Jon Niermann, Chairman Emily Lindley, Commissioner Toby Baker, Executive Director



### 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

what Klas

Office of Air

Enclosure

cc: Air Section Manager, Region 14 - Corpus Christi

Project Number: 302197

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
I. Contact Information	APIRI
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 TCE of the Attorney General on behalf of the TCEQ. For more information regarding Delinquent For Penalties, go to the TCEQ Web site at: www.tceq.texas.gov/agency/delin/index.html.	ees and
V. Signature	ladik da da kata da
The signature below confirms that I have knowledge of the facts included in this application at facts are true and correct to the best of my knowledge and belief. As the applicant, I commit to expectations of the expedited permitting program and application requirements promptly. Far expectation or requirement may cause my application to be removed from the expedited perm and possibly voided at the discretion of the TCEQ Executive Director. The signature further signatureness that intentionally or knowingly making or causing to be made false material statem representations in the application is a criminal offense subject to criminal penalties.	nd that these ofulfilling all ilure to meet any nitting program gnifies
Name: Matt Marra	
Signature:	

Date:

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 157150 Action Type

Permit Type

CONSTRUCT

Permit Status Received Date

PENDING

Renewal Date

**Action Status** 

PENDING

Complete Date

Assigned Team: ENERGY SECTION

STAFF ASSIGNED TO PROJECT:

INITIAL

GLASPIE-FELIX, SHELIA

- REVIEWR1\_2 -

AP INITIAL REVIEW

ALVIREZ, RUTH

- REVIEW ENG -

**ENERGY TEAM 2** 

COMPANY INFORMATION

Issued To

Company Name

05/31/2019

Customer Reference Number

LONE STAR PORTS, LLC

Lone Star Ports, LLC

CN605663830

- CONTACT INFORMATION

Contact Type

Name

Title

Organization Name

RESPONSIBLE **OFFICIAL** 

(713) 253-6948

MR MATT MARRA

VP REGULATORY COMPLIANCE & PROJECT MANAGEMENT

LONE STAR PORTS

LLC

Phone

FAX

Address

14 BIRCHWOOD PARK PL, THE WOODLANDS, TX, 77382-2026

EMAIL. MATTMARRA@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

PORT ARANSAS **TEXAS** 

ADJACENT TO HWY 361 & NE OF FERRY LANDING

CHRISTI

- 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 REVIEW6/3/19 - RETURNED TO APIRT 6/3/19- PN1 DOCUMENT#618251

06/07/2019

RECEIVED ELECTRONIC EMEWAND FIGURES 1-3 ON 6/2/19- FORWARDED UPON TRANSFER TO TECHNICALAREA ON 6/7/19 -ALTERNATIVE IS NOT REQUIRED BUT CONSULTANT REQUESTED THE SPANISH SIGNS PER APPLICANT

- PERMIT NOTES:

- FEE

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

PUBLIC NOTICE:

Public Hearing Req Number Public Meeting Req Number Comment Count Alternative Languages 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

06/07/2019 SITE REVIEW RFC SENT TO REGION (DATE) 06/07/2019

1ST NOTICE DCC COMPLETE (DATE)

2ND NOTICE OCC COMPLETE (DATE)

PROJECT DECLARED ADMIN 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 TOEQ

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

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 PRMT1571S0 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

From: Sent:

To:

Subject:	RE: INITIAL, Lone Star Ports, LLC, Project: 302197, Permit(s): 157150
Oh good! Thanks so much. That's have touched base with you just t	s the first time I've had that happen and I just assumed it would be okay, but I should to make sure.
Sent: Friday, June 07, 2019 4:09 P To: Jennifer Mason <jmason@disc< td=""><td></td></jmason@disc<>	
That's fine, I will make the notation Please see the attached document	on that alternate language is not required, but the applicant requested it. t.
Thanks. Shelia Glaspie-Felix	
Original Message From: Jennifer Mason < jmason@o Sent: Friday, June 7, 2019 3:02 PN To: Shelia Glaspie-Felix < shelia.gla Subject: RE: INITIAL, Lone Star Por	4
The client wanted to do a Spanish it would be okay?	notice anyway, even though it isn't required. I've never had that before, but I though
Sent: Friday, June 07, 2019 4:01 P To: Jennifer Mason < jmason@dis	
Your application indicated that yo	u would not require Alternative Language, it that incorrect.
Original Message From: Jennifer Mason <jmason@c 2019="" 2:58="" 7,="" <shelia.gla="" friday,="" glaspie-felix="" initial,="" june="" lone="" pm="" por<="" re:="" sent:="" shelia="" star="" subject:="" td="" to:=""><td>1</td></jmason@c>	1
Shelia - do you have the Spanish s	ign also?
Thank you!	
Origi na I Message	
	1

Jennifer Mason <jmason@disorboconsult.com>

Friday, June 7, 2019 3:11 PM

Shelia Glaspie-Felix

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.

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.

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.

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

ODISORIDO Consulting, u.c.

13345 Stagg Trail Road | Ashland, Virginia 23005

Mobile: 804.366.8274

Email: <u>jmason@disorboconsult.com</u> | 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.

From: Jennifer Mason < imason@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, Ltc.

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
- \* 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 <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_publicnotice.html">www.tceq.texas.gov/permitting/air/nav/air\_publicnotice.html</a>. 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

<PNI\_PROJ302197\_PRMT1 57150\_draft.docx>

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

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 contactinformation
- \* 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

she lia g lasp ie-felix@tceq.texa s.gov

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

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:

PN 1 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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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
she lia .glaspie-felix@tceq.texas.gov

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.

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:

PN 1 PROJ302197 PRMT157150 draft.docx

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- \* contaminants list
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- \* 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)

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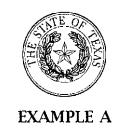
Please do not publish until your application has been declared administratively complete or you may be required to republish. Once declared administratively complete you will receive an email containing an administratively complete letter and public notice package. Then we will file the original notice 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 (S12) 239-4500
shelia.glaspie-felix@tceq.texas.gov

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



#### NOTICE OF RECEIPT OF APPLICATION AND INTENT TOOBTAIN AIR PERMIT

#### PROPOSED AIR QUALITY PERMIT NUMBER 57150

APPLICATION Lone Star Ports, LLC has applied to the Texas Commissi of 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 northeastion 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 10.1, Subchapter J. This line to an electronic map of the site of acility's general location is provided as a public courtesy and not part of the application or retice. For exact location, refer to application. http://www.tceq.texas.gov/assets/public/hb610/index.html?lat=27.850114 king=-97.071666&zoom=13&type=r. The facility will emit the following contaminants: carbon monocide, hydrogen sulfide hitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of the 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 A nita 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 C hristi 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 heating 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

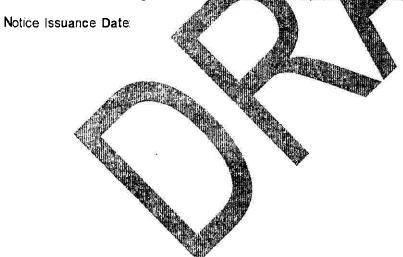
association, an official representative), mailing address, and daytime phone number; (2) applicant's name and permit number; (3) the statement "[I/we] request a contested case hearing"; (4) a specific description of how you would be adversely affected by the application and air emissions from the facility 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 studied to address in this proceeding.

MAILING LIST in addition to submitting public comments, you may asketo be placed on airitailing 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.

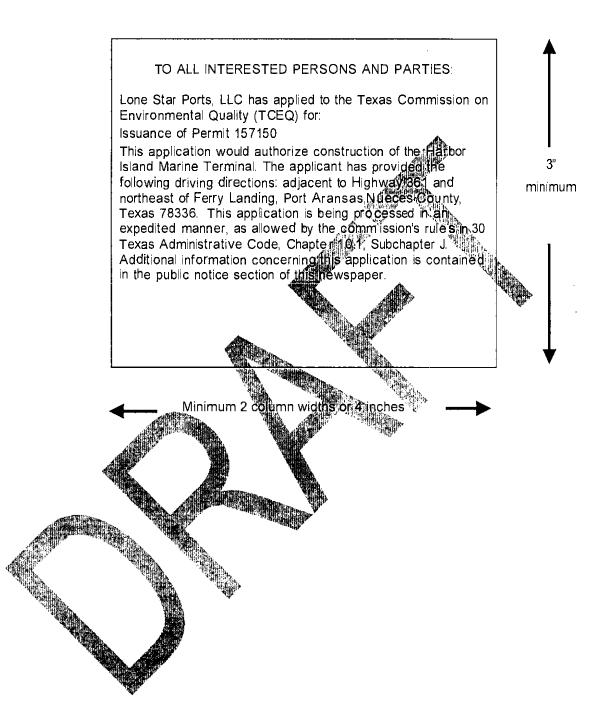
AGENCY CONTACTS AND INFORMATION Public comments and requests pust be submitted either electronically at www14.tceq.texas.gov/epic/eComment/, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that 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 on 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, L. & Birchwood Park Place, The Woodlands, Texas 77382-2026 or by calling Mr. Neal Nygaard Chief Operating Officer, Principal at (713) 955-1221.



