RENEWAL		
PUBLIC NOTICE COMMENT PERIOD (TITLE V OR NSR #2)		
SECOND DEFICIENCY CYCLE		
TOXICOLOGY RFC CYCLE		
WORKING DRAFT PERMIT REVIEW CYCLE		
WPO FINAL PACKAGE CYCLE		

- PROJECT ATTRIBUTES:

Attributes	Value
SB1756	FULL

Shelia Glaspie-Felix

From: Shelia Glaspie-Felix
Sent: Friday, June 7, 2019 3:19 PM
To: Colleen Krenek
Cc: Ruth Alvirez; Johnny Bowers; Stephanie Ross
Subject: Lone Star Ports, LLC - Permit #157150 - EMEW/Additional Documents
Attachments: PROJ302197 PRMT157150 EMEW.xlsx; PROJ302197 PRMT157150 Fig1.pdf; PROJ302197 PRMT157150 Fig2.pdf; PROJ302197 PRMT157150 Fig3.pdf

Please see the EMEW and additional documents that were received on 6/2/19.

Shelia Glaspie-Felix
Air Permit Initial Review Team
Air Permits Division
Texas Commission on Environmental Quality
Phone (512) 239-1210
Fax (512) 239-4500
shelia.glaspie-felix@tceq.texas.gov

Shelia Glaspie-Felix

From: Jennifer Mason <jmason@disorboconsult.com>
Sent: Friday, June 7, 2019 3:11 PM
To: Shelia Glaspie-Felix
Subject: RE: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150

Oh good! Thanks so much. That's the first time I've had that happen and I just assumed it would be okay, but I should have touched base with you just to make sure.

-----Original Message-----
From: Shelia Glaspie-Felix [mailto:shelia.glaspie-felix@tceq.texas.gov]
Sent: Friday, June 07, 2019 4:09 PM
To: Jennifer Mason <jmason@disorboconsult.com>
Subject: RE: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150

That's fine, I will make the notation that alternate language is not required, but the applicant requested it.
Please see the attached document.

Thanks.
Shelia Glaspie-Felix

-----Original Message-----
From: Jennifer Mason <jmason@disorboconsult.com>
Sent: Friday, June 7, 2019 3:02 PM
To: Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>
Subject: RE: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150

The client wanted to do a Spanish notice anyway, even though it isn't required. I've never had that before, but I thought it would be okay?

-----Original Message-----
From: Shelia Glaspie-Felix [mailto:shelia.glaspie-felix@tceq.texas.gov]
Sent: Friday, June 07, 2019 4:01 PM
To: Jennifer Mason <jmason@disorboconsult.com>
Subject: RE: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150

Your application indicated that you would not require Alternative Language, it that incorrect.

-----Original Message-----
From: Jennifer Mason <jmason@disorboconsult.com>
Sent: Friday, June 7, 2019 2:58 PM
To: Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>
Subject: RE: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150

Shelia - do you have the Spanish sign also?

Thank you!

-----Original Message-----

From: Shelia Glaspie-Felix [mailto:shelia.glaspie-felix@tceq.texas.gov]
Sent: Friday, June 07, 2019 3:56 PM
To: OCC-NSR <occ-nsr@tceq.texas.gov>; R6AirPermitsTX@epa.gov; Neal Nygaard <nnygaard@disorboconsult.com>
Cc: RFCAIR14 <rfcair14@tceq.texas.gov>; Matt Marra <Matt.Marra@lonestarports.com>; Joe Kupper <jkupper@disorboconsult.com>; Jennifer Mason <jmason@disorboconsult.com>
Subject: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150

Please see Public Notice attached.

Shelia Glaspie-Felix

From: Shelia Glaspie-Felix
Sent: Friday, June 7, 2019 2:56 PM
To: OCC-NSR; 'R6AirPermitsTX@epa.gov'; Neal Nygaard
Cc: RFCAIR14; Matt Marra; 'jkupper@disorboconsult.com'; 'Jennifer Mason'
Subject: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150
Attachments: PN1 PROJ302197 PRMT157150.docx

Please see Public Notice attached.

Shelia Glaspie-Felix

From: Shelia Glaspie-Felix
Sent: Friday, June 7, 2019 2:52 PM
To: RFCAIR14
Subject: Site Review/Request for Comments for Project Number 302197
Attachments: RFC-302197.docx

PLEASE DO NOT RESPOND TO THE PERSON SENDING THIS EMAIL.

This is a request for comments. Please submit comments to the individual and within the specified time frame as identified in the attached file.

Shelia Glaspie-Felix

From: Jennifer Mason <jmason@disorboconsult.com>
Sent: Friday, June 7, 2019 11:52 AM
To: Matt Marra; Shelia Glaspie-Felix; Shanon DiSorbo
Cc: Neal Nygaard
Subject: RE: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

Sheila – all changes are good with us.

Jennifer Mason

DiSorbo Consulting, LLC
13345 Stagg Trail Road | Ashland, Virginia 23005
Mobile: 804.366.8274
Email: jmason@disorboconsult.com | Fax: 713.955.1201
www.disorboconsult.com

From: Matt Marra [mailto:Matt.Marra@lonestarports.com]
Sent: Friday, June 07, 2019 12:20 PM
To: Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>; Jennifer Mason <jmason@disorboconsult.com>; Shanon DiSorbo <sdisorbo@disorboconsult.com>
Cc: Neal Nygaard <nnygaard@disorboconsult.com>
Subject: Re: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

Hi Sheila. That's fine. Thank you. Matt.

Get Outlook for iOS

From: Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>
Sent: Friday, June 7, 2019 11:15:49 AM
To: Jennifer Mason; Shanon DiSorbo; Matt Marra
Cc: Neal Nygaard
Subject: RE: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

The address listed has to reflect the information that you provided for the company's official contact (Matt Marra). It was my error to not put the company name for Mr. Nygaard. The last paragraph of Example A will be changed to reflect the following:

Further information may also be obtained from Lone Star Ports, LLC, 14 Birchwood Park Place, The Woodlands, Texas 77382-2026 or by calling Mr. Neal Nygaard, DiSorbo Consulting, LLC at (713) 955-1221.

The contaminants will reflect the following:

The facility will emit the following contaminants: carbon monoxide, hazardous air pollutants, hydrogen sulfide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less, and sulfur dioxide.

Please indicate if you are in agreement or need to discuss the listed changes.

Shelia Glaspie-Felix

From: Jennifer Mason <jmason@disorboconsult.com>
Sent: Thursday, June 6, 2019 3:38 PM
To: Shanon DiSorbo <sdisorbo@disorboconsult.com>; Matt Marra <Matt.Marra@lonestarports.com>; Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>
Cc: Neal Nygaard <nnygaard@disorboconsult.com>
Subject: RE: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

Hi Sheila,

We have an update to the Public Notice for the last paragraph:

Further information may also be obtained from Lone Star Ports, LLC, 1414 Valero Way, Corpus Christi, Texas 78410, or by calling Mr. Neal Nygaard, Chief Operating Officer, DiSorbo Consulting, at (713) 955-1221.

Also, the following should be updated to the contaminants list:

The facility will emit the following contaminants: carbon monoxide, hazardous air pollutants, hydrogen sulfide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less and sulfur dioxide.

The rest of the public notice draft looks good to me.

Jennifer Mason

DiSorbo Consulting, LLC
13345 Stagg Trail Road | Ashland, Virginia 23005
Mobile: 804.366.8274
Email: jmason@disorboconsult.com | Fax: 713.955.1201
www.disorboconsult.com

On Jun 5, 2019, at 9:56 AM, Matt Marra <Matt.Marra@lonestarports.com> wrote:

> FYI. Please review. I'll review in parallel. Thanks. Matt
> Get Outlook for iOS
>
> **From:** Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>
> **Sent:** Wednesday, June 5, 2019 9:54 AM
> **To:** NNYGAARD@DISORBOCONSULT.COM
> **Cc:** Matt Marra
> **Subject:** Public Notice Draft - Lone Star Ports, LLC - Permit #157150
>
> We have attached a draft portion of the Notice of Receipt of Application and Intent to Obtain a Permit, which contains information relevant to your application. The public notice is a legally approved document and only the items listed below are subject to approval/correction. If draft approval is not received within 2 working days, the notice package will be filed with the Chief Clerks' office "As Is".

Please review the following information carefully and provide us with any corrections as soon as possible:

* facility address or driving directions to the facility
* hyperlink for the map to facility - please confirm the map shows the general vicinity of the facility
* contaminants list
* public viewing place (must be in the same county as the facility and may be required to have internet access)
* for renewal applications, check all previous permitting actions to make sure they are listed in example A
* contact person and contact information
* big or small business status (If your answers on your application indicate that you qualify as a small business, you will not receive Example B with your draft or final package)

If you determine that you must meet the alternative language notice requirements, you are responsible for ensuring that the publication in the alternative language is complete and accurate in that language. Spanish notice templates are available through the Air Permits Division Web site at www.tceq.texas.gov/permitting/air/nav/air_publicnotice.html. All italic notes should be replaced with the corresponding Spanish translations for the specific application and published in the alternative language publication.

Please do not publish until your application has been declared administratively complete or you may be required to re-publish. Once declared administratively complete you will receive an email containing an administratively complete letter and public notice package. Then we will file the original notice package with the Chief Clerk for mailing.

Please reply to send approval via e-mail.

Your prompt response is appreciated.

Shelia Glaspie-Felix
Air Permit Initial Review Team
Air Permits Division
Texas Commission on Environmental Quality
Phone (512) 239-1210
Fax (512) 239-4500
shelia.glaspie-felix@tceq.texas.gov

<PN1 PROJ302197 PRMT157150 draft.docx>

Shelia Glaspie-Felix

From: Matt Marra <Matt.Marra@lonestarports.com>
Sent: Wednesday, June 5, 2019 9:58 AM
To: Shelia Glaspie-Felix
Subject: Re: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

Thank you, Shelia. -Matt

Get Outlook for iOS

From: Shelia Glaspie-Felix <shelia.glaspie-felix@tceq.texas.gov>
Sent: Wednesday, June 5, 2019 9:54:45 AM
To: NNYGAARD@DISORBOCONSULT.COM
Cc: Matt Marra
Subject: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

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Your prompt response is appreciated.

Shelia Glaspie-Felix
Air Permit Initial Review Team
Air Permits Division
Texas Commission on Environmental Quality

Phone (512) 239-1210
Fax (512) 239-4500
shelia.glaspie-felix@tceq.texas.gov

Shelia Glaspie-Felix

From: Joe Kupper <jkupper@disorboconsult.com>
Sent: Wednesday, June 5, 2019 10:02 AM
To: Shelia Glaspie-Felix
Subject: Automatic reply: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

I will be out of the office on vacation through Monday June 10. If you need to speak to someone before my return you can call Jesse Lovegren at 512-961-4471

Thanks, Joe

Shelia Glaspie-Felix

From: Shelia Glaspie-Felix
Sent: Wednesday, June 5, 2019 10:01 AM
To: 'jkupper@disorboconsult.com'
Subject: FW: Public Notice Draft - Lone Star Ports, LLC - Permit #157150
Attachments: PN1 PROJ302197 PRMT157150 draft.docx

Mr. Nygaard's email states that he will be out of the office, please ensure that a response is submitted.

Thank you.
Shelia Glaspie-Felix

From: Shelia Glaspie-Felix
Sent: Wednesday, June 5, 2019 9:55 AM
To: NNYGAARD@DISORBOCONSULT.COM
Cc: MATT.MARRA@LONESTARPORTS.COM
Subject: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

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Your prompt response is appreciated.

Shelia Glaspie-Felix
Air Permit Initial Review Team

Air Permits Division
Texas Commission on Environmental Quality
Phone (512) 239-1210
Fax (512) 239-4500
shelia.glaspie-felix@tceq.texas.gov

Shelia Glaspie-Felix

From: Neal Nygaard <nnygaard@disorboconsult.com>
Sent: Wednesday, June 5, 2019 9:55 AM
To: Shelia Glaspie-Felix
Subject: Automatic reply: Public Notice Draft - Lone Star Ports, LLC - Permit #157150

I am currently out of the office and will return on June 14th. If you need immediate assistance, please contact Shanon DiSorbo at 713-955-1221 or Joe Kupper at 512-693-4186.

Shelia Glaspie-Felix

From: Shelia Glaspie-Felix
Sent: Wednesday, June 5, 2019 9:55 AM
To: NNYGAARD@DISORBOCONSULT.COM
Cc: MATT.MARRA@LONESTARPORTS.COM
Subject: Public Notice Draft - Lone Star Ports, LLC - Permit #157150
Attachments: PN1 PROJ302197 PRMT157150 draft.docx

We have attached a draft portion of the Notice of Receipt of Application and Intent to Obtain a Permit, which contains information relevant to your application. The public notice is a legally approved document and only the items listed below are subject to approval/correction. If draft approval is not received within 2 working days, the notice package will be filed with the Chief Clerks' office "As Is". Please review the following information carefully and provide us with any corrections as soon as possible:

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* contact person and contact information
* big or small business status (If your answers on your application indicate that you qualify as a small business, you will not receive Example B with your draft or final package)

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Please reply to send approval via e-mail.

Your prompt response is appreciated.

Shelia Glaspie-Felix
Air Permit Initial Review Team
Air Permits Division
Texas Commission on Environmental Quality
Phone (512) 239-1210
Fax (512) 239-4500
shelia.glaspie-felix@tceq.texas.gov

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

EXAMPLE A

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN AIR PERMIT

PROPOSED AIR QUALITY PERMIT NUMBER 157150

APPLICATION Lone Star Ports, LLC has applied to the Texas Commission on Environmental Quality (TCEQ) for: Issuance of Permit 157150

This application would authorize construction of the Harbor Island Marine Terminal. The applicant has provided the following driving directions: adjacent to Highway 361 and northeast of Ferry Landing, Port Aransas, Nueces County, Texas 78336. This application is being processed in an expedited manner, as allowed by the commission's rules in 30 Texas Administrative Code, Chapter 101, Subchapter J. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application. http://www.tceq.texas.gov/assets/public/hb610/index.html?lat=27.851111&lng=-97.071666&zoom=13&type=r. The facility will emit the following contaminants: carbon monoxide, hydrogen sulfide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less and sulfur dioxide.

This application was submitted to the TCEQ on May 31, 2019. The application will be available for viewing and copying at the TCEQ central office, the TCEQ Corpus Christi regional office, and the Anita and W.T. Neyland Public Library, 1230 Carmel Parkway, Corpus Christi, Nueces County, Texas beginning the first day of publication of this notice. The facility's compliance file, if any exists, is available for public review in the Corpus Christi regional office of the TCEQ.

The executive director has determined the application is administratively complete and will conduct a technical review of the application.

PUBLIC COMMENT/PUBLIC MEETING You may submit public comments, or request a public meeting or a contested case hearing to the Office of the Chief Clerk at the address below. The TCEQ will consider all public comments in developing a final decision on the application. After the deadline for public comments, the executive director will prepare a response to all public comments.

The purpose of a public meeting is to provide the opportunity to submit comments or ask questions about the application. A public meeting about the application will be held if the executive director determines that there is a significant degree of public interest in the application, if requested by an interested person, or if requested by a local legislator. A public meeting is not a contested case hearing.

After technical review of the application is complete, the executive director may prepare a draft permit and will issue a preliminary decision on the application. Notice of Application and Preliminary Decision for an Air Quality Permit will then be published and mailed to those who made comments, submitted hearing requests or are on the mailing list for this application. That notice will contain the final deadline for submitting public comments.

OPPORTUNITY FOR A CONTESTED CASE HEARING You may request a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court. A contested case hearing will only be granted based on disputed issues of fact that are relevant and material to the Commission's decision. Further, the Commission will only grant a hearing on those issues submitted during the public comment period and not withdrawn. **The deadline to submit a request for a contested case hearing is 30 days after newspaper notice is published. If a request is timely filed, the deadline for requesting a contested case hearing will be extended to 30 days after the mailing of the response to comments.**

A person who may be affected by emissions of air contaminants from the facility is entitled to request a hearing. If requesting a contested case hearing, you must submit the following: (1) your name (or for a group or

association, an official representative), mailing address, and daytime phone number; (2) applicant's name and permit number; (3) the statement "[I/we] request a contested case hearing"; (4) a specific description of how you would be adversely affected by the application and air emissions from the facility in a way not common to the general public; (5) the location and distance of your property relative to the facility; (6) a description of how you use the property which may be impacted by the facility; and (7) a list of all disputed issues of fact that you submit during the comment period. If the request is made by a group or an association, one or more members who have standing to request a hearing must be identified by name and physical address. The interests the group or association seeks to protect must also be identified. You may also submit your proposed adjustments to the application/permit which would satisfy your concerns.

If a hearing request is timely filed, following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for contested case hearing to the Commissioners for their consideration at a scheduled Commission meeting. The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material air quality concerns submitted during the comment period.** Issues such as property values, noise, traffic safety, and zoning are outside of the Commission's jurisdiction to address in this proceeding.

MAILING LIST In addition to submitting public comments, you may ask to be placed on a mailing list to receive future public notices for this specific application by sending a written request to the Office of the Chief Clerk at the address below.

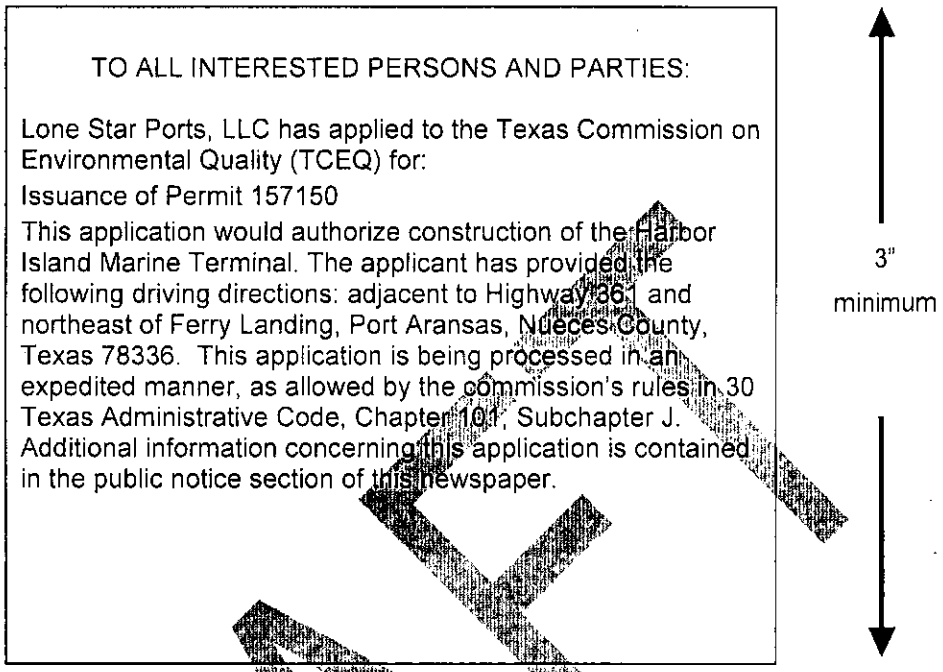
AGENCY CONTACTS AND INFORMATION Public comments and requests must be submitted either electronically at www14.tceq.texas.gov/epic/eComment/, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the Public Education Program toll free at 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Lone Star Ports, LLC, 14 Birchwood Park Place, The Woodlands, Texas 77382-2026 or by calling Mr. Neal Nygaard, Chief Operating Officer, Principal, at (713) 955-1221.

Notice Issuance Date:

Example B

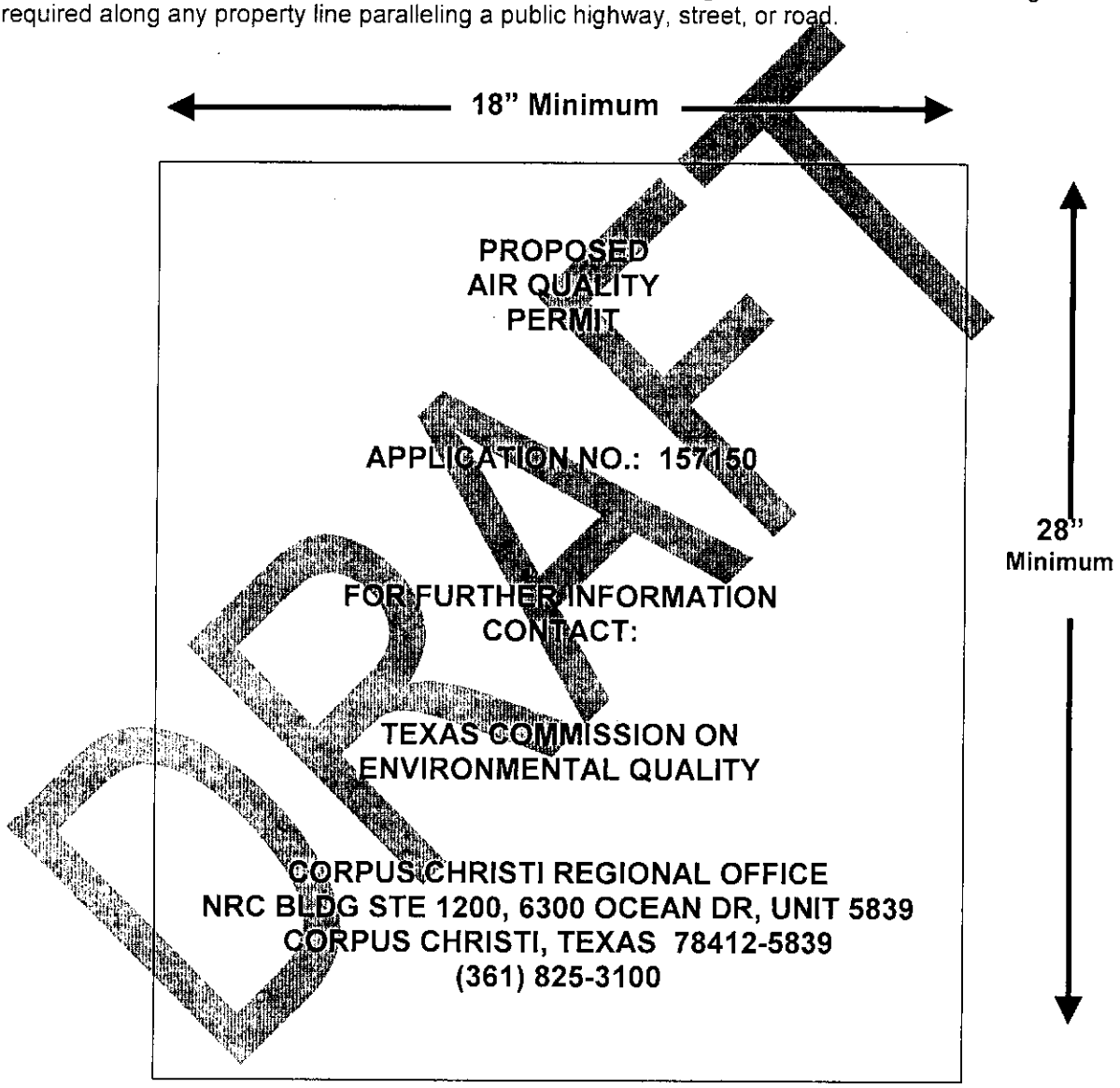
Publication Elsewhere in the Newspaper:



Example C

Sign Posting

Sign(s) must be in place on day of publication of first newspaper notice **and must remain in place and the lettering must be legible during that designated comment period (30 days). It is recommended that the signs remain in place until 30 days after the last newspaper publication of the second notice** (either English or alternate language notice, whichever is later). Note - The information shown is an example only. It is your responsibility to verify that the appropriate information pertaining to your application is accurate. Each sign placed at the site must be located within 10 feet of each (every) property line paralleling a public highway, street or road. Signs must be visible from the street and spaced at not more than 1,500-foot intervals. A minimum of one sign, but not more than three signs shall be required along any property line paralleling a public highway, street, or road.



Sign(s) must be placed at whatever height above the ground is necessary for sign(s) to be 100% visible from the street.

WHITE BACKGROUND WITH BLACK LETTERS

All lettering must be no less than 1-1/2 inch block printed capitals.

Shelia Glaspie-Felix

From:	Joe Kupper <jkupper@disorboconsult.com>
Sent:	Sunday, June 2, 2019 7:47 AM
To:	APIRT
Cc:	Neal Nygaard
Subject:	Lone Start Ports, LLC - Permit Number TBD - NSR Permit Application
Attachments:	EMEW Lone Star Ports.xlsx; fig2.pdf; Fig1.pdf; fig3.pdf
Categories:	Shelia

Attached is the EMEW and attachments for the project referenced above.

Electronic modeling files can be found at the following link:
https://disorboconsult.box.com/s/uanmvb65y9om1e797yhmnt74leod50hd

Joe M. Kupper, PE
Manager-Austin Office, *Principal*

DiSorbo Consulting, LLC
8501 N. MoPac Expy., Suite 300 | Austin, Texas 78759

Direct: 512-693-4186 | Mobile: 512-940-5516
Email: jkupper@disorboconsult.com | Fax: 512-279-3118
www.disorboconsult.com

libraries.org

A directory of libraries throughout the world

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- Jobs
- Procurement
- Member Login »

search

Anita and W.T. Neyland Public Library

Corpus Christi, TX

Address: 1230 Carmel Pkwy
Corpus Christi, Texas
78411-2908
United States

County: Nueces

Region: South Texas

Phone: 361-853-9961

Connect to: Library Web Site✓ Online Catalog

Library details: Anita and W.T. Neyland Public Library is a **Public** library.
This library is affiliated with **Corpus Christi Public Libraries** (**view map**) .

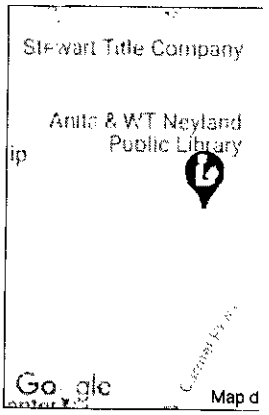
Permalink: **https://librarytechnology.org/library/24699**
(Use this link to refer back to this listing.)

Organizational structure: This is a publicly funded and managed library.

See also: **Directory of Public Libraries in the United States**

See also: **Directory of Public Libraries in Texas**

Anita and W.T. Neyland Pı



map location

Technology Profile

	Product Name	Year Contracted
Current Automation System	**Koha -- ByWater Solutions**	2011
Previous Automation System	**Symphony**	2009
Previous Automation System	**Horizon**	2004
Previous Automation System	**Dynix**	1987

Identifiers

libraries.org ID	24699

Related Libraries

- Libraries located in **C Christi** (Texas)
- Libraries located in **N** (Texas)
- **View map of libra Nueces County**
- **all Public libs in T**
- **United States**
- **Automation system**

Texas Commission on Environmental Quality
Form PI-1 General Application for
Air Preconstruction Permit and Amendment
Page 1

Important Note: The agency requires that a Core Data Form be submitted on all incoming applications unless a Regulated Entity and Customer Reference Number have been issued and no core data information has changed. For more information regarding the Core Data Form, call (512) 239-5175 or go to www.tceq.texas.gov/permitting/central_registry/guidance.html.

Important Note: we strongly encourage you to utilize the NSR Application Workbook to improve your permitting timeline. The workbook can be found at www.tceq.texas.gov/permitting/air/guidance/newsourcereview/nsrapp-tools.html

Does your application include an NSR Application Workbook? If yes, you do not need to complete any other questions on this form as the information is contained within the workbook. Complete this question, sign the last page of the form, and provide the hard copy of the entire form with your application submittal.			☐ YES ☒ NO
Is this an application for a Readily Available Permit (RAP)? If yes, you do not need to complete any other questions on this form as the relevant information is contained within the RAP workbook. Complete this question, sign the last page of the form, and provide the hard copy of the entire form with your application submittal.			☐ YES ☒ NO
I. Applicant Information			
A. Company or Other Legal Name: Lone Star Ports, LLC			
Texas Secretary of State Charter/Registration Number (if applicable):			
B. Company Official Contact Information: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:) _____			
Name: Matt Marra			
Title: VP, Regulatory Compliance & Project Management			
Mailing Address: 14 Birchwood Park Place			
City: The Woodlands	State: TX	ZIP Code: 77382	
Telephone No.: 713-253-6948	Fax No.:		
Email Address: Matt.Marra@lonestarports.com			
All permit correspondence will be sent via electronic copies unless hard copies are specifically requested through regular mail. The company official must initial here if hard copy correspondence is requested. _____			
C. Technical Contact Name Information: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:) _____			
Name: Neal Nygaard			
Title: Chief Operating Officer, Principal			
Company Name: DiSorbo Consulting, LLC			
Mailing Address: 1001 Louisiana, Suite 3250			
City: Houston	State: TX	ZIP Code: 77002	
Telephone No.: 713-955-1221	Fax No.: 713-955-1201		
Email Address: nnygaard@disorboconsult.com			
D. Site Name: Harbor Island Marine Terminal			

302197
157150

Texas Commission on Environmental Quality
Form PI-1 General Application for
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Page 2

I.	**Applicant Information (continued)**	
E.	Area Name/Type of Facility: Marine Terminal	☒ Permanent ☐ Portable
For portable units, please provide the serial number of the equipment being authorized below.		
Serial No:	Serial No:	
F.	Principal Company Product or Business:	
Principal Standard Industrial Classification Code (SIC): 4612		
Principal North American Industry Classification System (NAICS): 486110		
G.	Projected Start of Construction Date: TBD	
Projected Start of Operation Date: TBD		
H.	Facility and Site Location Information (If no street address, provide clear driving directions to the site in writing.):	
Street Address:		
Property is adjacent to Highway 361 and North East of Ferry Landing		
City/Town: Port Aransas	County: Nueces	ZIP Code: 78336
Latitude (nearest second): 27°51'04.83" N	Longitude (nearest second): 97°04'18.60" W	
I.	Account Identification Number (leave blank if new site or facility):	
J.	Core Data Form	
Is the Core Data Form (Form 10400) attached? If No, provide customer reference number and regulated entity number (complete K and L).		☒ YES ☐ NO
K.	Customer Reference Number (CN): TBD	
L.	Regulated Entity Number (RN): TBD	
II.	**General Information**	
A.	Is confidential information submitted with this application? If Yes, mark each confidential page confidential in large red letters at the bottom of each page.	☒ YES ☐ NO ✓
B.	Is this application in response to an investigation, notice of violation, or enforcement action?	☐ YES ☒ NO
If Yes, attach a copy of any correspondence from the agency and provide the RN in section I.L. above.		
C.	Number of New Jobs: TBD	
D.	Provide the name of the State Senator and State Representative and district numbers for this facility site:	
State Senator: Lois W. Kolkhorst ✓		District No.: 18 ✓
State Representative: Todd A. Hunter ✓		District No.: 32 ✓

III. Type of Permit Action Requested				
A. Mark the appropriate box indicating what type of action is requested.				
☒ Initial	☐ Amendment	☐ Revision (30 TAC § 116.116(e)		
☐ Change of Location	☐ Relocation			
B. Permit Number (if existing):				
C. Permit Type: Mark the appropriate box indicating what type of permit is requested. *(check all that apply, skip for change of location)*				
☒ Construction	☐ Flexible	☐ Multiple Plant	☐ Nonattainment	☐ Plant-Wide Applicability Limit
☐ Prevention of Significant Deterioration (PSD)	☐ Hazardous Air Pollutant Major Source			
☐ PSD for Greenhouse Gases (GHGs)	☐ Other:_____			
D. Is a permit renewal application being submitted in conjunction with this amendment in accordance with 30 TAC § 116.315(c).				☐ YES ☒ NO
E. Is this application for a change of location of previously permitted facilities?				☐ YES ☒ NO
If Yes, complete all parts of III.E.				
Current Location of Facility (If no street address, provide clear driving directions to the site in writing.):				
Street Address:				
City:	County:	ZIP Code:		
Proposed Location of Facility (If no street address, provide clear driving directions to the site in writing.):				
Street Address:				
City:	County:	ZIP Code:		
Will the proposed facility, site, and plot plan meet all current technical requirements of the permit special conditions? If "NO," attach detailed information.				☐ YES ☐ NO
Is the site where the facility is moving considered a major source of criteria pollutants or HAPs?				☐ YES ☐ NO

III. Type of Permit Action Requested *(continued)*	
F. Are there any standard permits, standard exemptions, or PBRs to be incorporated by reference?	☐ YES ☒ NO
If Yes, list any PBR, standard exemptions, or standard permits that need to be referenced. *(attach pages as needed)*	
Are there any PBR, standard exemptions, or standard permits associated to be incorporated by consolidation?	☐ YES ☒ NO
If Yes, list any PBR, standard exemptions, or standard permits that need to be consolidated. *(attach pages as needed)*	
If Yes, are emission calculations, a BACT analysis, and an impacts analysis attached to this application for any authorization to be incorporated by consolidation.	☒ YES ☐ NO
G. Are you permitting planned maintenance, startup, and shutdown emissions?	☒ YES ☐ NO
If Yes, attach information on any changes to emissions under this application as specified in VII and VIII.	
H. Federal Operating Permit Requirements (30 TAC Chapter 122 Applicability)	
Is this facility located at a site required to obtain a federal operating permit?	☒ YES ☐ NO ☐ To Be Determined
If Yes, list all associated permit number(s), attach pages as needed).	
Identify the requirements of 30 TAC Chapter 122 that will be triggered if this application is approved.	
☐ FOP Significant Revision ☐ FOP Minor ☐ Application for an FOP Revision	
☐ Operational Flexibility/Off-Permit Notification ☐ Streamlined Revision for GOP	
☒ To be Determined ☐ None	
Identify the type(s) of FOP(s) issued and/or FOP application(s) submitted/pending for the site. ***(check all that apply)***	
☐ GOP Issued ☐ GOP application/revision application submitted or under APD review	
☐ SOP Issued ☐ SOP application/revision application submitted or under APD review	

IV. Public Notice Applicability	
A. Is this a new permit application or a change of location application?	☒ YES ☐ NO
B. Is this application for a concrete batch plant? If Yes, complete all parts of V.D.	☐ YES ☒ NO
C. Is this an application for a major modification of a PSD, nonattainment, FCAA § 112(g) permit, or exceedance of a PAL permit?	☐ YES ☒ NO
D. If this is an application for emissions of GHGs, select one of the following: ☐ Separate Public Notice (requires a separate application) ☐ Consolidated Public Notice	
E. Is this application for a PSD or major modification of a PSD located within 100 kilometers or less of an affected state or Class I Area?	☐ YES ☒ NO
If Yes, list the affected state(s) and/or Class I Area(s).	

State	**Class I Area**

F. Is this a state permit amendment application? If Yes, complete all parts of IV.F.	☐ YES ☒ NO
Is there any change in character of emissions in this application?	☐ YES ☐ NO
Is there a new air contaminant in this application?	☐ YES ☐ NO
Do the facilities handle, load, unload, dry, manufacture, or process grain, seed, legumes, or vegetables fibers (agricultural facilities)?	☐ YES ☐ NO
List the total annual emission increases associated with the application ***(List all that apply and attach additional sheets as needed):***	
Volatile Organic Compounds (VOC):	
Sulfur Dioxide (SO_2):	
Carbon Monoxide (CO):	
Nitrogen Oxides (NO_x):	
Particulate Matter (PM):	
PM 10 microns or less (PM_{10}):	
PM 2.5 microns or less ($PM_{2.5}$):	
Lead (Pb):	
Hazardous Air Pollutants (HAPs):	
Below list other speciated air contaminants not listed above:	

V. Public Notice Information *(complete if applicable)*		
A. Responsible Person: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:) _____		
Name: Matt Marra		
Title: VP, Regulatory Compliance & Project Management		
Company Name: Lone Star Ports, LLC		
Mailing Address: 14 Birchwood Park Place		
City: The Woodlands	State: TX	ZIP Code: 77382
Telephone No.: 713-253-6948	Fax No.:	
Email Address: Matt.Marra@lonestarports.com		
B. Technical Contact: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:) _____		
Name: Neal Nygaard		
Title: Chief Operating Officer, Principal		
Mailing Address: 1001 Louisiana, Suite 3250		
City: Houston	State: TX	ZIP Code: 77002
Telephone No.: 713-955-1221	Fax No.: 713-955-1201	
Email Address: nnygaard@disorboconsult.com ✓		
C. Name of the Public Place: Anita & W.T. Neyland Public Library		
Physical Address *(No P.O. Boxes)*: 1230 Carmel Pkwy ✓		
City: Corpus Christi ✓	County: Nueces ✓	ZIP Code: 78411 ✓
The public place has granted authorization to place the application for public viewing and copying.		☒ YES ☐ NO ✓
The public place has internet access available for the public.		☒ YES ☐ NO
D. Concrete Batch Plants, PSD, and Nonattainment Permits		
County Judge Information (For Concrete Batch Plants and PSD and/or Nonattainment Permits) for this facility site.		
The Honorable:		
Mailing Address:		
City:	State:	ZIP Code:

V. Public Notice Information *(complete if applicable) (continued)*		
D. Concrete Batch Plants, PSD, and Nonattainment Permits ***(continued)***		
For Concrete Batch Plants		
Is the facility located in a municipality or an extraterritorial jurisdiction of a municipality?		☐ YES ☐ NO
Presiding Officers Name(s):		
Title:		
Mailing Address:		
City:	State:	ZIP Code:
Provide the name, mailing address of the chief executive for the location where the facility is or will be located.		
Chief Executive:		
Mailing Address:		
City:	State:	ZIP Code:
Provide the name, mailing address of the Indian Governing Body for the location where the facility is or will be located.		
Indian Governing Body:		
Mailing Address:		
City:	State:	ZIP Code:
Identify the Federal Land Manager(s) for the location where the facility is or will be located.		
Federal Land Manager(s):		
E. Bilingual Notice		
Is a bilingual program required by the Texas Education Code in the School District?		☐ YES ☒ NO ✓
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district?		☐ YES ☒ NO
If Yes, list which languages are required by the bilingual program?		
VI. Small Business Classification *(Required)*		
A. Does this company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?		☐ YES ☒ NO ✓
B. Is the site a major stationary source for federal air quality permitting?		☐ YES ☒ NO
C. Are the site emissions of any regulated air pollutant greater than or equal to 50 tpy?		☒ YES ☐ NO
D. Are the site emissions of all regulated air pollutants combined less than 75 tpy?		☐ YES ☒ NO

VII. Technical Information

A. The following information must be submitted with your Form PI-1
(this is just a checklist to make sure you have included everything)

☒ Current Area Map
☒ Plot Plan
☐ Existing Authorizations
☒ Process Flow Diagram
☒ Process Description
☒ Maximum Emissions Data and Calculations
☒ Air Permit Application Tables
☒ Table 1(a) (Form 10153) entitled, Emission Point Summary
☐ Table 2 (Form 10155) entitled, Material Balance
☐ Other equipment, process or control device tables

B. Are any schools located within 3,000 feet of this facility?	☐ YES ☒ NO

C. Maximum Operating Schedule: 8760

Hour(s): 24	Day(s): 7
Week(s): 52	Year(s):

Seasonal Operation? If Yes, please describe in the space provide below.	☐ YES ☒ NO

Hour(s):	Day(s):
Week(s):	Year(s):

D. Have the planned MSS emissions been previously submitted as part of an emissions inventory?	☐ YES ☒ NO

Provide a list of each planned MSS facility or related activity and indicate which years the MSS activities have been included in the emissions inventories. Attach pages as needed.

MSS Facility(s) or Activity	Year(s)

VII.	**Technical Information *(continued)***	
E.	Does this application involve any air contaminants for which a disaster review is required?	☐ YES ☒ NO
If Yes, list which air contaminants require a disaster review		
F.	Does this application include a pollutant of concern on the Air Pollutant Watch List (APWL)?	☐ YES ☒ NO
G.	Are emissions of GHGs associated with this project subject to PSD?	☐ YES ☒ NO
If Yes, provide a list of all associated applications for this project:		
H.	Does this project require an impacts analysis?	☒ YES ☐ NO
If No, is a description of why an impacts analysis is not required attached?		☐ YES ☐ NO
For Non-Federal Projects		
Is an attachment included detailing how the project meets all applicable impacts requirements, including which MERA step was met (if applicable), how the modeling was conducted (if applicable), and the results demonstrating compliance with all applicable impacts requirements following the Initial Modeling Summary guidance document?		☒ YES ☐ NO
Note: for projects with modeling, utilizing APD's Electronic Modeling Evaluation Workbook to complete this analysis will help streamline the modeling review and is strongly encouraged.		
VIII.	**State Regulatory Requirements** **Applicants must demonstrate compliance with all applicable state regulations to obtain a permit or amendment.** *The application must contain detailed attachments addressing applicability or non-applicability; identify state regulations; show how requirements are met; and include compliance demonstrations.*	
A.	Will the emissions from the proposed facility protect public health and welfare, and comply with all rules and regulations of the TCEQ?	☒ YES ☐ NO
B.	Will emissions of significant air contaminants from the facility be measured?	☒ YES ☐ NO
C.	Is the Best Available Control Technology (BACT) demonstration attached?	☒ YES ☐ NO
D.	Will the proposed facilities achieve the performance represented in the permit application as demonstrated through recordkeeping, monitoring, stack testing, or other applicable methods?	☒ YES ☐ NO
IX.	**Federal Regulatory Requirements** **Applicants must demonstrate compliance with all applicable federal regulations to obtain a permit or amendment.** *The application must contain detailed attachments addressing applicability or non-applicability; identify federal regulation subparts; show how requirements are met; and include compliance demonstrations.*	
A.	Does Title 40 Code of Federal Regulations Part 60, (40 CFR Part 60) New Source Performance Standard (NSPS) apply to a facility in this application?	☒ YES ☐ NO
B.	Does 40 CFR Part 61, National Emissions Standard for Hazardous Air Pollutants (NESHAP) apply to a facility in this application?	☐ YES ☒ NO

IX.	**Federal Regulatory Requirements *(continued)*** **Applicants must demonstrate compliance with all applicable federal regulations to obtain a permit or amendment.** *The application must contain detailed attachments addressing applicability or non-applicability; identify federal regulation subparts; show how requirements are met; and include compliance demonstrations.*	
C.	Does 40 CFR Part 63, Maximum Achievable Control Technology (MACT) standard apply to a facility in this application?	☒ YES ☐ NO
D.	Do nonattainment permitting requirements apply to this application?	☐ YES ☒ NO ✓
E.	Do prevention of significant deterioration permitting requirements apply to this application?	☐ YES ☒ NO ✓
F.	Do Hazardous Air Pollutant Major Source [FCAA § 112(g)] requirements apply to this application?	☐ YES ☒ NO ✓
G.	Is a Plant-wide Applicability Limit permit being requested?	☐ YES ☒ NO ✓
X.	**Professional Engineer (P.E.) Seal**	
Is the estimated capital cost of the project greater than $2 million dollars?		☒ YES ☐ NO
If Yes, submit the application under the seal of a Texas licensed P.E.		
XI.	**Permit Fee Information**	
Check, Money Order, Transaction Number, ePay Voucher Number:		
Fee Amount: $ 75,000		
Paid online?		☐ YES ☒ NO
Company name on check: Lone Star Ports, LLC		
Is a Table 30 (Form 10196) entitled, Estimated Capital Cost and Fee Verification, attached?		☒ YES ☐ NO ☐ N/A
XII.	**Delinquent Fees and Penalties**	
This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ is paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ website at: www.tceq.texas.gov/agency/financial/fees/delin.		
XIII.	**Signature**	
The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382, the Texas Clean Air Act (TCAA) the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.		
Name: Matt Marra		
Signature: _____ *Original Signature Required*		
Date: 5/29/19		

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

MAY 31 2019
APIRT

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN		RN

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

Lone Star Ports, LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0803268735	32070114759	83-2345223	

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☐ Yes ☒ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following:*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:

1414 Valero Way

City	State	ZIP	ZIP + 4
Corpus Christi	TX	78410	

16. Country Mailing Information *(if outside USA)* | **17. E-Mail Address** *(if applicable)*

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(361) 693-2100		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC.)