### Example B

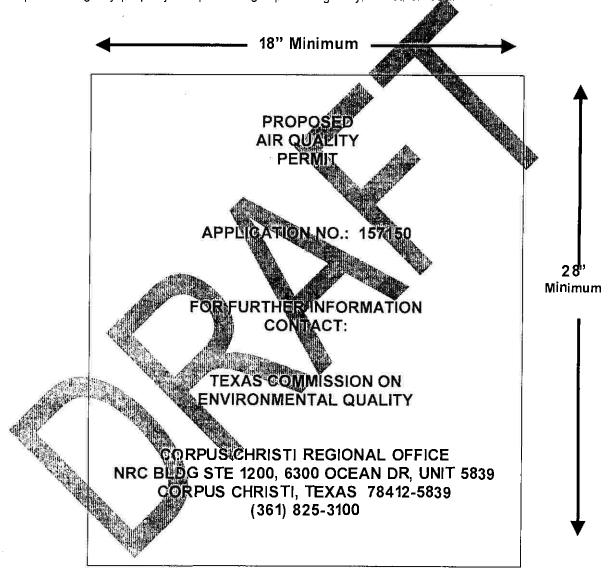
#### Publication Elsewhere in the Newspaper:



#### 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.

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: <a href="https://disorboconsult.box.com/s/uanmvb65y9om1e797yhmnt74leod50hd">https://disorboconsult.box.com/s/uanmvb65y9om1e797yhmnt74leod50hd</a>

### Joe M. Kupper, PE

Manager-Austin Office, Principal

# **ODISOrbo** 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

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- Jobs
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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

#### Technology Profile

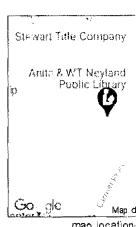
	Product Name	Year Contracted
Current Automation System	Koha – ByWater Solutions	2011
Previous Automation System	Symphony	2009
Previous Automation System	Horizon	2004
Previous Automation System	Dynix	1987

Identifiers

libraries.org ID 24699



Anita and W.T. Neyland Pi



map location

#### Related Libraries

- · Libraries located in C Christi (Texas)
- Libraries located in N (Texas)
- View map of libra **Nueces County**
- all Public libs in 1
- United States
- Automation system:



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 <a href="https://www.tceq.texas.qov/permitting/central\_registry/guidance.html">www.tceq.texas.qov/permitting/central\_registry/guidance.html</a>.

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

		<del></del>		
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.				
I. Applicant Information				
A. Company or Other Legal Name: Lone Star Port	s, LLC			
Texas Secretary of State Charter/Registration Number	er (if applicable):			
B. Company Official Contact Information: (X) Mr.	Mrs. Ms. Other:)			
Name: Matt Marra				
Title: VP, Regulatory Compliance & Project Managem	nent			
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 omail. The company official must initial here if hard cop	copies unless hard copies are s by correspondence is requested	pecifically requested through regular I		
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		
Fax No.: 713-955-1221 Fax No.: 713-955-1201				
Email Address: nnygaard@disorboconsult.com				
D. Site Name: Harbor Island Marine Terminal				

154150

I. Applicant Information (conti	nued)			
E. Area Name/Type of Facility: Mar	ine Terminal		⊠ Permanent □ P	ortable
For portable units, please provide the s	erial number of the e	quipment being author	orized below.	
Serial No:		Serial No:		
F. Principal Company Product or B	usiness:			
Principal Standard Industrial Classifica	tion Code (SIC): 4612	2		
Principal North American Industry Clas	sification System (NA	AICS): 486110		
G. Projected Start of Construction D	ate: TBD		_	
Projected Start of Operation Date: TBD	1			
H. Facility and Site Location Informa	ation (If no street addr	ress, provide clear dr	iving directions to the	site in writing.):
Street Address:				
Property is adjacent to Highway 36	l 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				" W
I. Account Identification Number (le	I. Account Identification Number (leave blank if new site or facility):			
J. Core Data Form				
Is the Core Data Form (Form 10400) a regulated entity number (complete Kar	tached? If No, provided L).	e customer reference	number and	⊠YES□NO
K. Customer Reference Number (C	N): TBD			
L. Regulated Entity Number (RN):	ibd .			
II. General Information				
A. Is confidential information submit confidential in large red letters at			h confidential page	⊠YES □ NO
B. Is this application in response to	an investigation, notic	ce of violation, or enfe	orcement action?	□YES⊠ NO
If Yes attach a copy of any correspond	ence from the agency	y 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 🗸				V
State Representative: Todd A. Hunter	1		District No.: 32	v

III. Type of Permit Action Reque	sted			
A. Mark the appropriate box indicati		requested		
☐ Initial	Amendment	•	evision (30 TA	CS 116 116(a)
☐ Change of Location	Relocation		EAISION (20 I V	<u></u>
	☐ Kelocation	· · · · · · · · · · · · · · · · · · ·		
B. Permit Number (if existing):	<del></del>			
C. Permit Type: Mark the appropria (check all that apply, skip for cha		pe of permit is requeste	ed.	
⊠ Construction ☐ Flexible	Multiple Plant	Nonattainment	☐ Plant-Wid	le Applicability Limit
☐ Prevention of Significant Deterioration	on (PSD)	Hazardous Air Pollutai	nt Major Source	e
☐ PSD for Greenhouse Gases (GHGs	) 🔲	Other:		
D. Is a permit renewal application be accordance with 30 TAC§ 116.3		tion with this amendme	ent in	□YES⊠NO
E. Is this application for a change of	location of previously pe	rmitted facilities?		□YES⊠NO
If Yes, complete all parts of III.E.			-	<u> </u>
Current Location of Facility (If no street	address, provide clear d	riving directions to the	site in writing.):	
Street Address:				
City:	County:	ZIP (	Code	***
Proposed Location of Facility (If no stre	et address, provide clear	driving directions to th	e site in writing	j.):
Street Address:	-	-		
City:	County:	ZIP C	ode:	
Will the proposed facility, site, and plot plan meet all current technical requirements of the permit special conditions? If "NO," attach detailed information.				
Is the site where the facility is moving considered a major source of criteria pollutants or HAPs?				

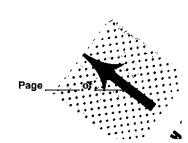
<del></del>					
101.	Type of Permit Action Requested (c	ontinued)			
F.	Are there any standard permits, standare reference?	ard exemptions	or PBRs to be incorp	porated by	☐ YES ☑ NO
If Yes	, list any PBR, standard exemptions, or	r standard p <b>e</b> rm	nits that need to be re	ferenced. (attach pa	ges as needed)
		-			
	nere any PBR, standard exemptions, or olidation?	standard permi	its associat <b>e</b> d to be in	corporated by	☐ YES ⊠ NO
If Yes	, list any PBR, standard exemptions, or	r standard perm	nits that need to be co	nsolidated. (attach p	pages as needed)
	, ar <b>e</b> emission calculations, a BACT an ation for any authorization to be incorpo			hed to this	⊠ YES □NO
G.	Are you permitting planned maintenand	c <b>e</b> , startup, and	shutdown emissions	?	☑ YES ☐NO
If Yes	, attach information on any changes to	emissions unde	er this application as s	specified in VII and V	/III.
Н.	Federal Operating Permit Requirement	ts (30 TAC Cha	pt <b>e</b> r 122 Applicability)	)	
ls this	facility located at a site required to obta	<b>a</b> in a <b>fe</b> deral op	erating permit?	☑ YES ☐ NO ☐	To Be Determined
f Yes	list all associated permit number(s), a	ttach pages as	needed).		
_					
Identit	y the requirements of 30 TAC Chapter	122 that will be	triggered if this applic	cation is approved.	
☐ FC	P Significant Revision	☐ FOP M	inor	Application for a	n FOP Revision
□Ор	erational Flexibility/Off-Permit Notificati	ion		☐ Streamlined Rev	rision for GO <b>P</b>
⊠ To	be Determined			☐ None	
	y the typ <b>e</b> (s) of FO <b>P</b> (s) issu <b>e</b> d and/or F k all that apply)	FOP application(	(s) submitted/pending	for the site.	
☐ GC	☐ GOP Issued ☐ GOP application/revision application submitted or under APD review			review	
□ sc	P Issued SOP	application/rev	vision application subr	nitted or under APD	r <b>e</b> view

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, c	omplete all parts of V.D.	☐ YES 🖾 NO	
C. Is this an application for a major modification of a PSD or exceedance of a PAL permit?	), nonattainment, FCAA § 112(g) 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 Not	ic <b>e</b>	
E. Is this application for a PSD or major modification of a less of an affected state or Class I Area?	PSD located within 100 kilometers or	□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, of	compl <b>ete</b> all parts of IV.F.	☐ YES 🛛 NO	
Is there any change in character of emissions in this applicat	tion?	□YES□NO	
Is there a new air contaminant in this application?		□YES□NO	
Do the facilities handle, load, unload, dry, manufacture, or pr vegetables fibers (agricultural facilities)?	ocess grain, seed, legumes, or	□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 <sub>2</sub> ):			
Carbon Monoxide (CO):			
Nitrogen Oxides (NO <sub>x</sub> ):	-		
Particulate Matter (PM):			
PM 10 microns or less (PM <sub>10</sub> ):			
PM 2.5 microns or less (PM <sub>2.5</sub> ):			
Lead (Pb):			
Hazardous Air Pollutants (HAPs):			
Below list other speciated air contaminants not listed above:			

TCEQ-10252 (APDG 5171v43, Revised 02/19) PI-1 This form is for use by facilities subject to air quality requirements and may be revised periodically.