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Harbor Island Marine Terminal

23. Street Address of the Regulated Entity: *(No PO Boxes)*							
	City		State		ZIP		ZIP + 4	
24. County							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Property is adjacent to Highway 361 and Nort East of Ferry Landing				
26. Nearest City			State	Nearest ZIP Code	
Port Aransas			TX	78336	
27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
27	51	04.83	97	04	18.60

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
4612		486110	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Marine Loading

34. Mailing Address:	1414 Valero Way							
	City	Corpus Christi	State	TX	ZIP	78410	ZIP + 4	
35. E-Mail Address:								

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
( ) -		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☒ Emissions Inventory Air	☒ Industrial Hazardous Waste
☐ Municipal Solid Waste	☒ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☒ Storm Water	☒ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	James F. Wedemeier II	41. Title:	Senior Staff Consultant

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(713) 955-1223		(713) 955-1201	jwedemeier@disorboconsult.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Lone Star Ports, LLC	Job Title:	VP, Regulatory Compliance & Project Management
Name*(In Print)*:	Matt Marra	Phone:	(713) 253-6948
Signature:		Date:	5/29/19

Texas Commission on Environmental Quality
Table 30
Estimated Capital Cost and Fee Verification

Include estimated cost of the equipment and services that would normally be capitalized according to standard and generally accepted corporate financing and accounting procedures. Tables, checklists, and guidance documents pertaining to air quality permits are available from the Texas Commission on Environmental Quality, Air Permits Division Web site at **www.tceq.texas.gov/nav/permits/air_permits.html**.

I.	**Direct Costs [30 TAC § 116.141(c)(1)]**	**Estimated Capital Cost**
A.	A process and control equipment not previously owned by the applicant and not currently authorized under this chapter.	$-
B.	Auxiliary equipment, including exhaust hoods, ducting, fans, pumps, piping, conveyors, stacks, storage tanks, waste disposal facilities, and air pollution control equipment specifically needed to meet permit and regulation requirements.	$-
C.	Freight charges	$-
D.	Site preparation, including demolition, construction of fences, outdoor lighting, road, and parking areas.	$-
E.	Installation, including foundations, erection of supporting structures, enclosures or weather protection, insulation and painting, utilities and connections, process integration, and process control equipment.	$-
F.	Auxiliary buildings, including materials storage, employee facilities, and changes to existing structures.	$-
G.	Ambient air monitoring network.	$-
II.	**Indirect Costs [30 TAC § 116.141(c)(2)]**	**Estimated Capital Cost**
A.	Final engineering design and supervision, and administrative overhead.	$-
B.	Construction expense, including construction liaison, securing local building permits, insurance, temporary construction facilities, and construction clean-up.	$-
C.	Contractor's fee and overhead.	$-
	Total Estimated Capital Cost	$ > $25,000,000

Texas Commission on Environmental Quality
Table 30
Estimated Capital Cost and Fee Verification

I certify that the total estimated capital cost of the project as defined in 30 TAC § 116.141 is equal to or less than the above figure. I further state that I have read and understand Texas Water Code § 7.179, which defines Criminal Offenses for certain violations, including intentionally or knowingly making, or causing to be made, false material statements or representations.

Company Name: Lone Star Ports, LLC

Company Representative Name *(please print)*: Matt Marra

Title: VP, Regulatory Compliance & Project Management

Company Representative Signature:

Estimated Capital Cost		Permit Application Fee	GHG*/PSD/Nonattainment Application Fee
Less than	$300,000	$900 (minimum fee)	$3,000 (minimum fee)
$300,000 to	$25,000,000	0.30% of capital cost	
$300,000 to	$7,500,000		1.0% of capital cost
Greater than	$25,000,000	$75,000 (maximum fee)	
Greater than	$7,500,000		$75,000 (maximum fee)

*A single PSD fee (calculated on the capital cost of the project per 30 TAC § 116.163) will be required for all of the associated permitting actions for a GHG PSD project. Other NSR permit fees related to the project that have already been remitted to the TCEQ can be subtracted when determining the appropriate fee to submit with the GHG PSD application; please identify these other fees in the GHG PSD permit application.

Permit Application Fee (from table above) = $ 75,000 Date: 5/29/19

DiSorbo
Environmental Consulting Firm

1001 Louisiana Street | Suite 3250 | Houston, TX 77002
713-955-1230 (p) | 713-955-1201(f) | www.disorboconsult.com

May 30, 2019

Mr. Johnny Bowers
Texas Commission on Environmental Quality
Air Permits Initial Review Team-MC161
12100 Park 35 Circle
Austin, TX, 78753

Re: New Source Review Permit Application
Lone Star Ports, LLC
Harbor Island Marine Terminal
Port Aransas, Nueces County

Dear Mr. Bowers:

On behalf of Lone Star Ports, LLC (Lone Star), DiSorbo Consulting, LLC is submitting the enclosed permit application to authorize the construction and operation of a marine terminal capable of loading crude oil and/or crude oil condensates onto ocean going ships/barges and inland barges via two loading berths near Port Aransas, Texas.

Lone Star requests this application to be reviewed via the expedited permitting process as the facilities included in this application will benefit the economy by providing economic opportunities to both third party contractors and the local communities near Port Aransas, TX. If you have any questions or require additional information, please feel free to contact me at (713) 955-1221 or Mr. Matt Marra of Lone Star at 713-253-6948.

Sincerely,

DiSorbo Consulting, LLC

Neal A. Nygaard
Chief Operating Officer, Principal

EXPEDITE

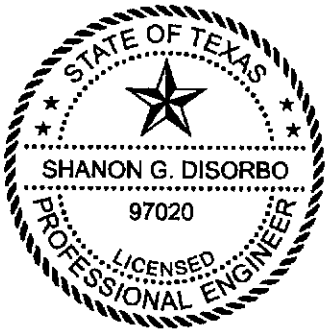
Enclosures

cc: Ms. Kelly Ruble, Air Section Manager, TCEQ Region 14, Corpus Christi, TX

New Source Review Permit Application
Texas Commission on Environmental Quality

Lone Star Ports, LLC
Port Aransas, Nueces County, Texas

May 2019



Shanon G. DiSorbo, P.E.
DiSorbo Consulting, LLC
TBPE# 15665

DiSorbo
Environmental Consulting Firm

1001 Louisiana Street | Suite 3250 | Houston, TX 77002
713-955-1230 (p) | 713-955-1201(f) | www.disorboconsult.com

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Appendices

Section 1
Project Information

1.1 Introduction

Lone Star Ports, LLC (Lone Star) is planning to construct and operate a marine terminal on Harbor Island near Port Aransas, Nueces County, Texas. The Harbor Island Marine Terminal will receive and load crude oil and/or crude oil condensates onto ocean going ships/barges and inland barges.

This application provides all of the information necessary for the TCEQ to make the determination that the construction of the proposed facilities, discussed below, are authorized by 30 TAC Chapter 116.

1.2 Project Description

Lone Star proposes to construct and operate a marine terminal capable of loading crude oil and/or crude oil condensates onto ocean going ships/barges and inland barges via two loading berths. Vapors associated with the loading of crude oil and/or crude oil condensates will be collected and routed to a vapor control system which consists of eight vapor combustion units (VCUs). In addition, Lone Star proposes to construct two storage tanks to be utilized for pipeline relief and/or the storage of residual crude and/or crude oil condensate associated with loading operations. Also included in this application are piping components and maintenance, startup, and shutdown activities associated with the storage tanks and marine loading operations.

Table 1-1, at the end of this section, presents a summary of the project emissions compared to Prevention of Significant Deterioration (PSD) applicability thresholds. As shown Table 1-1, the project emissions are below the major source thresholds for all pollutants; therefore, PSD permitting does not apply to the facilities included in this application.

1.3 Application Organization

This application is organized into the following sections:

Section 1 presents the application objectives and organization.

Section 2 contains the TCEQ Core Data Form, TCEQ Form APD-EXP, TCEQ form PI-1 and Table 30; as well as a copy of the fee check.

Section 3 contains an Area Map showing the site location.

Section 4 contains a process description of the sources associated with this permit application for the proposed Harbor Island Marine Terminal.

Section 5 contains a discussion of the estimated emissions from the facilities included in this application.

Section 6 presents the BACT analysis for the facilities included in this application.

Section 7 addresses applicability of the federal Nonattainment New Source Review (NNSR) and Prevention of Significant Deterioration (PSD) permitting requirements.

Section 8 presents the General Application Requirements that address the applicability of state and federal air regulations.

Appendix A contains the detailed routine emission calculations for the facilities included in this application (Contains Confidential Information).

Appendix B contains detailed emission calculations for maintenance, startup, and shutdown (MSS) activities (Contains Confidential Information).

Appendix C contains the Air Quality Analysis for the facilities included in this application.

Table 1-1
Federal NSR Applicability Analysis Summary
Lone Star Ports, LLC
Harbor Island Marine Terminal
May 2019

EPN	Facility Description	VOC			NOx			CO			SO2			H2S		
		Baseline	Proposed	Project Increase	Baseline	Proposed	Project Increase	Baseline	Proposed	Project Increase	Baseline	Proposed	Project Increase	Baseline	Proposed	Project Increase
		tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy
BERTHCAP	Berth Loading Fugitives Emissions Cap	-	26.40	26.40	-	-	-	-	-	-	-	-	-	-	0.03	0.03
MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	-	48.59	48.59	-	59.03	59.03	-	118.06	118.06	-	90.48	90.48	-	0.48	0.48
50-1	Recycle Tank No. 1	-	1.60	1.60	-	-	-	-	-	-	-	-	-	-	0.001	0.001
50-2	Recycle Tank No. 2	-	1.60	1.60	-	-	-	-	-	-	-	-	-	-	0.001	0.001
T-COMB-1	Temporary Portable Combustion Unit	-	0.24	0.24	-	5.57	5.57	-	7.42	7.42	-	0.06	0.06	-	0.01	0.01
MSS	MSS Emissions Cap	-	0.53	0.53	-	0.63	0.63	-	0.84	0.84	-	0.00	0.00	-	0.03	0.03
FUG	Piping Fugitive Components	-	3.40	3.40	-	-	-	-	-	-	-	-	-	-	0.003	0.003
Project Increase (tpy)				*82.37*			*65.23*			*126.33*			*90.54*			*0.55*
Major Source Threshold (tpy)				*250*			*250*			*250*			*250*			*250*
Existing Major Source (Yes/No)				*No*			*No*			*No*			*No*			*No*
Project Major Source By Itself (Yes/No)				*No*			*No*			*No*			*No*			*No*
Federal Review Required (Yes/No)				*No*			*No*			*No*			*No*			*No*

Table 1-1
Federal NSR Applicability Analysis Summary
Lone Star Ports, LLC
Harbor Island Marine Terminal
May 2019

EPN	Facility Description	PM/PM10/PM2.5			CO2e		
		Baseline	Proposed	Project Increase	Baseline	Proposed	Project Increase
		tpy	tpy	tpy	tpy	tpy	tpy
BERTHCAP	Berth Loading Fugitives Emissions Cap	-	-	-	-	-	-
MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	-	4.40	4.40	-	87,491.97	87,491.97
50-1	Recycle Tank No. 1	-	-	-	-	-	-
50-2	Recycle Tank No. 2	-	-	-	-	-	-
T-COMB-1	Temporary Portable Combustion Unit	-	0.28	0.28	-	2,608	2,608
MSS	MSS Emissions Cap	-	0.78	0.78	-	1,607.65	1,607.65
FUG	Piping Fugitive Components	-	-	-	-	-	-
Project Increase (tpy)				*5.45*			*91,707*
Major Source Threshold (tpy)				*250*			*75,000*
Existing Major Source (Yes/No)				*No*			*No*
Project Major Source By Itself (Yes/No)				*No*			*No*
Federal Review Required (Yes/No)				*No*			*No*

Table 1-2
Emissions Summary
Lone Star Ports, LLC
Harbor Island Marine Terminal
May 2019

EPN	FIN	Name	VOC		NO_X		CO		$PM/PM_{10}/PM_{2.5}$		H_2S		SO_2		CO_2e[1]
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	tpy
BERTH-1	BERTH-1	Berth 1 Loading Fugitives	9.05	-	-	-	-	-	-	-	0.01	-	-	-	-
BERTH-2	BERTH-2	Berth 2 Loading Fugitives	9.05	-	-	-	-	-	-	-	0.01	-	-	-	-
BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	-	26.40	-	-	-	-	-	-	-	0.03	-	-	-
MVCU-1	MVCU-1	Controlled Loading Marine VCU No.1	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-2	MVCU-2	Controlled Loading Marine VCU No.2	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-3	MVCU-3	Controlled Loading Marine VCU No.3	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-4	MVCU-4	Controlled Loading Marine VCU No.4	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-5	MVCU-5	Controlled Loading Marine VCU No.5	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-6	MVCU-6	Controlled Loading Marine VCU No.6	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-7	MVCU-7	Controlled Loading Marine VCU No.7	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-8	MVCU-8	Controlled Loading Marine VCU No.8	12.53	-	12.53	-	25.05	-	0.93	-	0.13	-	11.79	-	-
MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	-	48.59	-	59.03	-	118.06	-	4.40	-	0.48	-	90.48	87,492
50-1	50-1	Recycle Tank No. 1	5.14	1.60	-	-	-	-	-	-	0.0004	0.001	-	-	-
50-2	50-2	Recylce Tank No. 2	5.14	1.60	-	-	-	-	-	-	0.0004	0.001	-	-	-
T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	2.00	0.24	3.00	5.57	4.00	7.42	0.15	0.28	0.02	0.01	1.88	0.06	2,608
MSS	MSS	MSS Emissions Cap	35.89	0.53	1.99	0.63	2.66	0.84	0.10	0.03	0.04	0.00	0.25	0.78	1,608
FUG	FUG	Piping Fugitive Components	0.78	3.40	-	-	-	-	-	-	0.00	0.00	-	-	-
		Total Emission Rates:	-	**82.37**	-	**65.23**	-	**126.33**	-	**4.71**	-	**0.52**	-	**91.32**	**91,707**

Section 2
Administrative Forms

This section contains the following forms and information:

- TCEQ Core Data Form
- TCEQ Form APD-EXP
- TCEQ Form PI-1
- Table 30
- Copy of Fee Payment

Section 3
Location Information

The Harbor Island Marine Terminal is located near Port Aransas, Nueces County. An Area Map indicating a 3,000 foot radius around the terminal is included as Figure 3-1.

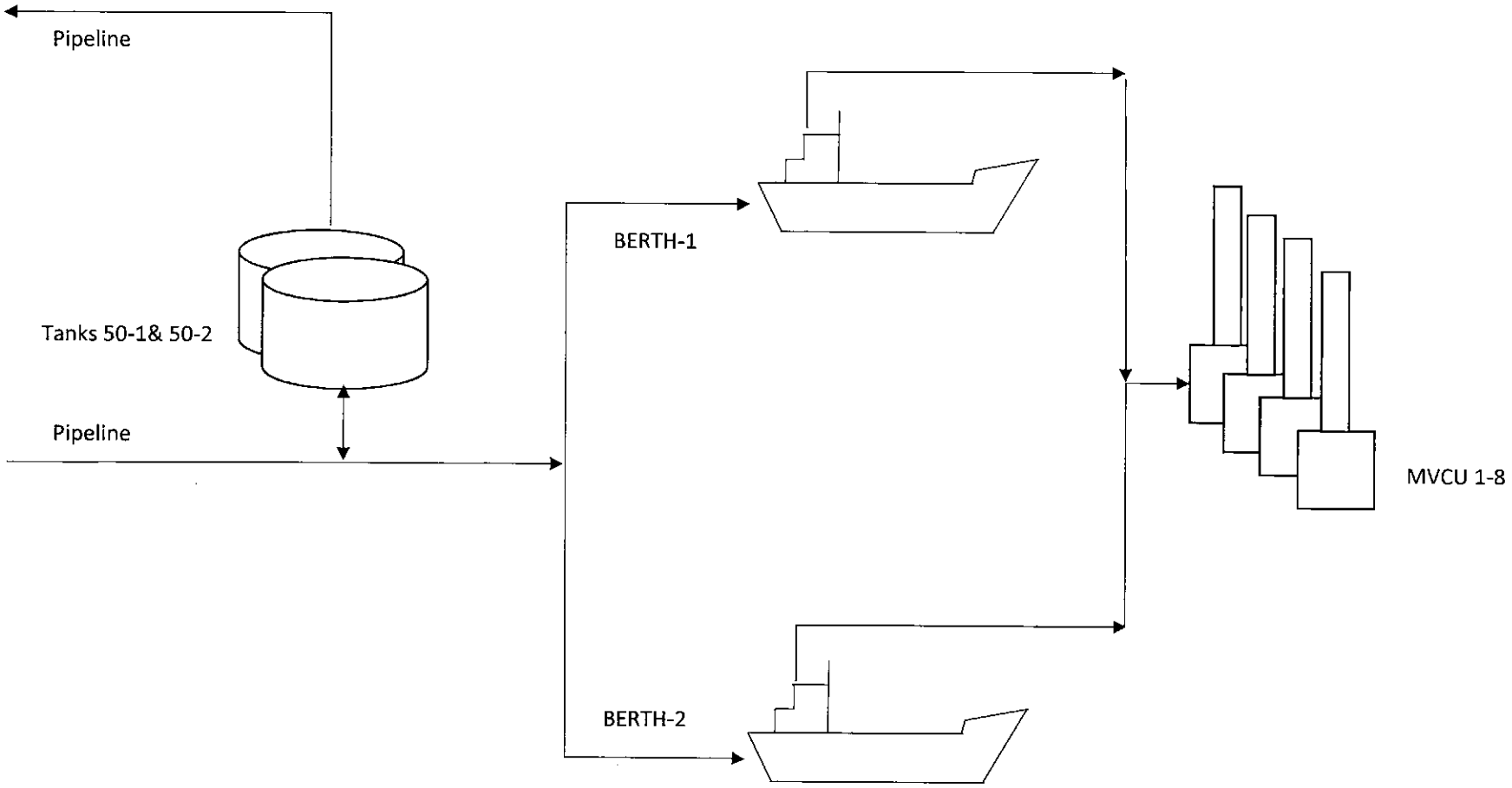
Lone Star Ports, LLC
Harbor Island Marine Terminal
Port Aransas, Texas

DiSorbo
Environmental Consulting Firm

Figure 3-1
Area Map

Section 4
Process Description

The Harbor Island Marine Terminal is a for-hire bulk liquid marine loading terminal. Crude oils and/or crude oil condensates are transferred through pipeline to the marine loading dock. A simplified process flow diagram for the facilities included in this application is included as Figure 4-1.



Lone Star Ports, LLC

Lone Star Ports, LLC
Harbor Island Marine Terminal
Port Aransas, Texas

DiSorbo
Environmental Consulting Firm

Figure 4-1
Process Flow

Section 5
Emission Calculations

The following describes the calculations used to determine the emission rates associated with each emission source category included in this permit application. A summary of the proposed emissions are included in Table 1(a) at the end of this section. Detailed emission calculations are presented in Appendices A and B of this application.

The terminal will handle a wide range of crude oils and/or crude oil condensates. The Reid Vapor Pressure (RVP) of the crude and/or crude oil condensates managed at the terminal vary from month to month; however, a maximum TVP of 11 psia is the basis for the proposed emission limits.

Lone Star proposes to establish emission caps for loading facilities rather than individual throughput limits due to the varying nature of crude oils and crude oil condensates and customer markets at the proposed terminal. Specifically, rather than limiting throughputs, Lone Star proposes to manage the loading facilities included in this application such that the permitted emission limits are not exceeded. Managing to the emissions caps allows Lone Star the operational flexibility to respond to market changes and customer demands.

5.1 Routine Emissions

The following describes the emission calculations associated with each routine emission source category in this permit application.

5.1.1 Storage Tank Emissions

For storage tanks, the emission calculations for routine working and breathing emissions are estimated using the calculations methods in *Compilation of Air Pollutant Emission Factors: Volume I Stationary Point and Area Sources* (AP-42, Fifth Edition, US EPA, November 2006 (hereafter referred to in this application as AP-42) Section 7.1. Short-term emission rates are calculated using AP-42 Section 7 equations using maximum temperature and vapor pressure.

In addition to routine IFR storage tank working and breathing emissions, routine IFR storage tank roof-landing events occur for periods of inventory control and product changes (EPNs: T-COMB-1). Floating roof landing emissions are estimated using the methods in Subsection 7.1.3.2.2 Roof

Landings of Section 7.1 Organic Liquid Storage Tanks of AP-42. For a given roof-landing event, total landing loss emissions are therefore the sum of the filling losses and the daily standing idle losses over the entire period that the roof remained landed. Landing losses are inherently episodic in nature and must be determined each time a tank's floating roof is landed.

Landing losses occur from floating roof tanks whenever the tank is drained to a level where its roof lands on its legs or other supports. When a floating roof lands on its supports or legs while the tank is being drained, the floating roof remains at the same height while the product level continues to lower. This creates a vapor space underneath the roof. Liquid remaining in the bottom of the tank provides a continuous source of vapors to replace those expelled by breathing (in the case of internal floating roof tanks) or wind action (in the case of external floating roof tanks). These emissions, referred to as standing idle losses (LSL), occur daily as long as the floating roof remains landed. Additional emissions occur when incoming stock liquid fills a tank with a landed roof. The incoming volume of liquid not only displaces an equivalent volume of vapors from below the floating roof, but also generates its own set of product vapors that are displaced during the filling process. These two types of emissions are collectively referred to as filling losses (LFL). The calculation methodology used of the standing loss and refilling emissions is discussed in further detail below.