V. Public Notice Information (cor	nplete if applicable	e <i>)</i>			
A. Responsible Person: (🛛 Mr. 🗌 M	A. Responsible Person: (X Mr. Mrs. Ms. Other:)				
Name: Matt Marra	-				
Title: VP, Regulatory Compliance & Proje	ect Management				
Company Name: Lone Star Ports, LLC					
Mailing Address: 14 Birchwood Park Plac	ce				
City: The Woodlands	State: TX		ZIP Code: 77382		
Telephone No.: 713-253-6948		Fax No.:		<u>—</u>	
Email Address: Matt.Marra@lonestarpor	ts.com	<u> </u>			
B. Technical Contact: (⊠ Mr. ☐ Mrs.	. Ms. Other:)		·		
Name: Neal Nygaard					
Title: Chief Operating Officer, Principal					
Mailing Address: 1001 Louisiana, Suite 3	3250				
City: Houston	City: Houston State: TX ZIP Code: 77002				
Telephone No.: 713-955-1221		Fax No.: 713-955-1	201		
Email Address: nnygaard@disorboconsu	ılt.com	,		. men	
C. Name of the Public Place: Anita &	W.T. Neyland Publi	c Library	,		
Physical Address (No P.O. Boxes): 1230	Carmel Pkwy ✓				
City: Corpus Christi 🗸	County: Nuec	es 🗸	ZIP Code: 78411	<u> </u>	
The public place has granted authorization	on to place the appli	cation for public viev	ving and copying.	⊠ YES □NO ✓	
The public place has internet access ava	allable for the public.			⊠ YES □NO	
D. Concrete Batch Plants, PSD, and I	Nonattainment Perm	nits		_	
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.	V. Public Notice Information (complete if applicable) (continued)			
D. C	D. Concrete Batch Plants, PSD, and Nonattainment Permits (continued)			
For Co	ncrete Batch Plants			
Is the fa	acility located in a municipality or an e	extraterritorial jurisdiction of a munici	pality?	□YES□NO
Pr <b>e</b> sidi	ng Officers Name(s):			
Title:				
Mailing	Address:	, ,		
City:		State:	ZIP Code:	·
Provide	e the name, mailing address of the chi	ef executive for the location where t	he facility is or will	be located.
Chief E	xecutive:			
Mailing	Address	· · · · · · · · · · · · · · · · · · ·		
City:		State:	ZIP Code:	
Provide	e the name, mailing address of the Ind	ian Governing Body for the location	where the facility is	or will be located.
Indian (	Governing Body:			
Mailing	Address:	11.1		
City:	Stat	e;	ZIP Code:	
Identify	the Federal Land Manager(s) for the	location where the facility is or will b	e located.	
Federal	Land Manager(s):		-	
E. B	Bilingual Notice			
ls <b>a</b> bilir	ngual program required by the Texas	Education Code in the School Distri	ct?	□YES NO V
	children who attend either the element eligible to be enrolled in a bilingual pro		sest to your	☐YES ⊠ NO
lf Yes, I	list which languages are required by the	ne bilingual program?		<del></del>
				, , ,,
VI.	Small Business Classification (Red	quired)		
	Does this company (including parent co 00 employees or less than \$6 million		) have fewer than	□YES 🖾 NO 🗸
B. Is	B. Is the site a major stationary source for federal air quality permitting? ☐ YES ☑ NO			
C. A	C. Are the site emissions of any regulated air pollutant greater than or equal to 50 tpy?			
D. A	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 Pl-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 <b>Ta</b> bles		
☑ Table 1(a) (Form 10153) entitl <b>e</b> d, Emission Point Summa	ıry	
☐ <b>T</b> able 2 (Form 10155) entitled, <b>Mate</b> rial Balance		
☐ Other equipment, process or control device tables		
B. Are any schools located within 3,000 feet of this facility	<i>y</i> ?	□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 pr	ovide below.	☐YES⊠ NO
Hour(s):	Day(s):	
Week(s):	Year(s):	
D. Have the planned MSS emissions been previously subinventory?	mitted as part of an emissions	□YES⊠NO
Provide a list of each planned MSS facility or related activity included in the emissions inventories. Attach pages as need	and indicate which years the MSS activi ed.	ties have been
MSS Facility(s) or Activity	Ye <b>ar(s)</b>	
		_

VII.	Technical Information (continued)		
E.	Does this application involve any air contaminants for which a disaster review is required?	☐ YES ⊠ NO	
If Ye	s, list which air contaminants require a disaster review	<u> </u>	
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	s, 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 N	Non-Federal Projects		
includ and t	attachment included detailing how the project meets all applicable impacts requirements, ding which MERA step was met (if applicable), how the modeling was conducted (if applicable), the results demonstrating compliance with all applicable impacts requirements following the Modeling Summary guidance document?	⊠ YES □NO	
Note: help :	for projects with modeling, utilizing APD's <u>Electronic Modeling Evaluation Workbook</u> to complet streamline the modeling review and is strongly encouraged.	e this analysis will	
VIII.	State Regulatory Requirements Applicants must demonstrate compliance with all applicable state regulations to obtain amendment. The application must contain detailed attachments addressing applicability or nidentify state regulations; show how requirements are met; and include compliance demonstrate.	non-applicability;	
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.	D. Will the proposed facilities achieve the performance represented in the permit application as demonstrated through recordkeeping, monitoring, stack testing, or other applicable methods?		
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 amendment. The application must contain detailed attachments addressing applicabilidentify federal regulation subparts; show how requirements are met; and include com	lity or non-applicability;
C. Does 40 CFR Part 63, Maximum Achievable Control Technology (MACT) standard apply a facility in this application?	y to YES NO
D. Do nonattainment permitting requirements apply to this application?	☐YES⊠NO V
E. Do prevention of significant deterioration permitting requirements apply to this applicatio	n? ☐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 NA
IXII DOUBAHAREAAC ARA DARARIAC	The State of the S
This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or General on behalf of the TCEQ is paid in accordance with the Delinquent Fee and Penalty Pro information regarding Delinquent Fees and Penalties, go to the TCEQ website at: <a href="https://www.tceq.texas.gov/agency/financial/fees/delin">www.tceq.texas.gov/agency/financial/fees/delin</a> .	
XIII. Signature	
The signature below confirms that I have knowledge of the facts included in this application and correct to the best of my knowledge and belief. I further state that to the best of my knowledge for which application is made will not in any way violate any provision of the Texas Water Code Texas Health and Safety Code, Chapter 382, the Texas Clean Air Act (TCAA) the air quality ru Commission on Environmental Quality; or any local governmental ordinance or resolution enact further state that I understand my signature indicates that this application meets all applicable prevention of significant deterioration, or major source of hazardous air pollutant permitting required further signifies awareness that intentionally or knowingly making or causing to be made false or representations in the application is a criminal offense subject to criminal penalties.	edge and belief, the project (TWC), Chapter 7; the les of the Texas ted pursuant to the TCAA. nonattainment, guirements. The signature
Name: Matt Marra	
Signature:	
Original Signature Required	
Date: 5/24/7	

TCEQ-10252 (APDG 5171v43, Revised 02/19). PI-1 This form is for use by facilities subject to air quality requirements and may be revised periodically.