Similar to breathing losses under normal operating conditions, standing idle losses occur during that period a roof is landed with product still in the tank. Emission calculation equations for these losses are from Subsection 7.1.2.2.1 Standing Idle Losses in Section 7.1 of AP-42. The quantity of emissions is dependent upon the number of days idle, tank type, type of product stored, and the time of the year. Maximum hourly VOC emissions for tanks with idle standing losses were determined by calculating the losses for one day and then dividing by twelve hours/day. Twelve hours were used since the tanks breathe out for twelve hours/day and breathe in the other twelve hours.

Similar to loading losses, refilling losses occur while a tank is being filled with product during that period of time a roof is landed. Emission calculation equations for these losses are from Subsection 7.1.3.2.2.2 of AP-42. The quantity of emissions is dependent upon the tank type (IFR/EFR), type of product stored, time of year, and fill rate. The maximum refilling loss is based on: (1) the tank re-fill rate; and (2) the month resulting in the highest emission as a function of vapor pressure. Maximum hourly VOC emissions were determined by dividing the filling emissions (LFL) by the maximum pumping rate. The calculation assumes that the product vapors within the vapor space under the tank roof are emitted from the tank at the same rate as the liquid coming into the tank.

Tank roof landing emissions associated with crude oils and crude oil condensates will be collected via vapor recovery equipment and routed to vapor combustion devices (EPN: T-COMB-1). Emissions from the vapor combustion device have been estimated using the methods outlined in the TCEQ's Air Permit Technical Guidance for Chemical Sources: Flares and Oxidizers, October 2002. VOC, NO_X, CO, SO_2, H_2S, and $PM/PM_{10}/PM_{2.5}$ emissions were estimated from the vapor combustion due to tank roof landing in the VCU system. VOC emissions are based on vendor guaranteed destruction efficiency of at least 99.8%. NO_X and CO emissions were based on vendor guaranteed emission factors and an estimated roof landing vapor heat content of 20,000 Btu/lb. SO_2 emissions associated with crude oil and crude condensate vapor control were based on 100% conversion of any H_2S in the waste gas stream while SO_2 emissions associated with assist gas usage were based on AP-42, Section 3.2.7 emission factors. H_2S emissions were based on a max vapor space concentration of 1,000 ppm and a corresponding DRE of 98%. $PM/PM_{10}/PM_{2.5}$ emissions were based on emission factors from AP-42, Section 3.2-7.

Detailed storage tank emission calculations are included in Appendix A, as Tables A-1 through A-4

5.1.2 Marine Vessel Loading

Loading losses are comprised of the total vapors displaced and generated by loading crude oils and/or crude oil condensate into the marine vessels. The uncontrolled loading losses have been calculated using Equation 1 from AP-42, Section 5.2:

$$L_L = 12.46 \frac{SPM}{T}$$

where:

L_L = loading loss, lb/1000 gallons of product loaded.

S = AP 42 saturation factor.

P = True Vapor Pressure at maximum temperature, psia.

M = Molecular weight of gasoline vapor, lb–lb/mole

T = Temperature of product loaded, degrees Rankine.

A Saturation factor of 0.2 was used in the calculation for ship and ocean-going barge loading operations with a factor of 0.5 for inland barges. The loading loss vapors from crude oil and crude oil condensate loading will be captured and routed to vapor combustion devices (EPNs: MVCU-1

through MVCU-8) for VOC destruction. Emissions from the vapor combustion devices have been estimated using the methods outlined in the TCEQ's Air Permit Technical Guidance for Chemical Sources: Flares and Oxidizers, October 2002. VOC emissions are based on a vendor guaranteed destruction efficiency of at least 99.8%. Uncollected fugitive loading emissions are calculated based on a collection efficiency of 99.89% for inerted vessel loading (EPNs: BERTH-1 & BERTH-2). SO_2 emissions associated with crude oil and crude condensate vapor control were based on 100% conversion of any H_2S in the waste gas stream while SO_2 emissions associated with assist gas usage were based on AP-42, Section 3.2.7 emission factors. H_2S emissions were based on a max vapor space concentration of 1,000 ppm and a corresponding DRE of 98%. $PM/PM_{10}/PM_{2.5}$ emissions were based on emission factors from AP-42, Section 3.2-7.

Detailed loading emission calculations are included in Appendix A as Tables A-5 through A-7.

5.1.3 Piping Equipment Fugitives

The fugitive emissions from piping components and ancillary equipment were estimated using methods outlined in the TCEQ's guidance web page for Equipment Leak Fugitives[1]. Each fugitive component was classified first by equipment type (valve, pump, relief valve, etc.) and then by material type (gas/vapor, light liquid, heavy liquid). Total emission rates were obtained by multiplying the number of fugitive components of a particular type by the appropriate Petroleum Marketing Terminal emission factor.

Detailed piping fugitive calculations are included in Appendix A as Table A-8.

5.2 Maintenance, Startup and Shutdown Emissions (MSS)

Maintenance, startup, and shutdown (MSS) activities and associated emissions will occur to support terminal operation. The following describes the calculations used to determine the MSS emissions associated with the each emission source included in this permit application. Detailed emission calculations are presented in Appendix B of this application.

5.2.1 Storage Tank Floating Roof Landing Losses

The roof-landing events occur for predictable maintenance events, tank inspections, tank cleaning, periods of inventory control, and routine product changes. Floating roof landing emissions are estimated using the methods in Subsection 7.1.3.2.2 Roof Landings of Section 7.1 Organic Liquid Storage Tanks of AP-42. For a given roof-landing event, total landing loss emissions are therefore

the sum of the filling losses and the daily standing idle losses over the entire period that the roof remained landed. Landing losses are inherently episodic in nature and must be determined each time a tank's floating roof is landed.

Landing losses occur from floating roof tanks whenever the tank is drained to a level where its roof lands on its legs or other supports (including roof suspension cables). When a floating roof lands on its supports or legs while the tank is being drained, the floating roof remains at the same height while the product level continues to lower. This creates a vapor space underneath the roof. Liquid remaining in the bottom of the tank provides a continuous source of vapors to replace those expelled by breathing (in the case of internal floating roof tanks) or wind action (in the case of external floating roof tanks). These emissions, referred to as *standing idle losses (LSL)*, occur daily as long as the floating roof remains landed. Additional emissions occur when incoming stock liquid fills a tank with a landed roof. The incoming volume of liquid not only displaces an equivalent volume of vapors from below the floating roof, but also generates its own set of product vapors that are displaced during the filling process. These two types of emissions are collectively referred to as *filling losses (LFL)*. The calculation methodology used of the standing loss and refilling emissions is discussed in further detail below.

Similar to breathing losses under normal operating conditions, standing idle losses occur during that period a roof is landed with product still in the tank. Emission calculation equations for these losses are from Subsection 7.1.2.2.1 Standing Idle Losses in Section 7.1 of AP-42. The quantity of emissions is dependent upon the number of days idle, tank type, type of product stored, and the time of the year. Maximum hourly VOC emissions for tanks with idle standing losses were determined by calculating the losses for one day and then dividing by twelve hours/day. Twelve hours were used since the tanks breathe out for twelve hours/day and breathe in the other twelve hours.

Similar to loading losses, refilling losses occur while a tank is being filled with product during that period of time a roof is landed. Emission calculation equations for these losses are from Subsection 7.1.3.2.2.2 of AP- 42. The quantity of emissions is dependent upon the tank type, type of product stored, time of year, and fill rate. The maximum refilling loss is based on: (1) the tank re-fill rate; and (2) the month resulting in the highest emission as a function of vapor pressure. Maximum hourly VOC emissions were determined by dividing the filling emissions (LFL) by the maximum pumping rate. The calculation assumes that the product vapors within the vapor space under the tank roof are emitted from the tank at the same rate as the liquid coming into the tank.

Once a tank is drained, tanks storing products with true vapor pressures greater than 0.5 psia are degassed and the vapors removed from the vapor space under the floating roof are routed to vapor combustor until the VOC concentration in the vapor space is less than 5,000 parts per million by volume (ppmv) after which the tank may vent to atmosphere. Blowers are used to ventilate the tank and force out any residual volatile organic compound (VOC) material. Emissions from cleaning, refilling and degassing of VOC concentrations higher than 10,000 ppmv are routed to vapor combustor for control. Emissions from the vapor combustion device have been estimated using the methods outlined in the TCEQ's *Air Permit Technical Guidance for Chemical Sources: Flares and Oxidizers, October 2002.* VOC, NO_X, SO_2, $PM/PM_{10}/PM_{2.5}$ and CO emissions were estimated form the vapor combustion due to tank roof landing. VOC emissions are based on vendor guaranteed destruction efficiency of at least 99.8%. SO_2 emissions associated with crude oil and crude condensate vapor control were based on 100% conversion of any H_2S in the waste gas stream while SO_2 emissions associated with assist gas usage were based on AP-42, Section 3.2.7 emission factors. H_2S emissions were based on a max vapor space concentration of 1,000 ppm and a corresponding DRE of 98%. $PM/PM_{10}/PM_{2.5}$ emissions were based on emission factors from AP-42, Section 3.2-7.

Detailed floating roof storage tank roof landing MSS emissions are included in Appendix B as Tables B-2, B-3, and B-5.

5.2.2 Equipment Venting

Equipment venting includes, but is not limited to, liquid draining, venting to control, venting to atmosphere post control and refilling emissions during startup. The equipment venting emissions are calculated using the ideal gas law using the volume of the equipment and the material properties of the VOC material contained in the equipment. Short-term and annual emissions are based on the number of simultaneous events and annual events per year, respectively. The equipment venting calculations are included to determine the contribution to the MSS cap purposes only. These emission calculations are not to be considered enforceable representations as to the magnitude, duration, and/or frequency of individual activities.

Equipment with isolated volumes equal to or less than 50.27 ft3 will be vented to the atmosphere uncontrolled while equipment with isolated volumes greater than 50.27 ft3 will first be degassed to a portable vapor control device so to attain a VOC concentration below 10,000 ppmv. VOC, NO_X, SO_2, $PM/PM_{10}/PM_{2.5}$ and CO emissions were estimated form the vapor combustion. VOC emissions

are based on vendor guaranteed destruction efficiency of at least 99.8%. SO_2 emissions associated with crude oil and crude condensate vapor control were based on 100% conversion of any H_2S in the waste gas stream while SO_2 emissions associated with assist gas usage were based on AP-42, Section 3.2.7 emission factors. H_2S emissions were based on a max vapor space concentration of 1,000 ppm and a corresponding DRE of 98%. $PM/PM_{10}/PM_{2.5}$ emissions were based on emission factors from AP-42, Section 3.2-7.

Detailed equipment venting emission calculations are included in Appendix B as Table B-4.

5.2.3 Vacuum Truck and Frac Tank Loading

Emissions from the use of air movers and frac tanks are estimated using the loading loss equation from AP-42, Section 5.2.

Detailed vacuum truck and frac tank loading emissions are included in Appendix B as Table B-6.

5.2.4 Pipeline Pigging Emissions

Pigging may be required to clean and maintain the product pipelines. Emission associated with pigging maintenance are calculated by employing the ideal gas equation and multiplying by the maximum number of hourly and annual pigging events anticipated. Emissions resulting from pigging activities will be controlled by carbon canister. Carbon canister emission are estimated based on vapor flow rates and a carbon breakthrough concentration of 100 ppmv.

Detailed pipeline pigging emission calculations are included in Appendix B as Table B-7.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Table 1(a) Emission Point Summary

Permit Number:	TBD	RN Number:	TBD	Date:	May 2019
Company Name:	Lone Star Ports, LLC				

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA						EMISSION POINT DISCHARGE PARAMETERS									
1. Emission Point			2. Component or Air Contaminant Name	3. Air Contaminant Emission Rate		4. UTM Coordinates of Emission Point			5. Height Above Ground	6. Stack Exit Data			7. Fugitives		
										Diameter	Velocity	Temp	Length	Width	Axis
EPN (A)	FIN (B)	NAME (C)		Pounds per Hour (A)	TPY (B)	Zone	East (Meters)	North (Meters)	(Feet)	(Feet) (A)	(fps) (B)	(°F) (C)	(ft) (A)	(ft) (B)	Degrees (C)
BERTH-1	BERTH-1	Berth 1 Loading Fugitives	VOC	9.05	-	14	690,182	3,081,415	52.5	-	-	-	1093	197	68
			H2S	0.01	-										
BERTH-2	BERTH-2	Berth 2 Loading Fugitives	VOC	9.05	-	14	690,528	3,081,540	52.5	-	-	-	1093	197	93
			H2S	0.01	-										
BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	VOC	-	26.40	-	-	-	-	-	-	-	-	-	-
			H2S	-	0.03										
MVCU-1	MVCU-1	Controlled Marine Loading VCU No. 1	VOC	12.53	-	14	690,448	3,081,816	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_2	11.79	-										
			$PM/PM_{10}/PM_{2.5}$	0.93	-										

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Table 1(a) Emission Point Summary

Permit Number:	TBD	RN Number:	TBD	Date:	May 2019
Company Name:	Lone Star Ports, LLC				

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA						EMISSION POINT DISCHARGE PARAMETERS									
1. Emission Point			2. Component or Air Contaminant Name	3. Air Contaminant Emission Rate		4. UTM Coordinates of Emission Point			Source 5. Height Above	6. Stack Exit Data			7. Fugitives		
										Diameter	Velocity	Temp	Length	Width	Axis
EPN (A)	FIN (B)	NAME (C)		Pounds per Hour (A)	TPY (B)	Zone	East (Meters)	North (Meters)	Ground (Feet)	(Feet) (A)	(fps) (B)	(°F) (C)	(ft) (A)	(ft) (B)	Degrees (C)
MVCU-2	MVCU-2	Controlled Marine Loading VCU No. 2	VOC	12.53	-	14	690,458	3,081,819	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_2	11.79	-										
			$PM/PM_{10}/PM_{2.5}$	0.93	-										
MVCU-3	MVCU-3	Controlled Marine Loading VCU No. 3	VOC	12.53	-	14	690,468	3,081,822	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_2	11.79	-										
			$PM/PM_{10}/PM_{2.5}$	0.93	-										
MVCU-4	MVCU-4	Controlled Marine Loading VCU No. 4	VOC	12.53	-	14	690,478	3,081,825	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_2	11.79	-										
			$PM/PM_{10}/PM_{2.5}$	0.93	-										

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Table 1(a) Emission Point Summary

Permit Number:	TBD	RN Number:	TBD	Date:	May 2019
Company Name:	Lone Star Ports, LLC				

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA						EMISSION POINT DISCHARGE PARAMETERS									
1. Emission Point			2. Component or Air Contaminant Name	3. Air Contaminant Emission Rate		4. UTM Coordinates of Emission Point			5. Height Above	Source 6. Stack Exit Data			7. Fugitives		
										Diameter	Velocity	Temp	Length	Width	Axis
EPN (A)	FIN (B)	NAME (C)		Pounds per Hour (A)	TPY (B)	Zone	East (Meters)	North (Meters)	Ground (Feet)	(Feet) (A)	(fps) (B)	(°F) (C)	(ft) (A)	(ft) (B)	Degrees (C)
MVCU-5	MVCU-5	Controlled Marine Loading VCU No. 5	VOC	12.53	-	14	690,498	3,081,830	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_3	11.79	-										
			$PM/PM_{10}/PM_{2.5}$	0.93	-										
MVCU-6	MVCU-6	Controlled Marine Loading VCU No. 6	VOC	12.53	-	14	690,508	3,081,833	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_4	11.79	-										
			$PM/PM_{10}/PM_{2.7}$	0.93	-										
MVCU-7	MVCU-7	Controlled Marine Loading VCU No. 7	VOC	12.53	-	14	690,518	3,081,836	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_5	11.79	-										
			$PM/PM_{10}/PM_{2.5}$	0.93	-										

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Table 1(a) Emission Point Summary

Permit Number:	TBD	RN Number:	TBD	Date:	May 2019
Company Name:	Lone Star Ports, LLC				

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA						EMISSION POINT DISCHARGE PARAMETERS									
1. Emission Point			2. Component or Air Contaminant Name	3. Air Contaminant Emission Rate		4. UTM Coordinates of Emission Point			Source 5. Height Above	6. Stack Exit Data			7. Fugitives		
										Diameter	Velocity	Temp	Length	Width	Axis
EPN (A)	FIN (B)	NAME (C)		Pounds per Hour (A)	TPY (B)	Zone	East (Meters)	North (Meters)	Ground (Feet)	(Feet) (A)	(fps) (B)	(°F) (C)	(ft) (A)	(ft) (B)	Degrees (C)
MVCU-8	MVCU-8	Controlled Marine Loading VCU No. 8	VOC	12.53	-	14	690,528	3,081,839	40	12	20.47	1400	-	-	-
			NOx	12.53	-										
			CO	25.05	-										
			H_2S	0.13	-										
			SO_6	11.79	-										
			$PM/PM_{10}/PM_{2.9}$	0.93	-										
MVCUCAP	MVCUCAP	Controlled Loading Annual Emissions Cap	VOC	-	48.59	-	-	-	-	-	-	-	-	-	-
			NOx	-	59.03										
			CO	-	126.33										
			H_2S	-	0.48										
			SO_2	-	90.48										
			$PM/PM_{10}/PM_{2.5}$	-	4.40										
50-1	50-1	Recycle Tank No. 1	VOC	5.14	1.60	14	690,222	3,081,787	48	0.003	0.003	Amb.			
			H_2S	0.01	0.01										
50-2	50-2	Recycle Tank No. 2	VOC	5.14	1.60	14	690,262	3,081,820	48	0.003	0.003	Amb.			
			H_2S	0.01	0.01										

Section 6
Best Available Control Technology

As stated in Section §116.111(a)(2)(C), new or modified facilities must utilize best available control technology (BACT), with consideration given to the technical practicability and economic reasonableness of reducing or eliminating the emissions from the facility. Each facility is evaluated on a case-by-case basis. Engineering principles and agency experience, concerning the practicality and reasonableness of an emission reduction option, are used in this determination.

As described in their guidance document entitled Evaluating Best Available Control Technology (BACT) in Air Permit Applications (April 2001), the TCEQ BACT evaluation is conducted using a "tiered" analysis approach. The evaluation begins at the first tier and continues sequentially through subsequent tiers only if necessary as determined by the evaluation process described in the TCEQ document. In each tier, BACT is evaluated on a case-by-case basis.

In the first tier, controls accepted as BACT in a recent permit review for the same process in the same industry are approved as BACT in a current review if no new technical developments have been made that would justify additional controls as economically or technically reasonable. According to the TCEQ, the second tier takes into account controls that have been accepted as BACT in recent permits for similar facilities in a different process or industry. The third tier of the TCEQ BACT approach consists of a detailed technical and economic analysis of all control options available for the process under review.

The following sections of the application describe the BACT Analysis for the activities covered in this amendment.

6.1 Storage Tanks

TCEQ's current BACT guidelines for storage tanks were obtained from its Technical Guidance Package for Chemical Sources: Storage Tanks, June 2015. The TCEQ BACT guidelines for internal floating roof (IFR) tanks storing materials with a vapor pressure greater than 0.5 psia and greater than 25,000 gallon capacity, require a mechanical or liquid mounted primary seal or vapor mounted primary seal with a rim mounted secondary seal. The storage tanks included in this application will be equipped with a primary mechanical shoe and secondary rim-mounted seal. Additionally, IFR

tank landings associated with products with true vapor pressures greater than 0.5 psia will be controlled by a vapor combustion unit with a minimum DRE of 99.8%. This level of control exceeds current BACT guidelines.

6.2 Marine Vessel Loading

TCEQ's current BACT guidelines for loading operations were obtained from its Technical Guidance Package for Chemical Sources: Loading Operations, 2017. The TCEQ BACT guidelines for the loading of VOC with a vapor pressure greater than 0.5 psia, require the vapors to be routed to a VOC control device. The TCEQ BACT guidelines for marine loading of VOC with a vapor pressure greater than 0.5 psia, require the vapors to be routed to a VOC control device and an annual vapor tightness test as specified in 40 CFR 63.565(c) or 40 CFR 61.304(f). Vapors generated during the loading of ships are collected and routed to controls using a vacuum control system with a collection efficiency of 99.89%.

The collected emissions from marine vessels are routed to one or more of eight VCUs (EPNs: MVCU-1 through MVCU-8) with a minimum DRE of 99.8%. Lone Star will implement the above control system to satisfy the BACT control requirements.

6.3 Piping Equipment Fugitives

TCEQ's BACT guidance for fugitive emissions requires implementing a fugitive LDAR Program, the stringency of which varies depending on the amount of uncontrolled fugitive VOC emissions. The uncontrolled fugitive VOC emissions associated with the piping equipment included in this application are greater than 25 tpy. Per TCEQ's guidance, BACT for that emission level is the implementation of TCEQ's 28VHP LDAR Program. Lone Start proposes to implement the 28VHPLDAR program to satisfy BACT which is consistent with recent TCEQ BACT determinations. .

6.4 MSS Activities

The BACT analysis addresses the following MSS activities and sources:

- MSS Vapor Control;
- Storage Tanks;
- Process Equipment and Piping;
- Air Mover, Vacuum Truck, and Frac Tanks; and
- Pipeline pigging.

BACT listings were found in the EPA RBLC search for some of the MSS activities listed above. TCEQ has no published BACT guidelines applicable to the other MSS sources or activities discussed in this application. The BACT candidates for MSS activities are based on the RBLC BACT listings and on past TCEQ permitting actions.