Page	of	
race	of	



**TCEQ Core Data Form** 

For detailed instructions regarding completion of this form, please read the Core Data Form instructions or call 51 239-5175. MAY 31 2019 **SECTION I: General Information** 1. Reason for Submission (If other is checked please describe in space provided.) **APIRT** 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) 3. Regulated Entity Reference Number (if issued) Follow this link to search for CN or RN numbers in CN RN Central Registry\*\* **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 of 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: eq. 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 (ifapplicable) 32070114759 0803268735 83-2345223 11. Type of Customer: Corporation ☐ Individual Partnership: ☐ General ☒ Limited Government: City County Federal State Other Sole Proprietorship Other: 12. Number of Employees 13. Independently Owned and Operated? 21-100 101-250 7 251-500 501 and higher Yes ⊠ No 14. Customer Role (Proposed of Actual) - as t 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 ☐Oth er: 1414 Valero Way 15. Mailing Address: City Corpus Christi State TX 78410 ZIP+4 16. Country Mailing Information (if outside USA) 17. E-Mail Address (if applicable) 18. Telephone Number 20. Fax Number (if applicable) 19. Extension or Code (361) 693-2100 SECTION III: Regulated Entity Information 21. General Regulated Entity Information (# 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

<del> </del>		·							
23. Street Address						· · · · · ·			<del></del>
the Regulated Entit ( <u>No PO Boxes)</u>	Ť				1			710.4	1
		City	State	_	ZIP			ZIP+4	<u></u>
24 County					<del></del>				
		Enter Physic	al Location Descrip	tion if no st	reet address	s is prov	ided.	<del>-</del>	
25. Description to Physical Location:		Property is adja	cent to Highway	361 and	Nort East	of Fer	ry Landi	ng	
26. Nearest City	, I.					State		Nea	rest ZIP Code
Poit Aransas						TX		783	336
27. Latitude (N)	Decima	al:		28	. Longitude	(W) In	Decimal:		
Degrees		Minutes	Seconds	Де	grees		Minutes		Seconds
27		51	04.83		97		_	04	18.60
29. Primary SIC Co	de (4 digil	ts) 30. Secondar	y SIC Code (4 digits)	31. Prin 5 or 6 di	nary NAICS pits)	Code	32. S /5 or 6	econdary NA dgils)	ICS Code
4612				48611	0				
		siness of this entity	? (Do not repeat the St	IC or NAICS des	cription.)				
Marine Loadin	g ,			<del> </del>					
34. Mailing				1414	Valero Wa	у			<u> </u>
Address:	:	City Corpus	: Christi State		ZIP		78410	ZIP+4	
35. E-Mail Ad	dress:	<u>_</u>	<del></del>		*1 V-200 \$ 51	21 Tan 1 2 1 1	1 March 15		
36. T	elephon	e Number	37. Exte	nsion or Co	de 📜 📜	3	8. Fax Num	iber (if applic	able)
(	)	-					(	) -	
		umbers Check all Pro		permits/registra	tion numbers	that will b	e affected by	the updates sub	milted on this
m. See the Core Data  Dam Safety		ructions for additional g	uldance. ☐ Edwards Ad	quifer	Emissio	ns Invento	orv Air	⊠ Industrial Ha	azardous Waste
		District		44			7		144
☐ Municipal Solid W	/aste	New Source Review	Air OSSF		☐ Petrole	ım Storag	e Tank	□PWS	
							ĺ		
☐ Sludge		⊠ Storm Water	☑ Tille V Air		Tires			Used Oil	
☐ Voluntary Cleanup	P	☐ Waste Water	Wastewate	r Agriculture	☐ Water F	Rights		Other:	
ECTION IV:	Prepa	arer Informat	io <u>n</u>						
40. Name: Jame	s F. W	/edemeier II		4	1. Title:	Senio	Staff Co	onsultant	
2. Telephone Numb		43. Ext./Code	44. Fax Number		45. E-Mail A	ddress			
(713) 955-1223			(713) 955-12	201	jwedeme	ier@di	sorbocor	sult.com	
ECTION V:	Autho	orized Signatu	ire						
6. By my signature b gnature authority to s lentified in field 39.	oelow, I o submit th	certify, to the best of this form on behalf of the	ny knowledge, that the entity specified in	he informatio Section II, F	n provided i ield 6 and/or	n this fion as requir	n is true and red for the u	d complete, an updates to the I	d that I have D numbers
Company: L	one Star	r Ports, LLC		Job Title	e: VP, I	Regulator	y Complian	ce & Project M	lanagement
	Vat. Marr				1		<u> </u>	713 ) 253-694	
Signature:	$\overline{\Lambda}$					Da		<12	29/19
<u> </u>	$-\!$	<i></i>				1		<del>/ -</del>	



# 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.

[,	Dir	ect 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.	\$-
	В.	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.	\$-
I.	Indi	rect Costs [30 TAC§ 116.141(c)(2)]	Estimated Capital Cost
	A.	Final engineering design and supervision, and administrative overhead.	\$-
	В.	Construction expense, including construction liaison, securing local building permits, insurance, temporary construction facilities, and construction clean-up.	\$-
	C.	Contractor's fee and overhead.	\$-
	Tota	l 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 Penyacantative Signature:

Company Repres	sentative Signature:		
Estimated	l 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)

<sup>\*</sup>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:



1001 Louisiana Street 713-955-1230 (p) Suite 3250 713-955-1201(f)

MAY 3 1 2019

Houston, TX 77002

www.disorboconsult.com

MAY 3 1 2019

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

1- Olhan

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

May2019



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



1001 Louisiana Street

713-955-1230 (p) 713-955-1201(f)

**Suite 3250** 

Houston, TX 77002

www.disorboconsult.com

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# 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.

<u>Section\_2</u> 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.

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

<u>Section 5</u> 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.

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

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

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

<u>Appendix B</u> 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 4.3 Foderel NSR Appleability Analysis Summary Liber Star Forts, LLC Hartor sisted Marire Terminal May 2019

***************************************	Project	ğ	0.03	0.48	0.001	0.003	0.01	0.03	0.003	0.55	320	Νo	ρķ	νo
H28	Proposed	£	0.03	0.48	0.001	0.001	0.01	0.03	0.003					
	Baseline	\$	١	,			,							
	Project	ĝ		90'48	·	٠	90'0	00 0		20.54	720	₩0	Mo	Wo
802	Proposed	Đ	,	90.46	1	,	0.08	00'0						
	Basefine	4	٠			,	*		,					
	Project	ğ	١	118.06	,	•	7.42	0.84	•	126.33	250	₹	Ş	νo
8	Proposed	3		118.06			7.42	0.84	•					
	Beaning	À		,	,	٠			,			v.		
	Project Increase	Ę\$	,	59.03	,	,	5,57	0.63	•	68.23	250	No	ş	γo
ě	pesoda	ě	,	59.03			5.57	0.63						
	Beseline	â	,	,										
	Project Increase	ã	26.40	48.59	1.80	7.60	0.24	0.53	3,40	82.37	250	ş	ş	٥¥
90	Proposed	3	26.40	48.59	1.60	1.60	0.24	0.53	3.40					
	Beseline	ŝ	<u>.</u>	,					,					
		Facility Description	Berth Loading Fugitives Emissions Cap	Controlled Loading Annual Emissions Cap	Recycle Tank No. 1	Recycle Tank No. 2	Temporary Portable Combustion Unit	MSS Emissions Cap	Piping Fugitive Components	Project increase (tpy)	Major Source Threshold (tpy)	Existing Major Source (Yes/No)	Project Major Source By (their (Yes/No)	Federal Review Required (Yes/No)
		<b>*</b> 6	BERTHCAP	MVCU-1 - MVCU-8	50-2	50-2	T-COMB-1	MSS	FUG	Proja	Major S.	Extring A	Project Major	Federal Re.

Table 1.4.
Federal NSR Applicability Analysis Summary
Lone Star Ports, LLC
Harbor Island Marine Terminal
May 2019

		£	PM/PM10/PM2.5	2.5		C028	
		Besuline	Proposed	Project	Beselins	Proposed	Froject increase
¥.	Facility Description	6	tpy	á	ě	ā	(tt)
BERTHCAP	Berth Loading Fugitives Emissions Cap	٠	•	**		,	-
MYCL-1-MYCL-8	Controlled Loading Annual Emissions Cap		4.40	4.40		87,491,97	87,491,97
50-1	Recycle Tank No. 1	•	1	0,			
50-2	Recycle Tank No. 2	٠		4			-
T-COMB-1	Temporary Portable Combustion Unit	7	0.28	0.28		2,608	2,608
MSS	MSS Emissions Cap	٠	0.78	0.78		1,607.65	1,607.65
F16	Poing Fuglive Components		•			,	
Proj	Project increase (tpy)			5,45			81,707
MajorS	Major Source Threshold (tpy)			250			75,000
Edsting	Existing Major Source (Yes/No)			No			No
Project Majo	Project Major Source By Itself (Yea/No)			No			94
Federal Re	Federal Review Required (Yes,/Na)			Wo			No.