Best Management Practices (BMP) for MSS activities includes the following:

- Minimizing the number and duration of all planned MSS events;
- Beginning tank degassing within 24 hours after the roof has been landed and the tank completely drained;
- Degassing tanks, process equipment, and piping with volumes > 50 ft^3 to a maximum outlet concentration of 10,000 ppmv, measured as VOC, and maintaining that concentration (or less) until maintenance activities are completed or refilling begins;
- Managing residual products with vapor pressures > 0.5 psia that are removed from equipment and piping as a result of an MSS activity in a controlled manner. Specifically, Lone Star will utilize air movers, vacuum trucks, frac tanks, and sumps equipped with vapor controls when handling materials with vapor pressures > 0.5 psia. All frac tanks will be loaded via submerged fill pipes.

Due to the insignificant level of emissions associated with the MSS activities included in this application, Lone Star proposes to implement the above described BMP to satisfy the BACT control requirements.

Section 7
Federal New Source Review

Non-attainment New Source Review (NNSR) permitting is required for each non-attainment pollutant at a greenfield site that results in an emission increase which exceeds the applicable major source threshold. Prevention of Significant Deterioration (PSD) permitting is required for each attainment pollutant and other regulated pollutants (such as H_2S and H_2SO_4) that exceeds the applicable major source threshold. Nueces County is designated as attainment/unclassified for the eight-hour ozone standard and attainment/unclassified for all other criteria pollutants. The emission increases associated with this permit application are summarized and compared to the PSD applicability thresholds in Table 1-1 at the end of Section 1. Included at the end of this section is a Table 1F which summarizes the Federal NSR applicability analysis.

7.1 NNSR Applicability

The Harbor Island Marine Terminal is not located in a nonattainment area for criteria pollutants. As a result, NNSR is not applicable to the proposed project.

7.2 PSD Applicability

The Harbor Island Marine Terminal is currently a greenfield site for Federal NSR applicability purposes and the project emission increases of VOC, NO_x, CO, SO_2, H_2S, and $PM/PM_{10}/PM_{2.5}$, are less than the applicable major source thresholds; therefore, PSD review does not apply for any of these pollutants. Because PSD review is not required for any other pollutant, PSD also does not apply to greenhouse gas (GHG) emissions.

TABLE 1F
AIR QUALITY APPLICATION SUPPLEMENT

Permit No.: TBD	Application Submittal Date: 29 May 2019
Lone Star Ports, LLC	
RN: TBD	Facility Location: Property is adjacent to Highway 361 and Nort East of Ferry Landing
City: Port Aransas	County: Nueces
Permit Unit I.D.: TBD	Permit Name: Harbor Island Marine Terminal
Permit Activity: X New Source Modification	
Project or Process Description: Marine Terminal	

Complete for all Pollutants with a Project Emission Increase.	POLLUTANTS								
	Ozone		CO	PM_{10}	$PM_{2.5}$	NO_x	SO_2	H_2S	CO_2e
	VOC	NO_x							
Nonattainment?	No	No	No	No	No	No	No	No	No
PSD?	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Existing site PTE (tpy)?	<250	<250	<250	<250	<250	<250	<250	<250	<75000
Proposed project emission increases (tpy from 2F)[2]	82.37	65.23	126.33	5.45	5.45	65.23	90.54	0.55	91,707
Is the existing site a major source?	No	No	No	No	No	No	No	No	No
If not, is the project a major source by itself?	No	No	No	No	No	No	No	No	No
If site is major, is project increase significant?	NA	NA	NA	NA	NA	NA	NA	NA	NA
If netting required, estimated start of construction?	NA								
Five years prior to start of construction	NA					contemporaneous			
Estimated start of operation	NA					period			
Net contemporaneous change, including proposed project, from Table 3F. (tpy)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Major NSR Applicable?	No	No	No	No	No	No	No	No	No

1 Other PSD pollutants. [Pb, H2S, TRS, H2SO4, Fluoride excluding HF, etc.]

2 Sum of proposed emissions minus baseline emissions, increases only.

The representations made above and on the accompanying tables are true and correct to the best of my knowledge.

Signature 5/29/19 VP, Regulatory Compliance & Project Management

Title

TABLE 2F
PROJECT EMISSION INCREASE

Pollutant[1]:	VOC	Permit No.:	TBD
Baseline Period:	N/A		

	Affected or Modified Facilities[2]			Permit No.	Actual Emissions[3] (tons/yr)	Baseline Emissions[4] (tons/yr)	Proposed Emissions[5] (tons/yr)	Projected Actual Emissions (tons/yr)	Difference (B-A)[6] (tons/yr)	Correction[7] (tons/yr)	Project Increase[8] (tons/yr)
					A		B				
	FIN	EPN	Facility Name								
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	-	26.40	-	26.40	-	26.40
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	NA	-	-	48.59	-	48.59	-	48.59
3	50-1	50-1	Recycle Tank No. 1	NA	-	-	1.60	-	1.60	-	1.60
4	50-2	50-2	Recycle Tank No. 2	NA	-	-	1.60	-	1.60	-	1.60
5	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	-	0.24	-	0.24	-	0.24
6	MSS	MSS	MSS Emissions Cap	NA	-	-	0.53	-	0.53	-	0.53
7	FUG	FUG	Piping Fugitive Components	NA	-	-	3.40	-	3.40	-	3.40
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
										Page Subtotal[9]:	82.37
										Project Total:	82.37

TABLE 2F
PROJECT EMISSION INCREASE

Pollutant[1]:	NO_X	Permit No.:	TBD
Baseline Period:	N/A		

	Affected or Modified Facilities[2]			Permit No.	Actual Emissions[3] (tons/yr)	Baseline Emissions[4] (tons/yr)	Proposed Emissions[5] (tons/yr)	Projected Actual Emissions (tons/yr)	Difference (B-A)[6] (tons/yr)	Correction[7] (tons/yr)	Project Increase[8] (tons/yr)
					A		B				
	FIN	EPN	Facility Name								
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	-	-	-	-	-	-
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	NA	-	-	59.03	-	59.03	-	59.03
3	50-1	50-1	Recycle Tank No. 1	NA	-	-	-	-	-	-	-
4	50-2	50-2	Recycle Tank No. 2	NA	-	-	-	-	-	-	-
5	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	-	5.57	-	5.57	-	5.57
6	MSS	MSS	MSS Emissions Cap	NA	-	-	0.63	-	0.63	-	0.63
7	FUG	FUG	Piping Fugitive Components	NA	-	-	-	-	-	-	-
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										Page Subtotal[9]:	65.23
										Project Total:	65.23

TABLE 2F
PROJECT EMISSION INCREASE

Pollutant[1]: CO	Permit No.: TBD
Baseline Period: N/A	

	Affected or Modified Facilities[2]			Permit No.	Actual Emissions[3] (tons/yr)	A Baseline Emissions[4] (tons/yr)	B Proposed Emissions[5] (tons/yr)	Projected Actual Emissions (tons/yr)	Difference (B-A)[6] (tons/yr)	Correction[7] (tons/yr)	Project Increase[8] (tons/yr)
	FIN	EPN	Facility Name								
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	-	-	-	-	-	-
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	NA	-	-	118.06	-	118.06	-	118.06
3	50-1	50-1	Recycle Tank No. 1	NA	-	-	-	-	-	-	-
4	50-2	50-2	Recycle Tank No. 2	NA	-	-	-	-	-	-	-
5	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	-	7.42	-	7.42	-	7.42
6	MSS	MSS	MSS Emissions Cap	NA	-	-	0.84	-	0.84	-	0.84
7	FUG	FUG	Piping Fugitive Components	NA	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
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										Page Subtotal[9]:	126.33
										Project Total:	126.33

TABLE 2F
PROJECT EMISSION INCREASE

Pollutant [1]:	SO_2	Permit No.:	TBD
Baseline Period:	N/A		

	Affected or Modified Facilities [2]			Permit No.	Actual Emissions [3] (tons/yr)	A Baseline Emissions [4] (tons/yr)	B Proposed Emissions [5] (tons/yr)	Projected Actual Emissions (tons/yr)	Difference (B-A) [6] (tons/yr)	Correction [7] (tons/yr)	Project Increase [8] (tons/yr)
	FIN	EPN	Facility Name								
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	-	-	-	-	-	-
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	NA	-	-	90.48	-	90.48	-	90.48
3	50-1	50-1	Recycle Tank No. 1	NA	-	-	-	-	-	-	-
4	50-2	50-2	Recycle Tank No. 2	NA	-	-	-	-	-	-	-
5	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	-	0.06	-	0.06	-	0.06
6	MSS	MSS	MSS Emissions Cap	NA	-	-	0.001	-	0.001	-	0.001
7	FUG	FUG	Piping Fugitive Components	NA	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
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										Page Subtotal [9]:	90.54
										Project Total:	90.54

TABLE 2F
PROJECT EMISSION INCREASE

Pollutant [1]:	H_2S	Permit No.:	TBD
Baseline Period:	N/A		

	Affected or Modified Facilities [2]			Permit No.	Actual Emissions [3] (tons/yr)	A Baseline Emissions [4] (tons/yr)	B Proposed Emissions [5] (tons/yr)	Projected Actual Emissions (tons/yr)	Difference (B-A) [6] (tons/yr)	Correction [7] (tons/yr)	Project Increase [8] (tons/yr)
	FIN	EPN	Facility Name								
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	-	0.03	-	0.03	-	0.03
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	NA	-	-	0.48	-	0.48	-	0.48
3	50-1	50-1	Recycle Tank No. 1	NA	-	-	0.001	-	0.001	-	0.001
4	50-2	50-2	Recycle Tank No. 2	NA	-	-	0.001	-	0.001	-	0.001
5	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	-	0.03	-	0.03	-	0.03
6	MSS	MSS	MSS Emissions Cap	NA	-	-	0.003	-	0.003	-	0.003
-	FUG	FUG	Piping Fugitive Components	NA	-	-	0.003	-	0.003	-	0.003
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
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										Page Subtotal [9]:	0.55
										Project Total:	0.55

TABLE 2F
PROJECT EMISSION INCREASE

Pollutant [1]:	$PM/PM_{10}/PM_{2.5}$	Permit No.:	TBD
Baseline Period:	N/A		

	Affected or Modified Facilities [2]			Permit No.	Actual Emissions [3] (tons/yr)	A Baseline Emissions [4] (tons/yr)	B Proposed Emissions [5] (tons/yr)	Projected Actual Emissions (tons/yr)	Difference (B-A) [6] (tons/yr)	Correction [7] (tons/yr)	Project Increase [8] (tons/yr)
	FIN	EPN	Facility Name								
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	-	-	-	-	-	-
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	NA	-	-	4.40	-	4.40	-	4.40
3	50-1	50-1	Recycle Tank No. 1	NA	-	-	-	-	-	-	-
4	50-2	50-2	Recycle Tank No. 2	NA	-	-	-	-	-	-	-
5	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	-	0.28	-	0.28	-	0.28
6	MSS	MSS	MSS Emissions Cap	NA	-	-	0.78	-	0.78	-	0.78
7	FUG	FUG	Piping Fugitive Components	NA	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
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										Page Subtotal [9]:	5.45
										Project Total:	5.45

Section 8
Rule Applicability Analysis

Pursuant to 30 TAC §116.111, Lone Star proposes to meet the rules and regulations of the TCEQ and the intent of the Texas Clean Air Act (TCCA). This section addresses each of those requirements.

8.1 Protection of Public Health and Welfare – 30 TAC §116.111(a)(2)(A)

The emissions from the facilities included in this application will comply with all air quality rules, regulations, and the intent of the Texas Clean Air Act (TCAA); including protection of public health and welfare. Applicable regulations are as follows:

8.1.1 Chapter 101 – General Air Quality Rules

The facilities included in this application will be operated in accordance with the General Rules relating to circumvention, nuisance, traffic hazard, notification requirements for emissions events and scheduled maintenance, startup and shutdown activities, sampling, sampling ports, emissions inventory requirements, sampling procedures, compliance with Environmental Protection Agency standard, the National Primary and Secondary Air Quality Standards, inspection fees, emissions fees, and all other applicable General Rules.

8.1.2 Chapter 106 – Permits by Rule

Facilities included in this application are currently not subject to the requirements of 30 TAC Chapter 106. In the event 30 TAC Chapter 106 becomes applicable, Lone Star will operate in compliance with the applicable requirements.

8.1.3 Chapter 111 – Visible Emissions and Particulate Matter

Facilities included in this application are subject to and will operate in compliance with all requirements of 30 TAC Chapter 111.

8.1.4 Chapter 112 – Sulfur Compounds

Facilities included in this application are subject to and will operate in compliance with all requirements of 30 TAC Chapter 112.

8.1.5 Chapter 113 – Toxic Materials

This chapter references the regulations under 40 CFR Part 63. Applicability for those regulations is addressed in Section 8.5.

8.1.6 Chapter 114 – Motor Vehicles

Facilities included in this application are not subject to the requirements of 30 TAC Chapter 114.

8.1.7 Chapter 115 – Volatile Organic Compounds (VOC)

Facilities included in this application are subject to and will operate in compliance with the following subchapters of 30 TAC 115:

- 30 TAC §115.112 – Control Requirements for Storage of Volatile Organic Compounds;
- 30 TAC §115.212 – Control Requirements for Loading and Unloading of Volatile Organic Compounds;
- 30 TAC §115.542 – Control Requirements for Degassing of Storage Tanks, Transfer Vessels, and Marine Vessels.

8.1.8 Chapter 116 – New Construction or Modification

Facilities included in this application are subject to and will operate in compliance with the applicable requirements of 30 TAC 116.

8.1.9 Chapter 117 – Nitrogen Compounds

Facilities included in this application are subject to and will operate in compliance with the applicable requirements of 30 TAC Chapter 117.

8.1.10 Chapter 118 – Air Pollution Episodes

The facilities included in this application are subject to and will operate in compliance with the applicable requirements of 30 TAC Chapter 118.

8.1.11 Chapter 122 – Federal Operating Permits

The proposed Harbor Island Marine Terminal is a major source for Title V purposes; therefore, subject to the requirements of 30 TAC Chapter 122.

8.1.12 Impact on Schools

There are no schools located within 3,000 feet of the facilities included in this application.

8.2 Measurement of Emissions – 30 TAC §116.111(a)(2)(B)

Emissions will be sampled upon request of the Executive Director of the TCEQ.

8.3 BACT Technology – 30 TAC §116.111(a)(2)(C)

Section 6 of this application provides a detailed best available control technology analysis for the facilities included in this application.

8.4 NSPS – 30 TAC §116.111(a)(2)(D)

Facilities included in this application are subject to and will operate in compliance with the applicable requirements of the following New Source Performance Standards:

40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

8.5 NESHAP – 30 TAC §116.111(a)(2)(E)

The facilities included in this application are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants.

8.6 NESHAP for Source Categories – 30 TAC §116.111(a)(2)(F)

Facilities included in this application are subject to and will operate in compliance with the applicable requirements of the following National Emission Standards for Hazardous Air Pollutants for Source Categories:

40 CFR Part 63, Subpart Y	National Emission Standards for Marine Tank Vessel Loading Operations

8.7 Performance Demonstration – 30 TAC §116.111(a)(2)(G)

This facilities included in this application will perform as represented in the application and as required by the permit.

8.8 Nonattainment Review – 30 TAC §116.111(a)(2)(H)

Nueces County has been designated attainment or unclassified with regard to criteria pollutant National Ambient Air Quality Standards. Therefore, nonattainment New Source Review requirements are not applicable to this project.

8.9 Prevention of Significant Deterioration – 30 TAC §116.111(a)(2)(I)

See Section 7 for a detailed PSD applicability analysis.

8.10 Air Dispersion Modeling – 30 TAC §116.111(a)(2)(J)

See Appendix C for the Air Quality Analysis associated with facilities included in this application.

8.11 Hazardous Air Pollutants – 30 TAC §116.111(a)(2)(K)

The Harbor Island Marine Terminal is a minor source of Hazardous Air Pollutants (HAPs); therefore, it is not an affected source subject to the requirements of FCAA 112(g).

8.12 Mass Cap and Trade Allowances – 30 TAC §116.111(a)(2)(L)

The Harbor Island Marine Terminal is not located in a county that is covered by the Mass Emissions Cap and Trade (MECT) program; therefore, this rule does not apply.

8.13 Public Notice – 30 TAC §116.111(b)

This project will result in increases in allowable emissions which exceed the applicable public notice threshold; therefore, public notice is required for this application.

Appendix C

Air Quality Analysis

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

General

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

EMEW Version No.: Version 2.1

Purpose Statement:
This workbook is completed by the applicant and submitted to the Texas Commission on Environmental Quality (TCEQ), specifically, the Air Dispersion Modeling Team (ADMT) for review. This workbook is a tool available for all projects using AERSCREEN, AERMOD, or ISC/ISCPrime for an impacts review and its use is required starting June 1, 2019. Provide the workbook with the permit application submittal for any Minor New Source Review project requiring a modeling impacts demonstration.

This workbook follows the guidance outlined in the Air Quality Modeling Guidelines (APDG 6232, September 2018) which can be found here:
https://www.tceq.texas.gov/assets/public/permitting/air/Modeling/guidance/airquality-mod-guidelines6232.pdf

Workbook Instructions:
1. Save a copy of the workbook to your computer or desktop prior to entering data.
2. Complete all required sections leaving no blanks. You may use the "tab" button or the arrow keys to move to the next available cell. Use "enter" to move down a line. Note: drop-downs are case-sensitive.
3. Fill in the workbook in order, do not skip around as this will cause errors. Use caution if changing a previously entered entry.
4. Not applicable sections of this workbook will be hidden as data is entered. For example, answering "No" to "Is downwash applicable? " will hide these sections of the workbook required only for downwash entry.
5. Email the workbook electronic file (EMEW) and any attachments to the Air Permits Initial Review Team. The subject line should read "Company Name - Permit Number (if known) - NSR Permit Application". Email address:

apirt@tceq.texas.gov

6. If printing the EMEW, follow the directions below to create a workbook header.
7. Printing the EMEW is not required for submitting to the Air Permits Division (APD); however, you may need to print it for sending to the regional offices, local programs, and for public access if notice is required. To print the workbook, follow the instructions below. Please be aware, several sheets contain large amounts of data and caution should be taken if printing, such as the Speciated Emissions sheet.
8. Updates may be necessary throughout the review process. Updated workbooks must be submitted in electronic format to APD. For submittal to regional offices, local programs, or public places you only have to print sheets that had updates. Be sure to change the headers accordingly.

Note: Since this will be part of the permit application, follow the instructions in the New Source Review (NSR) Application Workbook on where to send copies of your EMEW and permit application. The NSR Application Workbook can be found here:

https://www.tceq.texas.gov/permitting/air/guidance/newsourcereview/nsrapp-tools.html

Create Headers Before Printing:
1. Right-click one of the workbook's sheet tabs and "Select All Sheets."
2. Enter the "Page Layout View" by using the navigation ribbon's View > Workbook Views > Page Layout, or by clicking the page layout icon in the lower-right corner of Excel.
3. Add the date, company name, and permit number (if known) to the upper-right header. Note that this may take up to a minute to update your spreadsheet. Select any tab to continue working on the spreadsheet.

Printing Tips:
While APD does not need a hard copy of the full workbook, you may need to print it for sending to the regional offices, local programs, and for public access if notice is required.
1. The default printing setup for each sheet in the workbook is set for the TCEQ preferred format. The print areas are set up to not include the instructions on each sheet.
2. You have access to change all printing settings to fit your needs and printed font size. Some common options include:
   -Change what area you are printing (whole active sheet or a selection);
   -Change the orientation (portrait or landscape);
   -Change the margin size; and
   -Change the scaling (all columns on one sheet, full size, your own custom selection, etc.).

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

General

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Acknowledgement:	Select from the drop down:
I acknowledge that I am submitting an authorized TCEQ Electronic Modeling Evaluation Workbook and any necessary attachments. Except for inputting the requested data, I have not changed the TCEQ Electronic Modeling Evaluation Workbook in any way, including but not limited to changing formulas, formatting, content, or protections.	I agree

Administrative Information:	
Data Type:	**Facility Information:**
Project Number (6 digits):	
Permit Number:	
Regulated Entity ID (9 digits):	
Facility Name:	Harbor Island Marine Terminal
Facility Address:	Property is adjacent to Highway 361 and North East of Ferry Lan
Facility County (select one):	Nueces
Company Name:	Lone Star Ports, LLC
Company Contact Name:	Matt Marra
Company Contact Number:	713-253-6948
Company Contact Email:	Matt.Marra@lonestarports.com
Modeling Company Name, as applicable:	DiSorbo Consulting
Modeling Contact Name:	Joe Kupper, P.E.
Modeling Contact Number:	512-693-4186
Modeling Contact Email:	jkupper@DiSorboconsult.com
New/Existing Site (select one):	New Site
Modeling Date (MM/DD/YYYY):	5/30/2019
Datum Used (select one):	NAD 83
UTM Zone (select one):	14

Sheet Instructions: Indicate in the Table of Contents which sections are applicable and included for this modeling demonstration. Select "X" from the drop down if the item below is included in the workbook. Note: This workbook is only for the following air dispersion models: AERSCREEN, ISC/ISCPrime, and/or AERMOD. If SCREEN3 is used, please use the separate Electronic Modeling Evaluation Workbook (EMEW) for SCREEN3 workbook.