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

202		Momen	Voc.	J.	Ž	NO <sub>X</sub>	8	c	PW/	PM 10/PM2B	Ŧ	H <sub>2</sub> S	8	So. ∫	CO <sub>2</sub> 8 <sup>±</sup>
		B. 1	lb/hr	toy.	lb/hr	toy	lb/hr	ф	lb/hr	tþy	ib/hr	ŧ	lb/hr	tpy	Đ,
BERTH-1	BEATH-1	Berth 1 Loading Fugitives	9.05	,	-	,	1	•	,	1	0.01	,	•		
ВЕКТН-2	BERTH-2	Berth 2 Loading Fugitives	9.05	*	,	1	-		¢	'	0.01	3	-	,	
BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap		26.40	,	, 1	ć	,	•	,	,	50.0	1	,	,
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 Lpading Marine VCU No.2	12.53	1	12.53	,	25.05	-	0.93	-	0.13	,	11.79	ļ	•
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	1	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	, 1	,
MVCU-6	MVCLF6	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	,	•
MWCU-8	MVCU-8	Controlled Loading Marine VCU No.8	12.53	,	12.53	_	25.05		0.93	,	0.13	,	11.79		•
CU-1 MVCU- 8	MVCL-1 - MVCL- MVCL-1 - MVCL-8	Controlled Loading Annual Emissions Cap	, ,	48.59		59.03	1	118.06	,	4.40	ı	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	90'0	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	00.00	0.25	0.78	1,608
FUG	FUG	Piping Fugitive Components	0.78	3,40			f	•		_ 1	0.00	0.00	-	,	ŧ
		Total Emission Rates;	1	82.37	•	65.23	,	126.33		4.71	r	0.52		91.32	61,707

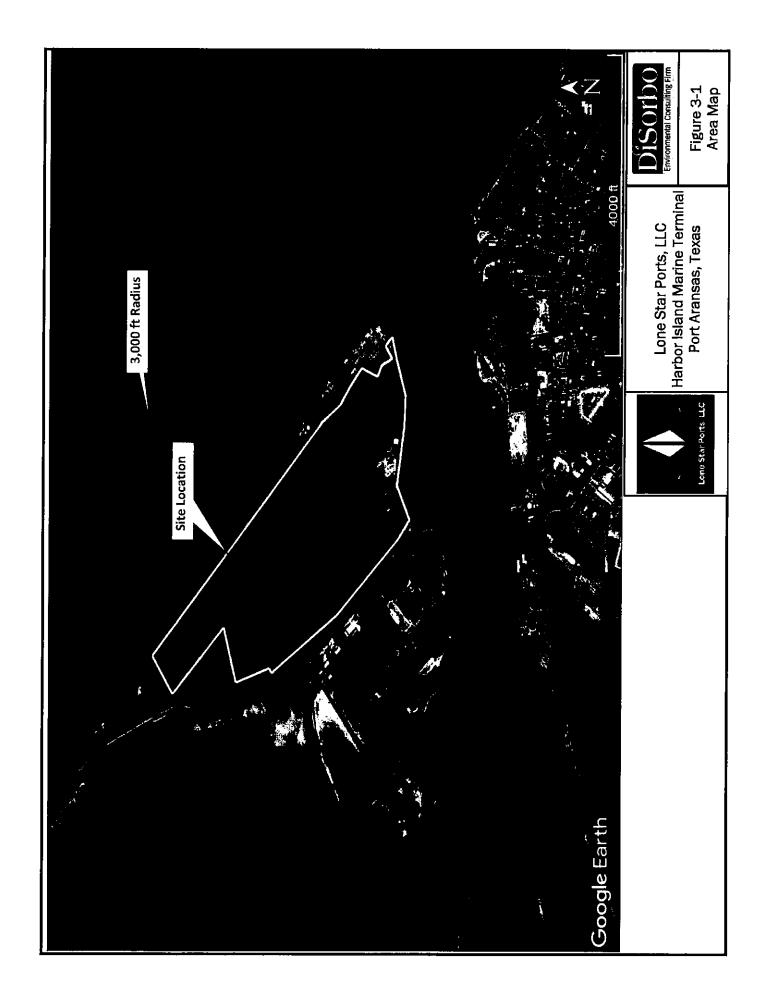
# Section 2 Administrative Forms

This section contains the following forms and information:

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

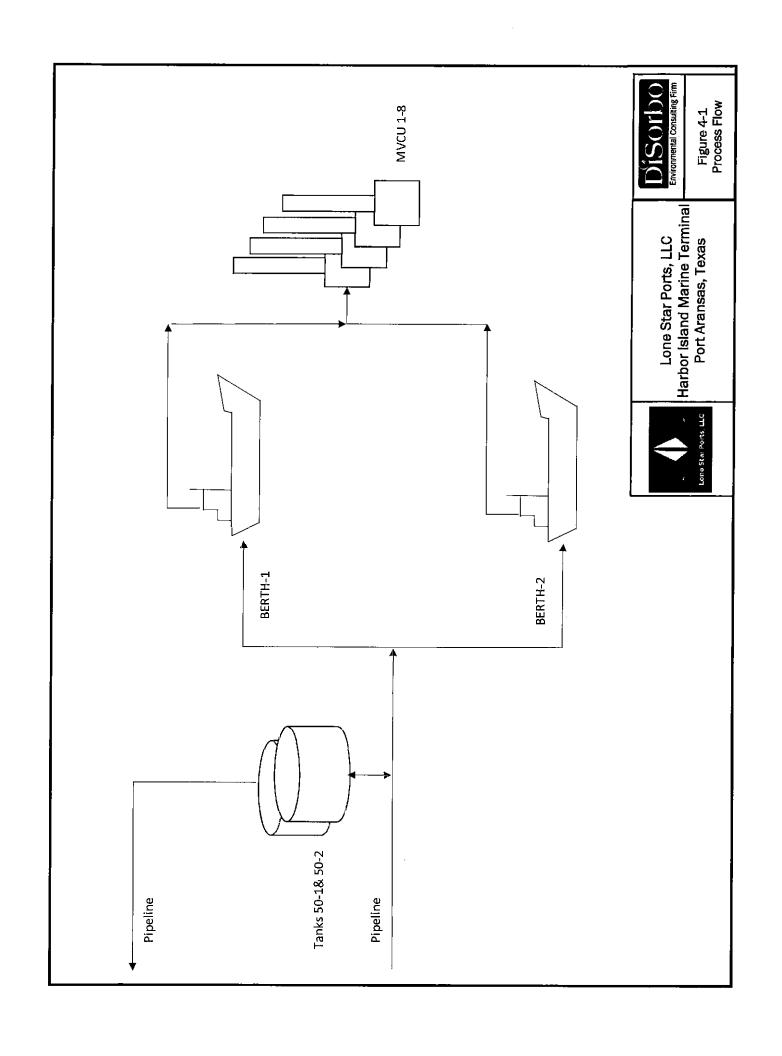
# Section 3 **Location Information**

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.



# 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.



## 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<sub>X</sub>, CO, SO<sub>2</sub>, H<sub>2</sub>S, and PM/PM<sub>10</sub>/PM<sub>2.5</sub> 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<sub>X</sub> and CO emissions were based on vendor guaranteed emission factors and an estimated roof landing vapor heat content of 20,000 Btu/lb. SO<sub>2</sub> emissions associated with crude oil and crude condensate vapor control were based on 100% conversion of any H<sub>2</sub>S in the waste gas stream while SO<sub>2</sub> emissions associated with assist gas usage were based on AP-42, Section 3.2.7 emission factors. H<sub>2</sub>S emissions were based on a max vapor space concentration of 1,000 ppm and a corresponding DRE of 98%. PM/PM<sub>10</sub>/PM<sub>2.5</sub> 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 = 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. 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, NOx, SO2, PM/PM10/PM2.5 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%. SO2 emissions associated with crude oil and crude condensate vapor control were based on 100% conversion of any H2S in the waste gas stream while SO<sub>2</sub> emissions associated with assist gas usage were based on AP-42. Section 3.2.7 emission factors. H2S emissions were based on a max vapor space concentration of 1,000 ppm and a corresponding DRE of 98%. PM/PM<sub>10</sub>/PM<sub>2.5</sub> 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 Bas 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<sub>X</sub>, SO<sub>2</sub>, PM/PM<sub>10</sub>/PM<sub>2.5</sub> 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 Bas 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 Bas 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 Bas Table B-7.