Table of Contents:

Texas Commission on Environmental Quality

Date: 5/30/2019
Permit #: TBD

Electronic Modeling Evaluation Workbook (EMEW)

General

Company Name: Lone Star Ports, LLC

Included Attachments Instructions: The following are attachments that must be included with any modeling analysis. If providing the plot plan and area map with the permit application, ensure there is also a copy with the EMEW. The copy can be electronic.	**Select an X from the dropdown menu if included:**
Plot Plan: Instructions: Mark all that apply in the attached plot plan. For larger properties or dense source areas, provide multiple zoomed in plot plans that are legible.	
Property/Fence Lines all visible and marked.	X
North arrow included.	X
Clearly marked scale.	X
All sources and buildings are clearly labeled.	X
Area Map:	
Instructions: Mark all that apply in the attached area map.	
Annotate schools within 3,000ft of source's nearest property line.	
All property lines are included.	X
Non-industrial receptors are identified.	X
Additional Attachments (as applicable): *Note: These are just a few examples of attachments that may need to be included. There may be others depending on the scope of the modeling analysis.*	**Select an X from the dropdown menu if included:**
Processed Met Data Information	
Excel spreadsheet of processed meteorology data.	
Meteorological Files (all input and outputs).	
Source Group Descriptions	
Description of modeling source groups (could be in a tabulated format).	
Modeling Techniques and Scenarios *Provide all justification and discussion on modeling scenarios used for the modeling analyses. The following boxes are examples of approaches that should be provided but is not all inclusive.*	
Discussion on modeling techniques not discussed in workbook.	
Justification for exceedance refinements, as applicable.	
Discussion and images for worst-case determination, as applicable.	
Single Property Line Designation, as applicable	
Include Agreement, Order, and map defining each petitioner.	
Post Processing using Unit Impact Multipliers (UIMs)	
Include documentation on any calculations used with the UIMs (i.e., Step 3 of the MERA).	
Tier 3 NO_2 analysis *If OLM or PVMRM are used, provide all justification and documentation on using this approach.*	
Description of model setup.	
Description and justification of model options selected (i.e., NO_2 to NO_x in-stack ratios).	
Other Attachments *Provide a list in the box below of additional attachments being provided that are not listed above:*	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

I. Project Information

A. Project Overview: In the box below, give a brief Project Overview. To type or insert text in box, double click in the box below. *Please limit your response to 2000 characters.*

Lone Star Ports proposes to construct and operate a marine terminal capable of loading crude oil and/or crude oil condensates onto ocean going ships/barges and inland barges via two loading berths. Vapors associated with the loading of crude oil and/or crude oil condensates will be collected and routed to a vapor control system which consists of eight vapor combustion units (VCUs). In addition, Lone Star proposes to construct two storage tanks to be utilized for pipeline relief and/or the storage of residual crude and/or crude oil condensate associated with loading operations. Also included in this application are piping components and maintenance, startup, and shutdown activities associated with the storage tanks and marine loading operations.

The modeling results show that the concentrations are all below the applicable standards and health effects guidelines. It should be noted that the modeling has been performed in a very conservative manner, in that all sources were modeled to be operating at their maximum emission rate at the same time. During actual operations the emission rates will be less than the permitted limits and not all of the sources will be operating at the same time. For example not all MSS activities will occur during the same hour.

For the Health Effects modeling results, please note that the maximum concentration occurs over water. However, because the EMEW workbook does not have a place to report receptors over water, the maximum results and ESL exceedances are conservatively reported in the industrial land category.

II. Air Dispersion Modeling Preliminary Information

Instructions: Fill in the information below based on your modeling setup. The selections chosen in this sheet will carry throughout the sheet and workbook. Based on selections below, only portions of the sheet and workbook will be available. Therefore, it is vital the sheet and workbook are filled out in order, do NOT skip around.

For larger text boxes, double click to type or insert text.

A. Type of Model Used: *Select "X" in all that apply*

	AERSCREEN	X	AERMOD
	Enter in all applicable Model Version(s).		

B. Building Downwash

Yes	Is downwash applicable? *(Select "Yes" or "No")*
04274	Enter BPIP version (AERMOD and ISCPrime only).

C. Type of Analyses: (Select "X" in all that apply)
*PSD projects should submit a protocol and not utilize this form.

X	Minor NSR NAAQS	X	State Property Line
X	Health Effects		

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

D. Constituents Evaluating: (Select "X" in all that apply)

NAAQS: List all pollutants that require an modeling review. *(Select "X" in all that apply)*

X	SO_2	X	PM_{10}
X	CO	X	$PM_{2.5}$
	Pb	X	NO_2

Both	Identify which averaging periods are being evaluated for NO_2.
Tier 2: ARM 2	Identify the 1-hr NO_2 tier used for the AERMOD or AERSCREEN analyses.
Tier 2: ARM 2	Identify the annual NO_2 tier used for the AERMOD or AERSCREEN analyses.

[redacted]

State Property Line: List all pollutants that require an modeling review. *(Select "X" in all that apply)*

X	H_2S	X	SO_2
	H_2SO_4		

Health Effects: Fill in the Speciated Emissions sheet with all applicable pollutants, CAS numbers, and ESLs.

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

E. Dispersion Options: *If "Urban" has been selected and this project is using AERMOD or AERSCREEN, include the population used. Select "X" in the box to select an option.*

	Urban
X	Rural

Provide any additional justification on the dispersion option selected above:

It is abundantly obvious that the area surrounding the site is a rural nature.

F. Determination of Surface Roughness: *If AERSCREEN or AERMOD is used, fill out the section below.*

Select basis for surface roughness: AERSURFACE

Select "X" in one of the three surface roughness categories:

X	Low		Medium
			High

If you are using AERSURFACE, please complete the following section:

13016	AERSURFACE Version Number		
690475	Center UTM Easting (meters)	3081600	Center UTM Northing (meters)
1	Study Radius (km)		
No	Airport? (Select Yes or No)		
No	Continuous Snow Cover (Select Yes or No)		
Average	Surface Moisture (Select Wet, Dry, or Average)		
No	Arid Region? (Select Yes or No)		
default	Month/Season Assignment		

Texas Commission on Environmental Quality

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Model Options

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G. Meteorological Data:		
If AERMOD and/or ISC/ISCPrime are selected, please complete the following section:		
12924		Surface Station
12924		Upper Air Station
13.4	Meters (m)	Profile Base Elevation (AERMOD only)
16216		AERMET Version Number
Yes	Was TCEQ pre-processed data used?	Years used
Please enter the year(s) selected for this meteorological data:		
2012 1 Year		2011-2015 5 Years
CO, PM10, H2S, Crude		Which analysis(es) relied on 1 year?
NO2, PM2.5, SO2		Which analysis(es) relied on 5 years?
Provide any other justification for Meteorological Data, as applicable.		
Used low roughness met data set because surface roughness for the site is less than 0.1		

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

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Company Name: Lone Star Ports, LLC

H. Receptor Grid:

For AERMOD or ISC/ISCPrime, fill in the following information on your modeled receptor grid. Note: Receptor grid resolution (tight, fine, medium, coarse) are based on recommended receptor grid spacing per the AQMG, if something outside of this is used, fully describe it below.

25	Meters (m)	Tight Receptor Spacing
300	Meters (m)	Tight Receptor Distance
100	Meters (m)	Fine Receptor Spacing
1000	Meters (m)	Fine Receptor Distance
	Meters (m)	Medium Receptor Spacing
	Meters (m)	Medium Receptor Distance
	Meters (m)	Coarse Receptor Spacing
	Meters (m)	Coarse Receptor Distance

Describe any other receptor grid designs (over water, GLC_{ni}, SPLD etc.):

None. The modeling results for GLCni and over water were determined by visual inspection of the modeling results.

I. Terrain:

X Elevated

18081 AERMAP Version.

For additional justification on terrain selection, fill in the box below:

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Building Downwash

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Facility:

Downwash Type	Modeled Building ID	Tank Diameter (m)	Number of Tiers	Maximum Height (m)	Tier 1 Height (m)	Tier 2 Height (m)	Tier 3 Height (m)	Tier 4 Height (m)	Tier 5 Height (m)	Tier 6 Height (m)	Tier 7 Height (m)
Tank	Tank1	26.2128	1	14.6304	14.6304						
Tank	Tank2	26.2128	1	14.6304	14.6304						
Building	Office		1	4.572	4.572						
Building	MCC		1	3.6576	3.6576						

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Point Source Parameters

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Facility:

EPN	Model ID	Modeling Scenario	Source Description	Point Source Type	Point Source Justification	Easting: X [m]	Northing: Y [m]	Base Elevation [m]	Height [m]	Exit Temperature [K]	Exit Velocity [m/s]	Diameter [m]
MVCU-1	MVCU1		Controlled Marine Loading VCU No. 1	POINT	Vertical Stack	690,448	3,081,816	2.33	40	1400	20.47	12
MVCU-2	MVCU2		Controlled Marine Loading VCU No. 2	POINT	Vertical Stack	690,458	3,081,819	2.36	40	1400	20.47	12
MVCU-3	MVCU3		Controlled Marine Loading VCU No. 3	POINT	Vertical Stack	690,468	3,081,822	2.39	40	1400	20.47	12
MVCU-4	MVCU4		Controlled Marine Loading VCU No. 4	POINT	Vertical Stack	690,478	3,081,825	2.41	40	1400	20.47	12
MVCU-5	MVCU5		Controlled Marine Loading VCU No. 5	POINT	Vertical Stack	690,498	3,081,830	2.45	40	1400	20.47	12
MVCU-6	MVCU6		Controlled Marine Loading VCU No. 6	POINT	Vertical Stack	690,508	3,081,833	2.48	40	1400	20.47	12
MVCU-7	MVCU7		Controlled Marine Loading VCU No. 7	POINT	Vertical Stack	690,518	3,081,836	2.5	40	1400	20.47	12
MVCU-8	MVCU8		Controlled Marine Loading VCU No. 8	POINT	Vertical Stack	690,528	3,081,839	2.53	40	1400	20.47	12
T-COMB-1	T_COMB_1		Temporary Portable Combustion Unit	POINT	Vertical Stack	690,257	3,081,786	2.17	11	1400	33	3
MSS	MSS_CONT		MSS Control Device (non-tank)	POINT	Vertical Stack	690,474	3,081,634	1.77	11	1400	33	3

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Volume Source Calculations

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

EPN	Model ID	Footprint of Source Length (m)	Footprint of Source Width (m)	Length of Side (making it a square) SQRT(L * W)	Type of Volume Source (sigma y) *Pick from drop-down*	**Sigma Y** (m)	Vertical Span Min Release (m)
BERTH-1	B01_0001	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0002	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0003	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0004	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0005	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0006	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0007	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0008	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-1	B01_0009	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0001	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0002	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0003	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0004	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0005	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0006	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0007	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0008	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
BERTH-2	B02_0009	30	30	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
50-1	TK50_1	0	0	0.30	Single Volume Source	0.07	14.478
50-2	TK50_2	0	0	0.30	Single Volume Source	0.07	14.478
FUG	FUG	122	122	121.92	Single Volume Source	28.35	0
MSS	MSS_FUG	6	6	6.10	Single Volume Source	1.42	0
MSS	Pigging	2	2	1.52	Single Volume Source	0.35	0
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	
				0.00		Incomplete	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Volume Source Calculations

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

EPN	Model ID	Vertical Span Max Release (m)	Vertical Dimension (m)	Type of Volume Source (sigma z) *Pick from drop-down*	Release Height (middle point of vertical span) (m)	Building Name (if on/adjacent to a building) *Pick from drop-down*	Adjacent Building Height, if applicable (m)	Sigma Z (m)
BERTH-1	B01_0001	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0002	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0003	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0004	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0005	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0006	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0007	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0008	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0009	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0001	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0002	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0003	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0004	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0005	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0006	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0007	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0008	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-2	B02_0009	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			0.35
50-1	TK50_1	14.7828	0.30	Elevated Source: On or adjacent to Building	14.63	Tank1	14.63	6.80
50-2	TK50_2	14.7828	0.30	Elevated Source: On or adjacent to Building	14.63	Tank2	14.63	6.80
FUG	FUG	1.83	1.83	Surface-Based Source	0.91			0.85
MSS	MSS_FUG	1.83	1.83	Surface-Based Source	0.91			0.85
MSS	Pigging	1.83	1.83	Surface-Based Source	0.91			0.85
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete
			0.00		0.00			Incomplete

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Volume Source Parameters

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

EPN	Model ID	Modeled Release Height [m]	Modeled Length X [m]	Lateral Dimension SigmaY [m]	Vertical Dimension SigmaZ [m]	Modeling Scenario	Easting: X [m]	Northing: Y [m]	Base Elevation [m]	Source Description	Volume Source Size Justification
BERTH-1	B01_0001	16.00	30.48	14.18	0.35		690,209	3,081,462	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0002	16.00	30.48	14.18	0.35		690,237	3,081,473	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0003	16.00	30.48	14.18	0.35		690,265	3,081,484	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0004	16.00	30.48	14.18	0.35		690,293	3,081,496	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0005	16.00	30.48	14.18	0.35		690,322	3,081,507	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0006	16.00	30.48	14.18	0.35		690,350	3,081,518	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0007	16.00	30.48	14.18	0.35		690,378	3,081,530	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0008	16.00	30.48	14.18	0.35		690,407	3,081,541	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-1	B01_0009	16.00	30.48	14.18	0.35		690,435	3,081,553	0	Berth 1 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0001	16.00	30.48	14.18	0.35		690,575	3,081,572	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0002	16.00	30.48	14.18	0.35		690,605	3,081,571	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0003	16.00	30.48	14.18	0.35		690,636	3,081,569	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Volume Source Parameters

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeled Release Height [m]	Modeled Length X [m]	Lateral Dimension SigmaY [m]	Vertical Dimension SigmaZ [m]	Modeling Scenario	Easting: X [m]	Northing: Y [m]	Base Elevation [m]	Source Description	Volume Source Size Justification
BERTH-2	B02_0004	16.00	30.48	14.18	0.35		690,666	3,081,568	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0005	16.00	30.48	14.18	0.35		690,697	3,081,567	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0006	16.00	30.48	14.18	0.35		690,727	3,081,565	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0007	16.00	30.48	14.18	0.35		690,758	3,081,564	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0008	16.00	30.48	14.18	0.35		690,788	3,081,562	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
BERTH-2	B02_0009	16.00	30.48	14.18	0.35		690,819	3,081,561	0	Berth 2 Loading Fugtives (Ships)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.
50-1	TK50_1	14.63	0.30	0.07	6.80		690,222	3,081,787	2.19	Recycle Tank No. 1	Emissions released from multiple roof vents at the top of tank
50-2	TK50_2	14.63	0.30	0.07	6.80		690,262	3,081,820	2.2	Recylce Tank No. 2	Emissions released from multiple roof vents at the top of tank
FUG	FUG	0.91	121.92	28.35	0.85		690,474	3,081,634	1.77	Piping Fugitive Components	Representative of the piping fugitive emissions that would occur
MSS	MSS_FUG	0.91	6.10	1.42	0.85		690,474	3,081,634	1.77	MSS Emissions Cap	Representative of the area the MSS activities could occur
MSS	Pigging	0.91	1.52	0.35	0.85		690,063	3,081,813	2.38	Pipeline pigging	Representative of the area the pigging emission could occur

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Point + Flare Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
MVCU-1	MVCU1	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-2	MVCU2	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-3	MVCU3	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-4	MVCU4	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-5	MVCU5	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-6	MVCU6	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-7	MVCU7	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
MVCU-8	MVCU8	0	NOx	1-hr	NAAQS	SIL analysis	No	12.53	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	NOx	1-hr	NAAQS	SIL analysis	No	3.00	Maximum Allowable	No
MSS	MSS_CONT	0	NOx	1-hr	NAAQS	SIL analysis	No	1.99	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	1-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	1-hr	NAAQS	SIL analysis	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	1-hr	NAAQS	SIL analysis	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	3-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	3-hr	NAAQS	SIL analysis	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	3-hr	NAAQS	SIL analysis	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	24-hr	NAAQS	SIL analysis	No	11.79	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	24-hr	NAAQS	SIL analysis	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	24-hr	NAAQS	SIL analysis	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Point + Flare Emissions

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
MVCU-7	MVCU7	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	1-hr	State Property Line	Site Wide	No	11.79	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	1-hr	State Property Line	Site Wide	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	1-hr	State Property Line	Site Wide	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-2	MVCU2	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-3	MVCU3	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-4	MVCU4	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-5	MVCU5	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-6	MVCU6	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-7	MVCU7	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-8	MVCU8	0	CO	1-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	CO	1-hr	NAAQS	SIL analysis	No	4.00	Maximum Allowable	No
MSS	MSS_CONT	0	CO	1-hr	NAAQS	SIL analysis	No	2.66	Maximum Allowable	No
MVCU-1	MVCU1	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-2	MVCU2	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-3	MVCU3	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-4	MVCU4	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-5	MVCU5	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-6	MVCU6	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-7	MVCU7	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
MVCU-8	MVCU8	0	CO	8-hr	NAAQS	SIL analysis	No	25.05	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	CO	8-hr	NAAQS	SIL analysis	No	4.00	Maximum Allowable	No
MSS	MSS_CONT	0	CO	8-hr	NAAQS	SIL analysis	No	2.66	Maximum Allowable	No
MVCU-1	MVCU1	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-2	MVCU2	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-3	MVCU3	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-4	MVCU4	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-5	MVCU5	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-6	MVCU6	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-7	MVCU7	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-8	MVCU8	0	PM10	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	PM10	24-hr	NAAQS	SIL analysis	No	0.150	Maximum Allowable	No
MSS	MSS_CONT	0	PM10	24-hr	NAAQS	SIL analysis	No	0.100	Maximum Allowable	No
MVCU-1	MVCU1	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-2	MVCU2	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-3	MVCU3	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-4	MVCU4	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-5	MVCU5	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-6	MVCU6	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-7	MVCU7	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
MVCU-8	MVCU8	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.930	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.150	Maximum Allowable	No
MSS	MSS_CONT	0	PM2.5	24-hr	NAAQS	SIL analysis	No	0.100	Maximum Allowable	No
MVCU-1	MVCU1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-2	MVCU2	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-3	MVCU3	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-4	MVCU4	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-5	MVCU5	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-6	MVCU6	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-7	MVCU7	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-8	MVCU8	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Point + Flare Emissions

Date: 5/30/2019

Permit #: TBD

Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
T-COMB-1	T_COMB_1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No

Texas Commission on Environmental Quality

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Date: 5/30/2019

Permit #: TBD

Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
MSS	MSS_CONT	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
MVCU-1	MVCU1	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-2	MVCU2	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-3	MVCU3	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-4	MVCU4	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-5	MVCU5	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-6	MVCU6	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-7	MVCU7	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
MVCU-8	MVCU8	0	H2S	1-hr	State Property Line	Site Wide	No	0.130	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	H2S	1-hr	State Property Line	Site Wide	No	0.0200	Maximum Allowable	No
MSS	MSS_CONT	0	H2S	1-hr	State Property Line	Site Wide	No	3.00E-04	Maximum Allowable	No
MVCU-1	MVCU1	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-2	MVCU2	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-3	MVCU3	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-4	MVCU4	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-5	MVCU5	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-6	MVCU6	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-7	MVCU7	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
MVCU-8	MVCU8	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	12.53	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	3.00	Maximum Allowable	No
MSS	MSS_CONT	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	1.99	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-2	MVCU2	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-3	MVCU3	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-4	MVCU4	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-5	MVCU5	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-6	MVCU6	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-7	MVCU7	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
MVCU-8	MVCU8	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.930	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.150	Maximum Allowable	No
MSS	MSS_CONT	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	0.100	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Point + Flare Emissions

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
MVCU-2	MVCU2	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	11.79	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

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Date: 5/30/2019

Permit #: TBD

Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
T-COMB-1	T_COMB_1	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	1.88	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	0.250	Maximum Allowable	No
MVCU-1	MVCU1	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-2	MVCU2	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-3	MVCU3	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-4	MVCU4	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-5	MVCU5	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-6	MVCU6	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-7	MVCU7	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-8	MVCU8	0	NOx	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	NOx	Annual	NAAQS	SIL analysis	No	1.27	Maximum Allowable	No
MSS	MSS_CONT	0	NOx	Annual	NAAQS	SIL analysis	No	0.144	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	Annual	NAAQS	SIL analysis	No	2.58	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	Annual	NAAQS	SIL analysis	No	0.0135	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	Annual	NAAQS	SIL analysis	No	0.177	Maximum Allowable	No
MVCU-1	MVCU1	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-2	MVCU2	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-3	MVCU3	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-4	MVCU4	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-5	MVCU5	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-6	MVCU6	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-7	MVCU7	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-8	MVCU8	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	0.0135	Maximum Allowable	No
MSS	MSS_CONT	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	0.177	Maximum Allowable	No
MVCU-1	MVCU1	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-2	MVCU2	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-3	MVCU3	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-4	MVCU4	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-5	MVCU5	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-6	MVCU6	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-7	MVCU7	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
MVCU-8	MVCU8	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.126	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.0632	Maximum Allowable	No
MSS	MSS_CONT	0	PM2.5	Annual	NAAQS	SIL analysis	No	0.00708	Maximum Allowable	No
MVCU-1	MVCU1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-2	MVCU2	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-3	MVCU3	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-4	MVCU4	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-5	MVCU5	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-6	MVCU6	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-7	MVCU7	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MVCU-8	MVCU8	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
T-COMB-1	T_COMB_1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No
MSS	MSS_CONT	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	[redacted]	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Volume Source Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
BERTH-1	B01_0001	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0002	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0003	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0004	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0005	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0006	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0007	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0008	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0009	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0001	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0002	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0003	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0004	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0005	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0006	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0007	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0008	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0009	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
50-1	TK50_1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
50-2	TK50_2	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
FUG	FUG	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
MSS	MSS_FUG	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
MSS	Pigging	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0001	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0002	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0003	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0004	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0005	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0006	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0007	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0008	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0009	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0001	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0002	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0003	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0004	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0005	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0006	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0007	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0008	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-2	B02_0009	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
50-1	TK50_1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
50-2	TK50_2	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
FUG	FUG	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
MSS	MSS_FUG	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
MSS	Pigging	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No		Maximum Allowable	No
BERTH-1	B01_0001	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0002	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0003	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Volume Source Emissions

Date: 5/30/2019

Permit #: TBD

Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?
BERTH-1	B01_0004	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0005	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0006	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0007	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0008	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-1	B01_0009	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0001	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0002	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0003	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0004	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0005	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0006	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0007	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0008	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
BERTH-2	B02_0009	0	H2S	1-hr	State Property Line	Site Wide	No	0.00100	Maximum Allowable	No
50-1	TK50_1	0	H2S	1-hr	State Property Line	Site Wide	No	4.00E-04	Maximum Allowable	No
50-2	TK50_2	0	H2S	1-hr	State Property Line	Site Wide	No	4.00E-04	Maximum Allowable	No
FUG	FUG	0	H2S	1-hr	State Property Line	Site Wide	No	8.00E-04	Maximum Allowable	No
MSS	MSS_FUG	0	H2S	1-hr	State Property Line	Site Wide	No	0.0267	Maximum Allowable	No
MSS	Pigging	0	H2S	1-hr	State Property Line	Site Wide	No	0.00850	Maximum Allowable	No

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions by Model ID

CAS #	Chemical Species	Other Species	Short-Term ESL (µg/m³)	Long-Term ESL (µg/m³)	Modeled Project Wide Emission Rate [lb/hr] MVCU1	Modeled Site Wide Emission Rate [lb/hr] MVCU1	Modeled Project Wide Emission Rate [tpy] MVCU1	Modeled Site Wide Emission Rate [tpy] MVCU1
N/A	Other (Please specify):	crude oil, < 1% benzene	3500	350	12.53	12.53	6.07	6.07

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook (EMEW)
Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions

CAS #	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]
	MVCU2	MVCU2	MVCU2	MVCU2	MVCU3	MVCU3	MVCU3	MVCU3	MVCU4	MVCU4	MVCU4	MVCU4	MVCU5	MVCU5	MVCU5	MVCU5	MVCU6
N/A	12.53	12.53	6.07	6.07	12.53	12.53	6.07	6.07	12.53	12.53	6.07	6.07	12.53	12.53	6.07	6.07	12.53

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions

	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]
CAS #	MVCU6	MVCU6	MVCU6	MVCU7	MVCU7	MVCU7	MVCU7	MVCU8	MVCU8	MVCU8	MVCU8	T_COMB_1	T_COMB_1	T_COMB_1	T_COMB_1	MSS_CONT	MSS_CONT
N/A	12.53	6.07	6.07	12.53	12.53	6.07	6.07	12.53	12.53	6.07	6.07	2.00	2.00	0.240	0.240	0.660	0.660

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions

CAS #	Modeled Project Wide Emission Rate [tpy] MSS_CONT	Modeled Site Wide Emission Rate [tpy] MSS_CONT	Modeled Project Wide Emission Rate [lb/hr] B01_0001	Modeled Site Wide Emission Rate [lb/hr] B01_0001	Modeled Project Wide Emission Rate [tpy] B01_0001	Modeled Site Wide Emission Rate [tpy] B01_0001	Modeled Project Wide Emission Rate [lb/hr] B01_0002	Modeled Site Wide Emission Rate [lb/hr] B01_0002	Modeled Project Wide Emission Rate [tpy] B01_0002	Modeled Site Wide Emission Rate [tpy] B01_0002	Modeled Project Wide Emission Rate [lb/hr] B01_0003	Modeled Site Wide Emission Rate [lb/hr] B01_0003	Modeled Project Wide Emission Rate [tpy] B01_0003	Modeled Site Wide Emission Rate [tpy] B01_0003	Modeled Project Wide Emission Rate [lb/hr] B01_0004	Modeled Site Wide Emission Rate [lb/hr] B01_0004	Modeled Project Wide Emission Rate [tpy] B01_0004
N/A	0.00700	0.00700	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook (EMEW)
Speciated Emissions

Date: 5/30/2019
Permit #: ~~TBD~~
Company Name: Lone Star Ports, LLC

Speciated Emissions

CAS #	Modeled Site Wide Emission Rate [tpy] B01_0004	Modeled Project Wide Emission Rate [lb/hr] B01_0005	Modeled Site Wide Emission Rate [lb/hr] B01_0005	Modeled Project Wide Emission Rate [tpy] B01_0005	Modeled Site Wide Emission Rate [tpy] B01_0005	Modeled Project Wide Emission Rate [lb/hr] B01_0006	Modeled Site Wide Emission Rate [lb/hr] B01_0006	Modeled Project Wide Emission Rate [tpy] B01_0006	Modeled Site Wide Emission Rate [tpy] B01_0006	Modeled Project Wide Emission Rate [lb/hr] B01_0007	Modeled Site Wide Emission Rate [lb/hr] B01_0007	Modeled Project Wide Emission Rate [tpy] B01_0007	Modeled Site Wide Emission Rate [tpy] B01_0007	Modeled Project Wide Emission Rate [lb/hr] B01_0008	Modeled Site Wide Emission Rate [lb/hr] B01_0008	Modeled Project Wide Emission Rate [tpy] B01_0008	Modeled Site Wide Emission Rate [tpy] B01_0008
N/A	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions

	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]
CAS #	B01_0009	B01_0009	B01_0009	B01_0009	B02_0001	B02_0001	B02_0001	B02_0001	B02_0002	B02_0002	B02_0002	B02_0002	B02_0003	B02_0003	B02_0003	B02_0003	B02_0004
N/A	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01	1.01	1.47	1.47	1.01

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook (EMEW)
Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions

CAS #	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]
	B02_0008	B02_0008	B02_0009	B02_0009	B02_0009	B02_0009	TK50_1	TK50_1	TK50_1	TK50_1	TK50_2	TK50_2	TK50_2	TK50_2	FUG	FUG	FUG
N/A	1.47	1.47	1.01	1.01	1.47	1.47	5.14	5.14	1.60	1.60	5.14	5.14	1.60	1.60	0.777	0.777	3.41

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Speciated Emissions

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Speciated Emissions

CAS #	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	Modeled Project Wide Emission Rate [lb/hr]	Modeled Site Wide Emission Rate [lb/hr]	Modeled Project Wide Emission Rate [tpy]	Modeled Site Wide Emission Rate [tpy]	[redacted]
FUG	FUG	MSS_FUG	MSS_FUG	MSS_FUG	MSS_FUG	Pigging	Pigging	Pigging	Pigging	
N/A	3.41	26.70	26.70	0.362	0.362	8.52	8.52	0.163	0.163	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Combined Emissions

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]
MVCU-1	MVCU1	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-2	MVCU2	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-3	MVCU3	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-4	MVCU4	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-5	MVCU5	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-6	MVCU6	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-7	MVCU7	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
MVCU-8	MVCU8	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	12.53
T-COMB-1	T_COMB_1	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	3.00
MSS	MSS_CONT	0	NOx	1-hr	NAAQS	SIL analysis	No	Point	1.99
MVCU-1	MVCU1	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-2	MVCU2	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-3	MVCU3	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-4	MVCU4	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-5	MVCU5	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-6	MVCU6	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-7	MVCU7	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-8	MVCU8	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	1.88
MSS	MSS_CONT	0	SO2	1-hr	NAAQS	SIL analysis	No	Point	0.25
MVCU-1	MVCU1	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-2	MVCU2	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-3	MVCU3	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-4	MVCU4	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-5	MVCU5	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-6	MVCU6	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-7	MVCU7	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-8	MVCU8	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	1.88
MSS	MSS_CONT	0	SO2	3-hr	NAAQS	SIL analysis	No	Point	0.25
MVCU-1	MVCU1	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-2	MVCU2	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-3	MVCU3	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-4	MVCU4	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-5	MVCU5	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-6	MVCU6	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-7	MVCU7	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
MVCU-8	MVCU8	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	1.88
MSS	MSS_CONT	0	SO2	24-hr	NAAQS	SIL analysis	No	Point	0.25
MVCU-1	MVCU1	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Combined Emissions

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]
MVCU-2	MVCU2	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
MVCU-3	MVCU3	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
MVCU-4	MVCU4	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
MVCU-5	MVCU5	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
MVCU-6	MVCU6	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
MVCU-7	MVCU7	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
MVCU-8	MVCU8	0	SO2	1-hr	State Property Line	Site Wide	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	1-hr	State Property Line	Site Wide	No	Point	1.88
MSS	MSS_CONT	0	SO2	1-hr	State Property Line	Site Wide	No	Point	0.25
MVCU-1	MVCU1	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-2	MVCU2	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-3	MVCU3	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-4	MVCU4	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-5	MVCU5	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-6	MVCU6	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-7	MVCU7	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-8	MVCU8	0	CO	1-hr	NAAQS	SIL analysis	No	Point	25.05
T-COMB-1	T_COMB_1	0	CO	1-hr	NAAQS	SIL analysis	No	Point	4.00
MSS	MSS_CONT	0	CO	1-hr	NAAQS	SIL analysis	No	Point	2.66
MVCU-1	MVCU1	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-2	MVCU2	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-3	MVCU3	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-4	MVCU4	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-5	MVCU5	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-6	MVCU6	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-7	MVCU7	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
MVCU-8	MVCU8	0	CO	8-hr	NAAQS	SIL analysis	No	Point	25.05
T-COMB-1	T_COMB_1	0	CO	8-hr	NAAQS	SIL analysis	No	Point	4.00
MSS	MSS_CONT	0	CO	8-hr	NAAQS	SIL analysis	No	Point	2.66
MVCU-1	MVCU1	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-2	MVCU2	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-3	MVCU3	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-4	MVCU4	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-5	MVCU5	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-6	MVCU6	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-7	MVCU7	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-8	MVCU8	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.93
T-COMB-1	T_COMB_1	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.15
MSS	MSS_CONT	0	PM10	24-hr	NAAQS	SIL analysis	No	Point	0.10
MVCU-1	MVCU1	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-2	MVCU2	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Combined Emissions

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]
MVCU-3	MVCU3	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-4	MVCU4	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-5	MVCU5	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-6	MVCU6	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-7	MVCU7	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
MVCU-8	MVCU8	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.93
T-COMB-1	T_COMB_1	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.15
MSS	MSS_CONT	0	PM2.5	24-hr	NAAQS	SIL analysis	No	Point	0.10
MVCU-1	MVCU1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-2	MVCU2	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-3	MVCU3	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-4	MVCU4	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-5	MVCU5	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-6	MVCU6	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-7	MVCU7	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-8	MVCU8	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
T-COMB-1	T_COMB_1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MSS	MSS_CONT	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Point	--
MVCU-1	MVCU1	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-2	MVCU2	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-3	MVCU3	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-4	MVCU4	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-5	MVCU5	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-6	MVCU6	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-7	MVCU7	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
MVCU-8	MVCU8	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.13
T-COMB-1	T_COMB_1	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.02
MSS	MSS_CONT	0	H2S	1-hr	State Property Line	Site Wide	No	Point	0.00
MVCU-1	MVCU1	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-2	MVCU2	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-3	MVCU3	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-4	MVCU4	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-5	MVCU5	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-6	MVCU6	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-7	MVCU7	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-8	MVCU8	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
T-COMB-1	T_COMB_1	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MSS	MSS_CONT	0	NOx	1-hr	NAAQS	Minor Full NAAQS	No	Point	3.00
MVCU-1	MVCU1	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	1.99
MVCU-2	MVCU2	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-3	MVCU3	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79

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Date: 5/30/2019
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EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]
MVCU-4	MVCU4	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-5	MVCU5	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-6	MVCU6	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-7	MVCU7	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-8	MVCU8	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	1.88
MSS	MSS_CONT	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	0.25
MVCU-1	MVCU1	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-2	MVCU2	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-3	MVCU3	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-4	MVCU4	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-5	MVCU5	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-6	MVCU6	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-7	MVCU7	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MVCU-8	MVCU8	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
T-COMB-1	T_COMB_1	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
MSS	MSS_CONT	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.15
MVCU-1	MVCU1	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	0.10
MVCU-2	MVCU2	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-3	MVCU3	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-4	MVCU4	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-5	MVCU5	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-6	MVCU6	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-7	MVCU7	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-8	MVCU8	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	1.88
MSS	MSS_CONT	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	0.25
MVCU-1	MVCU1	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-2	MVCU2	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-3	MVCU3	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-4	MVCU4	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-5	MVCU5	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-6	MVCU6	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-7	MVCU7	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-8	MVCU8	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
T-COMB-1	T_COMB_1	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	1.88
MSS	MSS_CONT	0	SO2	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.25
MVCU-1	MVCU1	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
MVCU-2	MVCU2	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
MVCU-3	MVCU3	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
MVCU-4	MVCU4	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68

Texas Commission on Environmental Quality

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EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]
MVCU-5	MVCU5	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
MVCU-6	MVCU6	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
MVCU-7	MVCU7	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
MVCU-8	MVCU8	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.68
T-COMB-1	T_COMB_1	0	NOx	Annual	NAAQS	SIL analysis	No	Point	1.27
MSS	MSS_CONT	0	NOx	Annual	NAAQS	SIL analysis	No	Point	0.14
MVCU-1	MVCU1	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-2	MVCU2	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-3	MVCU3	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-4	MVCU4	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-5	MVCU5	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-6	MVCU6	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-7	MVCU7	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MVCU-8	MVCU8	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
T-COMB-1	T_COMB_1	0	SO2	Annual	NAAQS	SIL analysis	No	Point	2.58
MSS	MSS_CONT	0	SO2	Annual	NAAQS	SIL analysis	No	Point	0.01
MVCU-1	MVCU1	0	SO2	Annual	NAAQS	SIL analysis	No	Point	0.18
MVCU-1	MVCU1	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-2	MVCU2	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-3	MVCU3	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-4	MVCU4	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-5	MVCU5	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-6	MVCU6	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-7	MVCU7	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
MVCU-8	MVCU8	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	2.58
T-COMB-1	T_COMB_1	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	0.01
MSS	MSS_CONT	0	SO2	Annual	NAAQS	Minor Full NAAQS	No	Point	0.18
MVCU-1	MVCU1	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-2	MVCU2	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-3	MVCU3	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-4	MVCU4	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-5	MVCU5	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-6	MVCU6	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-7	MVCU7	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MVCU-8	MVCU8	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
T-COMB-1	T_COMB_1	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.13
MSS	MSS_CONT	0	PM2.5	Annual	NAAQS	SIL analysis	No	Point	0.06
MVCU-1	MVCU1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	0.01
MVCU-2	MVCU2	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
MVCU-3	MVCU3	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
MVCU-4	MVCU4	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
MVCU-5	MVCU5	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--

Texas Commission on Environmental Quality

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EPN	Model ID	Modeling Scenario	Pollutant	Modeled Averaging time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]
MVCU-6	MVCU6	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
MVCU-7	MVCU7	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
MVCU-8	MVCU8	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
T-COMB-1	T_COMB_1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
MSS	MSS_CONT	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Point	--
BERTH-1	B01_0001	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0002	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0003	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0004	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0005	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0006	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0007	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0008	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0009	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0001	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0002	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0003	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0004	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0005	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0006	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0007	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0008	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0009	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
50-1	TK50_1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
50-2	TK50_2	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
FUG	FUG	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
MSS	MSS_FUG	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
MSS	Pigging	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0001	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0002	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0003	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0004	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0005	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0006	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0007	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0008	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0009	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0001	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0002	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0003	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0004	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--

Texas Commission on Environmental Quality

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BERTH-2	B02_0005	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0006	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0007	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0008	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-2	B02_0009	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
50-1	TK50_1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
50-2	TK50_2	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
FUG	FUG	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
MSS	MSS_FUG	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
MSS	Pigging	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	No	Volume	--
BERTH-1	B01_0001	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0002	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0003	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0004	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0005	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0006	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0007	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0008	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-1	B01_0009	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0001	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0002	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0003	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0004	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0005	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0006	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0007	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0008	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
BERTH-2	B02_0009	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
50-1	TK50_1	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
50-2	TK50_2	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
FUG	FUG	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
MSS	MSS_FUG	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.00
MSS	Pigging	0	H2S	1-hr	State Property Line	Site Wide	No	Volume	0.03
									0.01

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Monitor Calculations

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Pollutant:	$PM_{2.5}$			
AQS ID:	483550034		Street Address and City:	5707 Up River Rd
Link to Data Source:	www.epa.gov/outdoor-air-quality-data/monitor-values		County:	Nueces
Select metric for short term averaging time below:	1st Year Concentration ($\mu g/m^3$)	2nd Year Concentration ($\mu g/m^3$)	3rd Year (most recent) Concentration ($\mu g/m^3$)	Calculated Background Concentration ($\mu g/m^3$)
24-hr 98 percentile	23.00000	25.00000	29.00000	26
Annual Average	9.40000	8.60000	8.10000	8.7

Pollutant:	NO_2			
AQS ID:	480391016		Street Address and City:	109b Brazoria Hwy 332 West
Link to Data Source:	www.epa.gov/outdoor-air-quality-data/monitor-values		County:	Brazoria
Select metric for short term averaging time below:	1st Year Concentration ($\mu g/m^3$)	2nd Year Concentration ($\mu g/m^3$)	3rd Year (most recent) Concentration ($\mu g/m^3$)	Calculated Background Concentration ($\mu g/m^3$)
1-hr 98 percentile	35.72000	35.72000	33.84000	35
Annual Average				0

Pollutant:	SO_2			
AQS ID:	483550025		Address:	orpus Christi State School (Airport R
Link to Data Source:	www.epa.gov/outdoor-air-quality-data/monitor-values		County:	Nueces
Select metric for short term averaging time below:	1st Year Concentration ($\mu g/m^3$)	2nd Year Concentration ($\mu g/m^3$)	3rd Year (most recent) Concentration ($\mu g/m^3$)	Calculated Background Concentration ($\mu g/m^3$)
1-hr 99 percentile	7.80000	10.50000	13.10000	10
H2H 3-hr Avg			10.30000	10
H2H 24-hr Avg			3.90000	4
Annual Average			1.10000	1

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Monitor Calculations

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Pollutant:	PM_{10}			
AQS ID:	483550034		Address:	5707 Up River Rd
Link to Data Source:	www.epa.gov/outdoor-air-quality-data/monitor-values		County:	Nueces
Select metric for short term averaging time below:	1st Year Concentration ($\mu g/m^3$)	2nd Year Concentration ($\mu g/m^3$)	3rd Year (most recent) Concentration ($\mu g/m^3$)	Calculated Background Concentration ($\mu g/m^3$)
H2H 24-hr Avg	36.00000	43.00000	79.00000	79

Pollutant:	CO			
AQS ID:			Address:	
Link to Data Source:			County:	
Select metric for short term averaging time below:	1st Year Concentration ($\mu g/m^3$)	2nd Year Concentration ($\mu g/m^3$)	3rd Year (most recent) Concentration ($\mu g/m^3$)	Calculated Background Concentration ($\mu g/m^3$)
Choose an item				0
Choose an item				0

Pollutant:	Pb		
AQS ID:		Address:	
Link to Data Source:		County:	
Select metric for short term averaging time below:	Concentration ($\mu g/m^3$) from 38 Month Sample Period	Calculated Background Concentration ($\mu g/m^3$)	
Choose an item		0	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	$PM_{2.5}$
AQS ID:	483550034
County:	Nueces
Distance to Project Site (km):	38.0

Monitor Justification Data

Category:	10 Kilometer $PM_{2.5}$ Emissions Comparison	Types of Nearby Sources	County $PM_{2.5}$ Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:	4 tpy	Fabrication Facility			Undeveloped/water/residential	coastal
Monitor:	1257 tpy	multiple refineries			industrial	coastal
Data Source:	https://www.tceq.texas.gov/assets/public/implementation/air/ie/pseisums/2013thru2017ptptsum.xlsx					

Additional Information

How are off-property sources accounted for?	The monitor was used in lieu of explicitly modeling off-property sources considering the quantity of emissions near the monitor compared to the quantity of emissions near the project site. Very minor source adjacent to the project site.
Monitoring data set year(s)/Additional Justification:	2016-2018, Major industry near monitor, compared to rural nature of the project site, which is very conservative.

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	NO_2
AQS ID:	480391016
County:	Brazoria
Distance to Project Site (km):	204.0

Monitor Justification Data

Category:	10 Kilometer NO_2 Emissions Comparison	Types of Nearby Sources	County NO_2 Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:	3 tpy	Fabrication Facility	7041 tpy	340223	Undeveloped/water/residential	coastal
Monitor:	2487 tpy	Large chemical plants	6364 tpy	3313166	Urban/industrial	coastal
Data Source:	https://www.tceq.texas.gov/assets/public/implementation/air/ie/pseisums/2013thru2017statecum.xlsx		ftp://ftp.epa.gov/EmisInventory/2014/tier_summaries	U.S. Census Bureau (July 1, 2017 Estimate) https://factfinder.census.gov/faces/nav/jsf/pages/community		

Additional Information

How are off-property sources accounted for?	The monitor was used in lieu of explicitly modeling off-property sources considering the quantity of emissions near the monitor compared to the quantity of emissions near the project site. Very minor source adjacent to the project site.
Monitoring data set year(s)/Additional Justification:	2016-2018, Major industry near monitor, compared to rural nature of the project site, which is very conservative.

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	SO_2
AQS ID:	483550025
County:	Nueces
Distance to Project Site (km):	37.0

Monitor Justification Data

Category:	10 Kilometer SO_2 Emissions Comparison	Types of Nearby Sources	County SO_2 Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:	0.1 tpy	Fabrication Facility			Undeveloped/water/residential	coastal
Monitor:	524	multiple refineries			industrial	coastal
Data Source:	https://www.tceq.texas.gov/assets/public/implementation/air/ie/pseisums/2013thru2017statetosum.xlsx					

Additional Information

How are off-property sources accounted for?	The monitor was used in lieu of explicitly modeling off-property sources considering the quantity of emissions near the monitor compared to the quantity of emissions near the project site. Very minor source adjacent to the project site.
Monitoring data set year(s)/Additional Justification:	2016-2018, Major industry near monitor, compared to rural nature of the project site, which is very conservative.