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

Permit Number:	TBD	RN Number:	TBD	Dete:	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

		AIR CONTAMINANT DATA	4TA					Ō	AISSION POL	EMISSION POINT DISCHARGE PARAMETIERS	E PARAMETI	ERS			
											S.	Source			
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				Pounds per											
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			NOX	12.53	1										
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			SO <sub>2</sub>	11.79											
			PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.93											

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

Permit Number: TBD	RN Number:	твр	Date:	May 2019
ompany Name: Lone Star Ports,	OTI			

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

S. Air Contaminant			AIR CONTAMINANT DATA	Y.						MISSION PO	EMISSION POINT DISCHARGE PARAMETERS	E PARAME	502			
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Controlled Marine Loading   Co				Contaminant Name	Emissic	n Rate		Polnt		Above	Diameter	Velocity	Temp	Length	Width	Axis
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Controlled Marine Loading VCU No. 3         CO         25.05         -         14         690,468         3,081,822         40           VCU No. 3         H <sub>2</sub> S         0.13         -         11.79         -         40           SO <sub>2</sub> 11.79         -         40         40         40         40           VOUC         12.53         -         40         40         40         40           Controlled Marine Loading VGU No. 4         H <sub>2</sub> S         0.13         -         40         40           SO <sub>2</sub> 11.79         -         40         40         40         40				VOC	12.53	•									ļ <u>.</u>	
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VOC         12.53         .         A         A         A         A         A         A         A         A         B </td <td></td> <td></td> <td></td> <td>PM/PM<sub>10</sub>/PM<sub>2.5</sub></td> <td>0.93</td> <td></td>				PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.93											
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Controlled Marine Loading CO 25.05 - 14 690,478 3.081,825 40 SO <sub>2</sub> 11.79 - SO <sub>2</sub> 11.79 - PM/PM <sub>10</sub> /PM <sub>14</sub> 0.93 .				NOX	12,53	r										-
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}				PM/PM <sub>10</sub> /PM <sub>2.8</sub>	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.

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			8O₄	11.79										_	
			PM/PM10/PM2.7	0.93	1									••	
			voc	12.53	ı										
			NOX	12,53	J							S1110-			
MVCHL7	MVCILLY	Controlled Marine Loading	00	25.05		3	000	900 0	7			S			
		VCU No. 7	H <sub>2</sub> S	0.13		\$	grc'neo	3,081,830	₹	3	20.47	1400	1		
			sos	11.79	1									••	
.00			PM/PM <sub>10</sub> /PM <sub>2.8</sub>	0.93	,										i

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

			j		
Permit Number:	TBD	RN Number:	TBD	Derte:	May 2019
Company Name:	Lone Star Ports, LL	O			

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

1. Emission Point			The second secon				ū		EMISSION POINT DISCHARGE PARAMETERS	E PARAMET	ERS			_
1. Emissio										Š	Source			
	n Point	2. Component or Air	3. Air Contaminant	taminant	4.	4. UTM Coordinates of Emission	s of Emission	5. Helght	25 '9	6. Stack Exit Data	ta	7.	7. Fugitives	
		Conteminant Name	Emission Rate	n Rate		Polit		Above	Diameter	Velocity	Temp	Length	Width	Axis
NH	NAME		Pounds per Hour	Ě	Zone	Fper	floor	Gmund	(Food)	(graj)	é	ě		
(B)	(0)		€	(9)		(Meters)	(Meters)	(Feet)	€ 3	<u>1</u> @	9	€8	3 @	See (2)
		200	12.53	3			7)							
		NOX	12.53											
MVCILA	Controlled Marine Loading	8	25.05	Ü	;						1			
	VCU No. 8	H <sub>2</sub> S	0.13	9	ŧ	690,528	3,081,839	8	21	20,47	1400	i	•	
		°os	11.79			•								
		PM/PM <sub>10</sub> /PM <sub>2.9</sub>	0.93	- (										
		VOC	:•	48.59										
		XON		59.03									_	
MATCHICAD	Controlled Loading Annual	00		126.33										
	Emissions Cap	H <sub>2</sub> S	ı	0.48		1	ri	Ř	1			1		•
		202	*	90.48										
	300	PM/PM <sub>10</sub> /PM <sub>2.6</sub>	p.	4.40									_	
50	Records Tent No. 1	NOC	5.14	1.60	;		1000							1
		H <sub>2</sub> S	0,01	0.01	\$	222,069	3,081,787	3	0.003	0.003	Amb.			
50.3	Records Tent No. 2	Noc	5.14	1.60	3	000		,			į			
	7 to William Canadana	H <sub>2</sub> S	0.01	0.01	\$	297'069	3,081,820	84	0.003	0.003	Amb.			

# 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 ft³ 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<sub>2</sub>S and H<sub>2</sub>SO<sub>4</sub>) 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, NOx, CO, SO<sub>2</sub>, H<sub>2</sub>S, and PM/PM<sub>10</sub>/PM<sub>2.5</sub>, 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.: TBO	Application Submittal Date: 24 May2019
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
Pernik Activity: X New Source Modification	
Project or Process Description: Marine Terminal	

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Complete for all Pollutarits with a Project Emission locrease.	Oz	one ,		7011	1				**
incresse.	VOC	NO,	ထ	PM <sub>10</sub>	PM <sub>2.8</sub>	NO <sub>x</sub>	SO <sub>2</sub>	H₂S	CO <sub>2</sub> e
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	NA
If netting required, estimated start or construction?				<u>'</u>	NA				
Five years prior to start of construction			NA				contem	poraneous	
Estimated start of operation			NA.			i	þ	eriod	
Net contemporaneous change, including proposed project, from Table 3F. (tpy)	NA.	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 repression	ations made above and on the accompany	ing tab	es are the and correct to the best of my knowledge.  2919 vp. RegulatoryCompilance, & Project Managemen	<b>l</b> .	-	-
Signature			Title			

82.37

Page Subtotal<sup>9</sup>: Project Total:

TABLE 2F PROJECT EMISSION INCREASE

Pollu	Pollutant <sup>1</sup> :	VOC	:				Permit No.:	TBD			
Base	Baseline Perlod:	N/A									
						<b>*</b>	_ 				
		Affected or Modi	or Modified Facilities²	Permit	Actual Emissions <sup>3</sup>	Baseline Emissions <sup>4</sup>	Proposed Emissions <sup>5</sup>	Projected Actual	Difference (B-A) <sup>6</sup>	Correction?	Project Increase <sup>8</sup>
	E	EPN	Facility Name	ź	(tons/yr)	(tons/yr)	(tons/yr)	Emissions (tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	Ą		,	26,40		26.40	*	26.40
2	MVCU-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	ΑŽ	ι		48.59	,	48.59	×	48.59
3	50-1	50-1	Recycle Tank No. 1	ž			1.60	,	1.60		1.60
4	50-2	50-2	Recycle Tank No. 2	ž		j	1.60		1.60	<u>.</u>	1,60
ιΩ	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	¥		,	0.24	,	0.24	j K	0.24
ဖ	MSS	MSS	MSS Emissions Cap	¥	,	1	0.53	1	0.53	Ŷ	0.53
7	FUG	FUG	Piping Fugitive Components	NA			3.40		3.40	Î	3.40
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TABLE 2F PROJECT EMISSION INCREASE

Polle	Pollutant <sup>1</sup> :	×on	5.5			:	Permit No.:	E CE		F	
Base	Baseline Period:	ΝΆ									
						*	m				
		Affected or Mod	or Modified Facilities²	Permit	Actual	Baseline	Proposed	Projected Actual	Difference	Correction7	Project
	N.	EPN	Facility Name	ż	(tons/yr)	(tons/yr)	(tons/yr)	Emissions (tons/yr)	(B-A)" (tons/yr)	(tons/yr)	Increase (tons/yr)
Ħ	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	Ϋ́		,			,	,	,
2	MVCU-1 - MVCU-8	MVCU-1- MVCU-8	Controlled Loading Annual Emissions Cap	AN	•		59.03		59.03		59.03
က	50-1	50-1	Recycle Tank No. 1.	A A				1	,	,	
4	50-2	50-2	Recycle Tank No. 2	N A				,	,	-	
ເກ	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	•		5.57	,	5.57		5.57
9	MSS	MSS	MSS Emissions Cap	ΝΑΝ			0.63	,	0.63		0.63
7	FUG	FUG	Piping Fugitive Components	ΝA						-	
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			;						<del>«</del>	Page Subtotal <sup>9</sup> :	65.23
			***************************************							Project Total	65.23

TABLE 2F PROJECT EMISSION INCREASE

Permit No.: TBD		
89	N/A	
Pollutant <sup>1</sup> ;	Baseline Period:	

		į				Α .	no.				
		Affected o	Affected or Modified Facilities <sup>2</sup>	Permit	Actual Emissions <sup>3</sup>	Baseline Emissions <sup>4</sup>	Proposed Emissions <sup>5</sup>	Projected Actual	Difference	Correction7	Project Increases
	MH	EPN	Facility Name	oʻ Z	(fons/yr)	(tons/yr)	(tons/yr)	(tons/vr)	(tons/yr)	(tons/yr)	(tcns/yr)
1	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA A			,				
2	MVCU-1 - MYCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	N A	,		118.06	,	118.06		118.06
က	50-1	50-1	Recycle Tank No. 1	ΑN	-	,	,				
4	50-2	50-2	Recycle Tank No. 2	N A	,	·	,			,	
ß	1-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	ΝΑ	,	•	7.42		7.42		7.42
9	MSS	SSM	MSS Emissions Cap	N.		-	0.84	1	0.84	ı	0.84
7	FUG	FUG	Piping Fugitive Companents	ΑZ	•		,				
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TABLE 2F PROJECT EMISSION INCREASE

Projected Difference Correction? (tons/yr) (to	Pollut	Pollutant 1:	SO <sub>2</sub>					Permit No.:				
Fig. 2   Fig. 19   Fig.	Вале	line Period:	N/A									
Fig. 2014   Final Part   Fina							<sub>\\</sub>	 		•		
FTN   EPN   Faulty Name   Controlled Loading Advanced Emissions Cap   NA   Controlled Loading Advanced Cap   NA   Controlled Loading Advanced Cap   NA   Controlled Loading Advanced Cap   Controll			Affected o		Parity Control of the	Actual	Baseline	Proposed	Projected	Difference	Competer 7	Project
BERTHCAP   BERTHCAP   Berth Loading Ragitives Emissions Cap   NA   NA   NA   NA   NA   NA   NA   N		Ę	EPN	Facility Name	ō.	Emissions 3 (tons/yr)	Emissions (tons/yr)	Emissions <sup>5</sup> (tons/yr)	Enissions (tons/yr)	(Fr.) (trons/yr)	(tons/yr/)	Increase* (tons/yr)
MVCU-1.         Controlled Loading Annual Emissions Capa         NA         90.48         90.48         90.48         90.48         90.48         PMCU-1.         PMCU-	1	BERTHCAP	BERTHCAP	Berth		,			,		,	ı
SO-1         Recycle Tank No. 1         NA         NA         Percycle Tank No. 2         Percycle	2	MYCU-1 - MYCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	ΑĀ	1		90.48		90.48	,	90.48
So 2   So 2   Recycle Tank No. 2   NA	က	50-1	50-1	Recycle Tank No. 1	Ą							
T-COM/6-1   T-COM/6-1   Temporary Portable Combustion Unit   NA   NA   0.06   0.06   0.06   0.06	4	50-2	50-2	Recycle Tank No. 2	¥				'	ļ,	,	
MSS         MSS Emissions Cap         NA         0.001         0.001	ഗ	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	A N	,		90.0	-	90.0	,	90.0
FUG   RUG   Piping Fuggive Components   NA	9	MSS	MSS	MSS Emissions Cap	¥			0.001		0.001	,	0,001
Color   Colo	7	FUG	FUG	Piping Fugitive Components	ΝΑ		r	1	1	ı	ı	
Color   Colo	'	1		•	,	•	r	,	ı	,	1	
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TABLE 2F PROJECT EMISSION INCREASE

Pollut	Pollutant 1.	H <sub>s</sub> S					Permit No.:	CELL CELL	}		
Basel	Baseline Perlod:	N/A									
						٧	8				
		Affected or	Affected or Modified Facilities 2	Permit	Actual	Baseline Francisco	Proposed	Projected Actual	Difference	Correction <sup>7</sup>	
	<b>Æ</b>	EPN	Facility Name	ż	(tons/yr)	(tons/yr)	(tons/yr)	Emissitons (tons/yr)	(Pc-N)	(fons/yr)	Incredese (tons/yr)
1	ВЕКТНСАР	BERTHCAP	Berth Loading Fugitives Emissions Cap	AN	,	,	0.03		0.03	,	0.03
5	MVÇŲ-1 - MVCU-8	MVCU-1 - MVCU-8	Controlled Loading Annual Emissions Cap	∀ X		,	0.48		0.48	,	0.48
3	50-1	50-1	Recycle Tank No. 1	N A	•		0.001	,	0.001	,	0.001
4	50-2	50-2	Recycle Tank No. 2	NA	-		0.301	·	0.001	,	0.001
က	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-	,	0.03	ı	0.03	,	0.03
ဖ	MSS	MSS	MSS Emissions Cap	NA		1	0.003	1	0,003		0.003
,	FUG	FUG	Piping Fugitive Components	NA		r	0.003	-	0,003	,	0,003
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TABLE 2F PROJECT EMISSION INCREASE

Pollu	Pollutant 1:	PM/PM10/PM2,6	Azis				Permit No.:	TBD			
Base	Baseline Period:	ΝΆ									
						∢	60				
		Affected or Modif	r Modified Pacilities 2	Permit	Actual	Baseline	Proposed	Projected Actual	Difference	Correction 7	Project
	Z	EPN	Facility Name	No.	(tons/yr)	(tons/yr)	(tons/yr)	Emissions (tons/yr)	(b-4) (tons/yr)	(tons/yr)	(tons/yr)
ч	BERTHCAP	BERTHCAP	Berth Loading Fugitives Emissions Cap	NA	-	,	,	1	-	,	
7	MVCU-1 - MVCU-8	MVCU-1 MVCU-8	Controlled Loading Annual Emissions Cap	NA	-		4.40	-	4.40	ı	4.40
ო	50-1	50-1	Recycle Tank No. 1	NA		,	1		ſ		ı
4	50-2	50-2	Recycle Tank No. 2	AN	ı	,	1		r		,
เว	T-COMB-1	T-COMB-1	Temporary Portable Combustion Unit	NA	-		0.28		0.28		0.28
9	MSS	MSS	MSS Emissions Cap	NA	,		0.78	•	0.78	-	0.78
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										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 TCEO.

#### 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

#### Electronic Modeling Evaluation Workbook (EMEW)

#### General

Date: <u>5/30/2019</u> Permit#: TB ₽

Company Name: <u>LoneStar, Ports LLC.</u>

#### 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/ain/Modeling/guidance/airguality-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.
- 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.tceg.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.

- 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.).

Electronic Modeling Evaluation Workbook (EMEW)

Date: <u>5/30/2019</u> Permit#: <u>TB\_D</u>

General

Company Name: <u>Jone S. Ar Ports, ILC</u>

<u>-</u>	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.	l agree

content, or protections.	,
Ad	Iministrative Information:
Data Type:	Facility Information:
Project Number (6 digits):	
Permit Number:	1
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:	713-253-694B
Company Contact Email:	Matt.Marra@lonestarports.com
Modeling Company Name, as applicable:	DiSorbo Consulling
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):	NAD83
UTM Zone (select one):	14
Sheet Instructions: Indicate in the Table of	Contents which sections are applicable and included for this

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:	
Section:	Sheet Title (Click to jump to specific sheet):	Select an X from the dropdown menu if included:
1	General	
2	Model Options	]X
3	Building Downwash	X
4	Flare Source Parameters	
5	Point Source Parameters	Χ
6	Area Source Parameters	
7	Volume Source Calculations	X
8	Volume Source Parameters	X
9	Point and Flare Source Emissions	X
10	Area Source Emissions	
11	Volume Source Emissions	Х
12	Speciated Emissions	Х
13	Intermittent Sources	
14	Modeling Scenarios	
15	Monitor Calculations	X
16	Background Justification	X
17	Secondary Formation of PM2.5	X
18	NAAQS/State Property Line (SPL) Modeling Results	Х
19	Unit Impact Multipliers	
20	Health Effects Modeling Results	X
21	Modeling File Names	X
22	Specialted Chemicals	

Electronic Modeling Evaluation Workbook (EMEW)

Date:	5/30/2019
Permit#:	.TED

Company Name: <u>LoneStar Ports, LLC</u>

General

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 multiple zoomed in plot plans that are legible.	source areas, provide
Property/Fence Lines all visible and marked.	X
North arrow included.	X
Clearly marked scale.	X
All sources and buildings are clearly labeled.	Х
Area Map:	<u> </u>
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.	Х
Non-industrial receptors are identified.	Х
Additional Attachments (as applicable):	Select an X from the
Note: These are just a few examples of attachments that may need to be included.	dropdown menu if
There may be others depending on the scope of the modeling analysis.	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 and	alyses. 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.	
Slagle Property Line Designation, as applicable	
Include Agreement, Order, and map defining each petitioner.	
Post Processing using Unit Im pact Multipliers (UIMs)	T
Include documentation on any calculations used with the UIMs (i.e., Step 3 of the MERA).	
Tier 3 NO <sub>2</sub> analysis	
If OLM or PVMRM are used, provide all justification and documentation on using this ap	proach
Description of model setup.	
Description and justification of model options selected (i.e., $NO_2$ to $NO_x$ in-stack ratios).	
Other Attachments	<u> </u>
Provide a list in the box below of additional attachments being provided that are not list	ed above:
	1

Electronic Modeling Evaluation Workbook (EMEW)

**Model Options** 

Company Name: Lone Star Ports, LLC

Date: <u>5/30/2019</u> Permit#: <u>T.E</u>D

#### 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	AER <b>M</b> OD	
		applicable M	odel Version(s).	
<b>B</b> . Buildi	n <b>g</b> Do <b>wn</b> wash			
Yes	ls downwash applicable?	(Select "Yes"	or "No")	
04274	Enter BPIP version (AER	MOD and ISC	Prime only).	
	of Analyses: (Select "X" in a ejects should submit a protoc		ze this form.	
X	Minor NSR NAAQS Health Effects	X	State Property Line	