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	PM_{10}
AQS ID:	483550034
County:	Nueces
Distance to Project Site (km):	

Monitor Justification Data						
Category:	10 Kilometer PM_{10} Emissions Comparison	Types of Nearby Sources	County PM_{10} Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:						
Monitor:						
Data Source:						

Additional Information	
How are off-property sources accounted for?	
Monitoring data set year(s)/Additional Justification:	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	CO
AQS ID:	
County:	
Distance to Project Site (km):	

Monitor Justification Data						
Category:	10 Kilometer CO Emissions Comparison	Types of Nearby Sources	County CO Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:						
Monitor:						
Data Source:						

Additional Information	
How are off-property sources accounted for?	
Monitoring data set year(s)/Additional Justification:	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	Pb
AQS ID:	
County:	
Distance to Project Site (km):	

Monitor Justification Data						
Category:	10 Kilometer Pb Emissions Comparison	Types of Nearby Sources	County Pb Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:						
Monitor:						
Data Source:						

Additional Information	
How are off-property sources accounted for?	
Monitoring data set year(s)/Additional Justification:	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Pollutant:	O_3 (for Tier 3 Analysis)
AQS ID:	
County:	
Distance to Project Site (km):	

Category:	10 Kilometer NO_x Emissions Comparison	10 Kilometer VOC Emissions Comparison	Types of Nearby Sources	County NO_x Emissions Comparison	County VOC Emissions Comparison	County Population Comparison
Project:						
Monitor:						
Data Source:						

Additional Information

How are off-property sources accounted for?	
Additional Justification:	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Land Use Comparison	Regional Considerations

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Secondary Formation of PM2.5

Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

Modeled Emission Rates for Precursors (MERPs) Demonstration Tool for Calculating Secondary $PM_{2.5}$ Impacts

Precursor	Project Increases (tpy)	Source Selection	Selection of Variables		MERP Value		Total Secondary Value ($\mu g/m^3$)	
			Emission Rate (tpy)	Height (m)	24-hr	Annual	24-hr $PM_{2.5}$	Annual $PM_{2.5}$
Nitrogen Oxide (NO_x)	65.23	worst-case	[redacted]		2500	10000	0.35080	0.01145
Sulfur Dioxide (SO_2)	91.32	worst-case			343	1801		

MERPs Demonstration Justification

A. Provide justification for selection of worst-case MERP and/or site-specific source here. *Please limit your response to 2000 characters.*

Use of worst-case is justification in itself.

Inte

All internal comments

[redacted]

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Table 1. Project-Related Modeling Results for State Property Line

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	253.10000	20.42
H_2SO_4	1-hr		1
H_2SO_4	24-hr		0.3
H_2S	1-hr	14.90000	2.16 *(If property is residential, recreational, business, or commercial)*
H_2S	1-hr	14.90000	3.24 *(If property is not residential, recreational, business, or commercial)*

Table 2. Site-wide Modeling Results for State Property Line

Pollutant	Averaging Time	GLCmax (µg/m^3)	Standard (µg/m^3)
SO_2	1-hr	253.10000	1021
H_2SO_4	1-hr		50
H_2SO_4	24-hr		15
H_2S	1-hr	14.90000	108 *(If property is residential, recreational, business, or commercial)*
H_2S	1-hr	14.90000	162 *(If property is not residential, recreational, business, or commercial)*

Table 3. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	138.26000	7.8*
SO_2	3-hr	179.70000	25
SO_2	24-hr	73.10000	5
SO_2	Annual	1.07000	1
PM_{10}	24-hr	4.60000	5
NO_2	1-hr	122.96000	7.5**
NO_2	Annual	0.780	1
CO	1-hr	356.40000	2000
CO	8-hr	211.20000	500

Additional information for the De Minimis values listed above can be found at:

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Date: 5/30/2019
Permit #: TBD

Company Name: Lone Star Ports, LLC

* www.tceq.texas.gov/assets/public/permitting/air/memos/appwso2.pdf
** www.tceq.texas.gov/assets/public/permitting/air/memos/guidance_1hr_no2naaqs.pdf

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Table 4. $PM_{2.5}$ Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax ($\mu g/m^3$)	Secondary $PM_{2.5}$ Contribution ($\mu g/m^3$)	Total Conc. = Secondary $PM_{2.5}$ + GLCmax ($\mu g/m^3$)	De Minimis ($\mu g/m^3$)
$PM_{2.5}$	24-hr	3.8	0.35079728	4.15080	1.2*
$PM_{2.5}$	Annual	0.0600	0.011445633	0.07145	0.2*

Additional information for the De Minimis values listed above can be found at:
* www.tceq.texas.gov/permitting/air/modeling/epa-mod-guidance.html

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Table 5. Total Concentrations for Minor NSR NAAQS (Concentrations > De Minimis)

Pollutant	Averaging Time	GLCmax ($\mu g/m^3$)	Background ($\mu g/m^3$)	Total Conc. = [Background + GLCmax] ($\mu g/m^3$)	Standard ($\mu g/m^3$)
SO_2	1-hr	100.96000	10.00	110.96	196
SO_2	3-hr	179.70000	10.00	189.70	1300
SO_2	24-hr	73.10000	4.00	77.10	365
SO_2	Annual	1.07000	1.00	2.07	80
PM_{10}	24-hr		79.00	79.00	150
Pb	3-mo		0	0	0.15
NO_2	1-hr	77.41000	35.00	112.41	188
NO_2	Annual		0	0	100
CO	1-hr		0	0	40000
CO	8-hr		0	0	10000

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Table 6. Total Concentrations for Minor NSR NAAQS (Concentrations > De Minimis)

Pollutant	Averaging Time	GLCmax (µg/m^3)	Secondary $PM_{2.5}$ Contribution (µg/m^3)	Background (µg/m^3)	Total Conc. = [Background + Secondary + GLCmax] (µg/m^3)	Standard (µg/m^3)
$PM_{2.5}$	24-hr	1.96500	0.35079728	25.67	27.98580	35
$PM_{2.5}$	Annual		0.011445633	8.70	8.71145	12

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Health Effect Modeling Results

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Facility:

Modeled Health Effect Results (MERA Guidance):				Step 3	Step 4: Production	
Chemical Species	CAS Number	Averaging Time	ESL [µg/m^3]	10% ESL Step 3 Modeled GLCmax [µg/m^3]	25 % ESL Step 4 Production GLCmax since most recent site wide modeling [µg/m^3]	10% ESL Step 4 Production Project Only GLCmax [µg/m^3]
crude oil, < 1% benzene	N/A	1-hr	3500			
crude oil, < 1% benzene	N/A	Annual	350	5.31		

Texas Commission on Environmental Quality

Date: 5/30/2019

Electronic Modeling Evaluation Workbook (EMEW)

Permit #: TBD

Health Effect Modeling Results

Company Name: Lone Star Ports, LLC

Facility:

Modeled Health	Step 4: MSS		Step 5: MSS Only	Step 5: Hours of Exceedance		
Chemical Species	50% ESL Step 4 MSS GLCmax since most recent site wide modeling [µg/m^3]	25% ESL Step 4 MSS Project Only GLCmax [µg/m^3]	Full ESL Step 5 GLCmax [µg/m^3]	*1X ESL GLCmax* Step 5 MSS Hours of Exceedance	*2X ESL GLCmax* Step 5 MSS Hours of Exceedance	*4X ESL GLCmax* Step 5 MSS Hours of Exceedance
crude oil, < 1% benzene						
crude oil, < 1% benzene						

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Health Effect Modeling Results

Date: 5/30/2019
Permit #: TBD
Company Name: Lone Star Ports, LLC

Facility:

Modeled Health I		Step 6	Step 7: Site Wide		Step 7: Hours of Exceedance	
Chemical Species	*10X ESL GLCmax* Step 5 MSS Hours of Exceedance	Was Step 6 relied on to fall out of the MERA?	Site Wide GLCmax [µg/m^3]	Site Wide GLCni [µg/m^3]	*1X ESL GLCni* Hours of Exceedance	*2X ESL GLCmax* Hours of Exceedance
crude oil, < 1% benzene			14929.00	2569.00	0	28
crude oil, < 1% benzene						

Texas Commission on Environmental Quality

Date: 5/30/2019

Electronic Modeling Evaluation Workbook (EMEW)

Permit #: TBD

Health Effect Modeling Results

Company Name: Lone Star Ports, LLC

Facility:

Modeled Health I		
Chemical Species	*4X ESL GLCmax* Hours of Exceedance	*10X ESL GLCmax* Hours of Exceedance
crude oil, < 1% benzene	1	0
crude oil, < 1% benzene		

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Modeling File Names

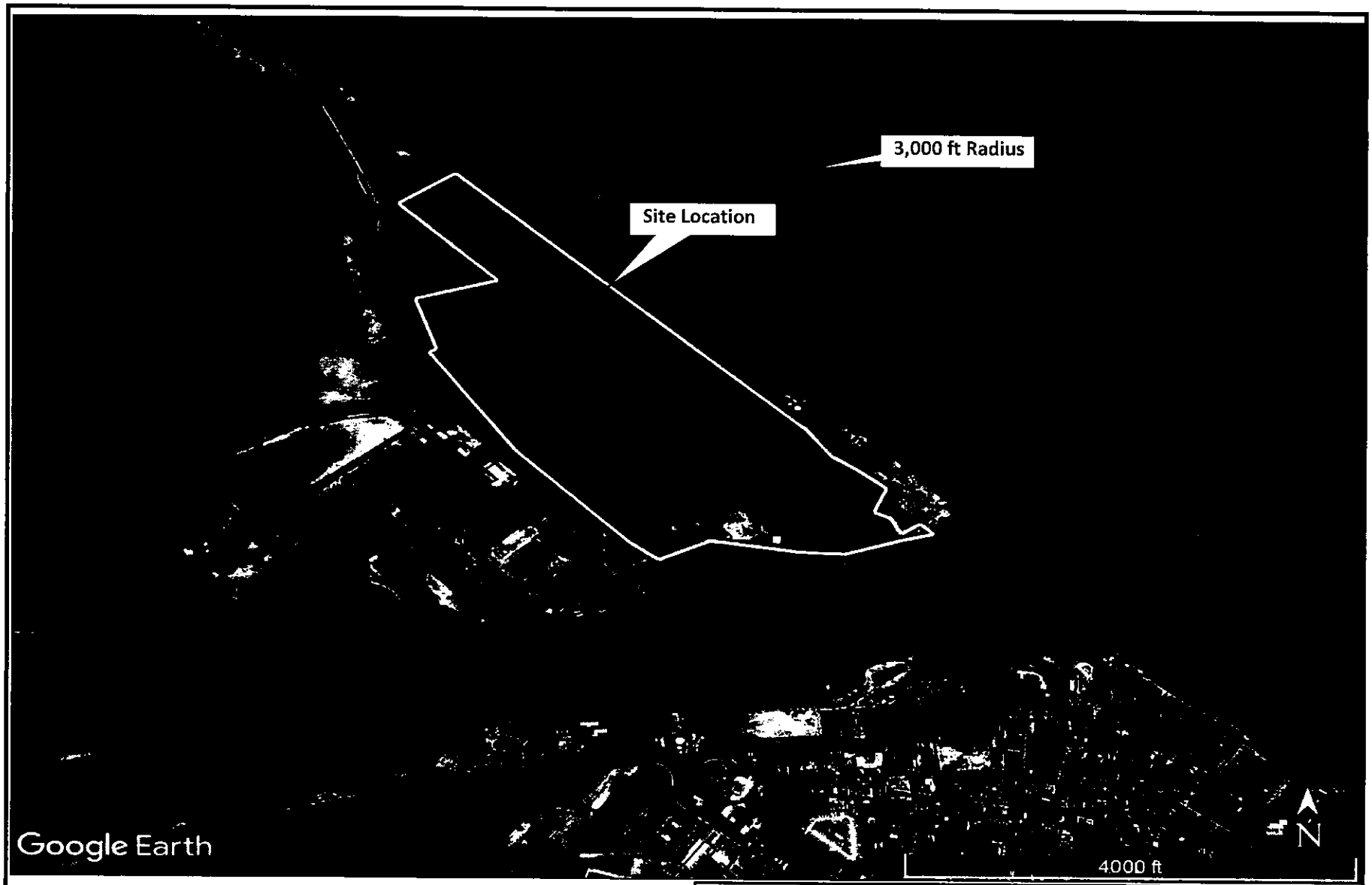
Date: 5/30/2019

Permit #: ~~TBD~~

Company Name: Lone Star Ports, LLC

Facility:

Model File Base Name	Pollutant	Averaging Time	File Extensions	Additional File Description
Project1yr_2012_CO	CO	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide
Project1yr_2012_CRUDE	Crude	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and site-wide
Project1yr_2012_CRUDEANN	Crude	Annual	*.dta, *.grf, *.lst, *.sum	project-wide and site-wide
Project1yr_2012_H2S	H2S	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and site-wide
Project1yr_2012_PM10	PM10	24-hr	*.dta, *.grf, *.lst, *.sum	project-wide
Project5yr_5yrs_NO2	NOx	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Project5yr_5yrs_PM2.5	PM2.5	24-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Project5yr_5yrs_PM25	PM2.5	Annual	*.dta, *.grf, *.lst, *.sum	project-wide
Project5yr_5yrs_SO2	SO2	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Project5yr_5yrs_SO2_ST	SO2	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and site-wide
Project5yr_5yrs_SO2ANN	SO2	Annual	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
ProjectANN_5yrs_NO2	NOx	Annual	*.dta, *.grf, *.lst, *.sum	project-wide
Project1yr_2012_CO	CO	8-hr	*.dta, *.grf, *.lst, *.sum	project-wide
Project5yr_5yrs_SO2_ST	SO2	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and site-wide
Project5yr_5yrs_SO2_ST	SO2	3-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Project5yr_5yrs_SO2_ST	SO2	24-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Structures	All	All	see folder	elevation files for structures
Sources	All	All	see folder	elevation files for sources
Receptors	All	All	see folder	elevation files for receptors
Project	All	All	*.pip, *.prw, *.so, *.sum, *.tab	downwash file
Project	All	All	*.pip, *.prw, *.so, *.sum, *.tab	downwash file
Nueces_CRPCRP12L	CO, PM10, H2S, Crude	See above	*.pfl, *.sfc	surface and upper air met files
Nueces_CRPCRP2011_2015L	NO2, PM2.5, SO2	See above	*.pfl, *.sfc	surface and upper air met files

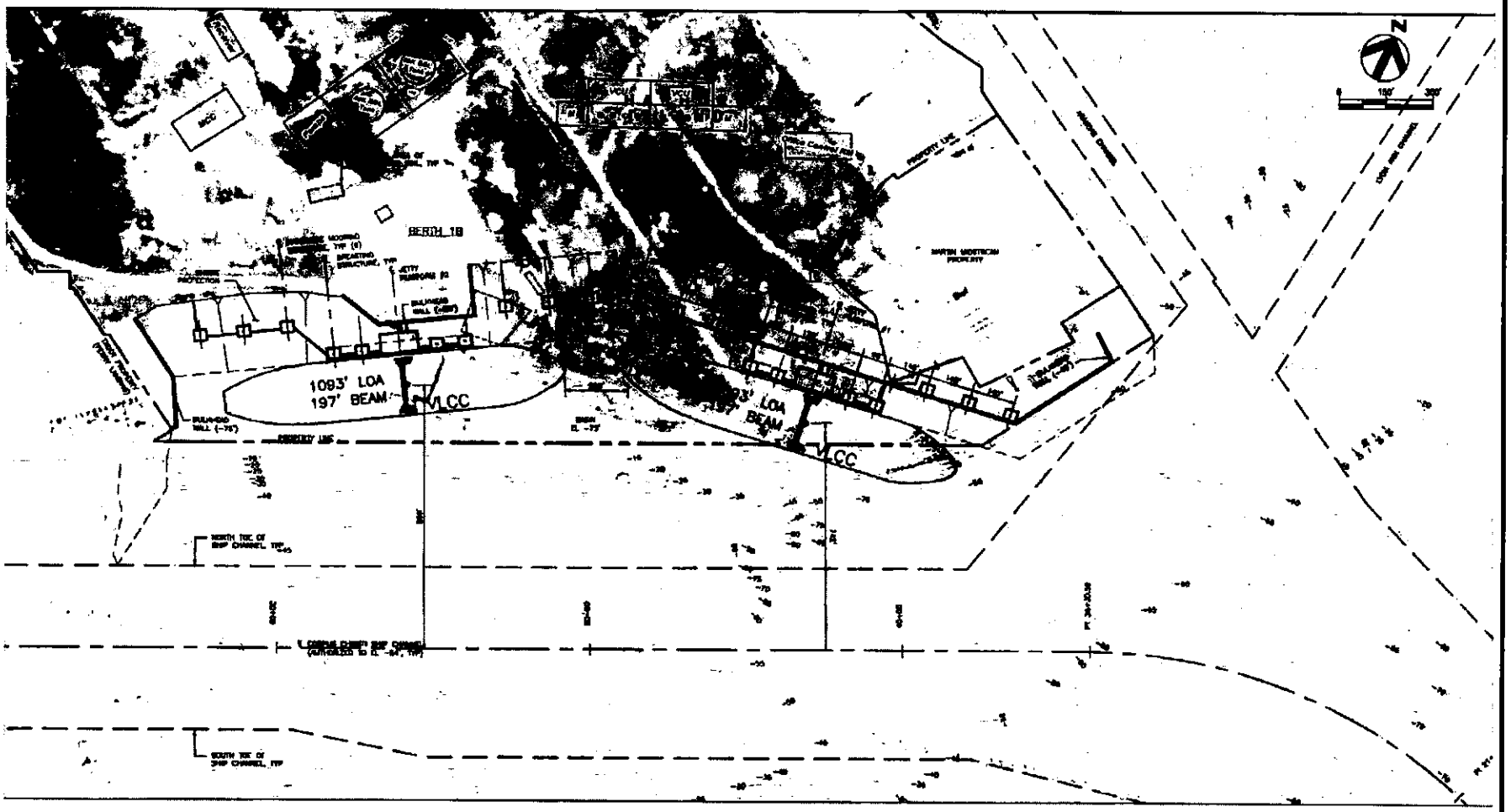


Lone Star Ports, LLC

Lone Star Ports, LLC
Harbor Island Marine Terminal
Port Aransas, Texas

DiSorbo
Environmental Consulting Firm

Figure 1
Area Map

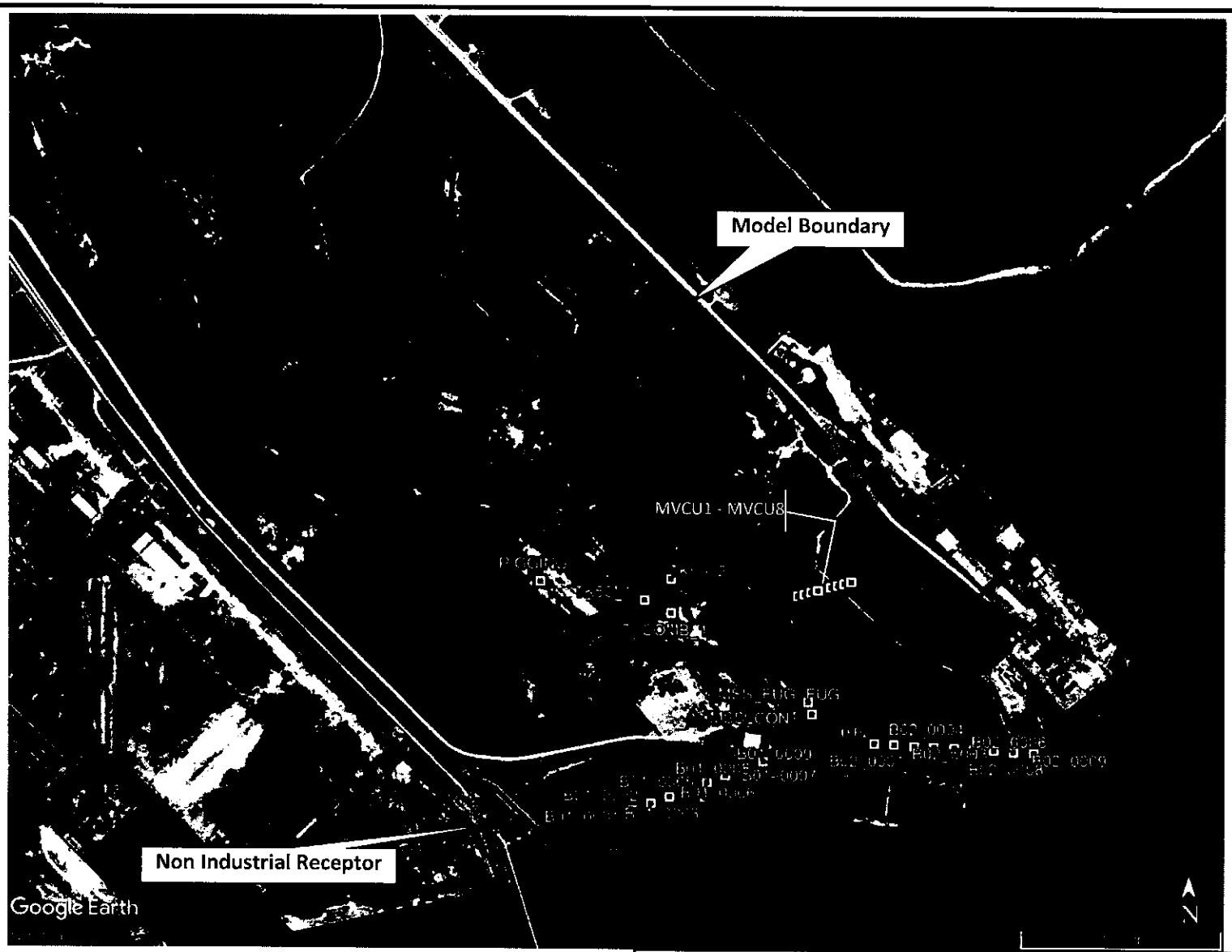


Lone Star Ports, LLC

Lone Star Ports, LLC
Harbor Island Marine Terminal
Port Aransas, Texas

DiSorbo
Environmental Consulting Firm

Figure 2
Plot Plan



Lone Star Ports, LLC

Lone Star Ports, LLC
Harbor Island Marine Terminal
Port Aransas, Texas

DiSorbo
Environmental Consulting Firm

Figure 3
Model Plot Plan

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.