Date: 5/30/2019 Permit#: \_\_.TED\_ Electronic Modeling Evaluation Workbook (EMEW)

**Model Options** 

Company Name:	Lone Star Ports.	ЩC

X	SO <sub>2</sub>	cants that require ar	X modeling		ct "X" in all that apply)
				PM <sub>10</sub>	
X	co		Х	PM <sub>2,5</sub>	
	Pb		X	NO <sub>2</sub>	
Both		Identify which	averaging	p <b>erio</b> ds are be	eing evaluated for NO <sub>2</sub> .
Tier 2:	ARM 2	ldentify the 1-h analyses.	nr NO2 tiei	used for the A	ERMOD of AERSCREEN
Tier 2:	ARM 2	Identify the ani	nual NO2	tier used for the	AERMOD or
		AERSCREEN			
State !	Property Line:	List all poliutants th	at require	an modeling r	eview. (Select "X" in all
that ap	oply)				
X	H <sub>2</sub> S	,	X	SO <sub>2</sub>	
	—— r₂ H₂SO₄				

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

Permit#: TBD

Company Name: Lone Star Ports, LLC

Date: \_\_5/30/2019

E. Disper	
	sion Options: If "Urban" has been selected and this project is using AERMOD or
AERSCRI	EEN, include the population used. Select "X" in the box to select an option.
	Urban
x	Rural
	y additional justification on the dispersion option selected above:
	a <sup>n</sup> tly obvious that the area surrounding the site is a ru <sup>r</sup> al nature.
	ni <sup>n</sup> ation of Surface Roughness: If AERSCREEN or AERMOD is used, fill out the
section be	low.
section be	
section be	low.
section be	sis for surface roughness: AERSURFACE
section be Select bas Select "X"	low.
section be Select bas Select "X"	sis for surface roughness: AERSURFACE
section be Select bas Select "X"	in one of the three surface roughness categories:
section be Select bas Select "X"	in one of the three surface roughness categories:  Low Medium
section be Select bas Select "X" X	in one of the three surface roughness categories:  Low Medium  High
section be Select bas Select "X" X If you are 13016	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section:  AERSURFACE Version Number
Select "X" X  If you are 13016 690475	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section:  AERSURFACE Version Number  Center UTM Easting (meters) 3081600 Center UTM Northing (meters)
Select "X" X  If you are 13016 690475	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section  AERSURFACE Version Number  Center UTM Easting (meters) 3081600 Center UTM Northing (meters)  Study Radius (km)
Select "X" X If you are 13016 690475	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section:  AERSURFACE Version Number  Center UTM Easting (meters)  Study Radius (km)  Airport? (Select Yes of No)
Select "X" X  If you are 13016 690475 1 No	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section:  AERSURFACE Version Number  Center UTM Easting (meters) 3081600 Center UTM Northing (meters)  Study Radius (km)  Airport? (Select Yes of No)  Continuous Snow Cover (Select Yes or No)
Select "X" X  If you are 13016 690475 1 No No Average	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section:  AERSURFACE Version Number  Center UTM Easting (meters) 3081600 Center UTM Northing (meters)  Study Radius (km)  Airport? (Select Yes or No)  Continuous Snow Cover (Select Yes or No)  Surface Moisture (Select Wet, Dry, or Average)
Select bas Select "X"	in one of the three surface roughness categories:  Low Medium  High  using AERSURFACE, please complete the following section:  AERSURFACE Version Number  Center UTM Easting (meters) 3081600 Center UTM Northing (meters)  Study Radius (km)  Airport? (Select Yes of No)  Continuous Snow Cover (Select Yes or No)

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

Company Name: Lone Star Ports, LLC

Date: <u>5/30/2019</u> Permit #: <u>TBD</u>

	Company
G. Meteorological Data:	
If AERMOD and/or ISC/ISCPrime are se	elected, 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	Years used
data used?	
Please enter the year(s) selected for this	
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 Meteor	
Used low roughness met data set becau	use surface roughness for the site is less than 0.1

Electronic Modeling Evaluation Workbook (EMEW)

Model Options

Company Name: Lone Star Ports, LLC

Date: <u>5/30/2019</u> Permit#: <u>T</u> <u>ED</u>

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
	per the AQMG, if so	omething 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 re	eceptor grid designs	(over water, GLCni, SPLD etc.):
of the modeling result		
I. Terrain:		100
X Elevated	A EDITAD V	
18081	AERMAP Vers	
ror additional justifica	tion on terrain selec	tion, fill in the box below:

Electronic Modeling Evaluation Workbook (EMEW)

Building Downwash

Company Name:

Lone Star Ports, LLC

Date: \_\_5/30/2019\_

Permit#: \_\_TRD

Facility: Modeled Tank Number Maximum Tier 1 Tier 2 Tier 3 Tier 4 Tier 5 Tier 6 Tier 7 Height (m) Downwash Type Building ID Diameter (m) of Tiers Height (m) Height (m) Height (m) Height (m) Height (m) Height (m) Tank Tank1 14.6304 26.2128 14.6304 1 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

Permit #: TBD

Lone Star Ports, LLC

Company Name:

MVCU-1

M\CU4

MVCU-5

MVCU-6

MVcU-3

Diameter [m] 77 77 12 12 72 2 H 12 ო m Exit Velocity [m/s] 20,47 20.47 20.47 20.47 20,47 20.47 20.47 20.47 33 33 Exit Temperature [K] 1400 1400 1400 1400 1400 1400 1400 1400 1400 1400 Helght [m] 9 40 40 4 4 4 4 40 Ħ 11 Base Elevation [m] 2.39 2.33 2.36 2.41 2,45 2,48 2.53 25 2.17 1.77 3,081,816 3,081,839 3,081,786 3,081,819 3,081,822 3,081,825 3,081,833 3,081,634 Northing: Y [m] 3,081,830 3,081,836 690,448 690,458 690,508 690,518 690,474 Easting: X [m] 690,478 690,498 690,257 690,468 690,528 Point Source Justification Vertical Stack Point Source Type POINT MSS Control Device (non-Source Description Temporary Portable Loading VCU No. 5 Controlled Marine Controlled Marine Controlled Marine Controlled Marrine Controlled Marine Controlled Marine Controlled Marine Controlled Marine Combustion Unit Loading VCU No. 1 Loading VCU No. 2 VCU No. 7 VCU No. 3 VCU No. 4 VCU No. 6 VCU No. 8 Loading Loading Loading Loading Loading Modeling Scenario Model ID MSS\_CONT \_COMB\_1 **MVcu2** MVCU3 MVCU1 MVCU5 MVcu8 MVCU4 MI/CU6 MVCU7 E P FCOMB-1 Facility: MVCU-2

MVCU-8

MSS

MVCU-7

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook (EMEW)
Volume Source Calculations

Permit #: \_TBD\_

|

Company Name: Lone Star Ports, LLC

Facility:

Foatprint of Footprint of Source Source Source	Footprint of Source		Length of Side	<b></b>	Type of Volume Source (sigma y)	Sigma Y	Vertical Span
Model ID Length (m) Widt	-	Widt	Width (m)	(making it a square) SQRT(L * W)	Pick from drop-down	(E)	Min Release (m)
30		30		30,48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30	_	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
		တ္တ		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15,24
30	+	30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30	_	စ္က	_	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30	┪	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30	_	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15,24
30		30	-	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30	_	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30	_	30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
30	-	30		30,48	Multiple Volumes: Adjacent Volume Sources	14.18	15,24
30 30		30		30.48	Multiple Volumes: Adjacent Volume Sources	14.18	15.24
0		0		0:30	Single Volume Source	0.07	14.478
0 0	1	0		0.30	Single Volume Source	0.07	14.478
122	1	122		121.92	Single Volume Source	28.35	0
JG 6		9	_	6,10	Single Volume Source	1.42	0
Pigging 2 2		2	1	1.52	Single Volume Source	0.35	0
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Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW)
Volume Source Calculations

Permit #: \_<del>TBD</del>\_

Company Name: Lone Star Ports, LLC

Facility:

		Vertical Span	Vertical	Type of Volume Source (sigma z)	Release Height	Building Name	Adjacent Building	SigmaZ
		Max Release	Cimension		(middle point of	(if on/adjacent to a	Height, if	
EPN	Model ID	(m)	(m)	Pick from drop-down		Pick from drop-down	applicable (m)	Œ
BERTH-1	B01_0001	16.764		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	801_0003	16,764		Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0004	16.764		Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	801_0005	16.764		Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0006	16.764		Elevated Source: Not on or adjacent to Building	16.00			0.35
BERTH-1	B01_0007	16.764		Elevated Source. Not on or adjacent to Building				3.5
BERTH-1	B01_0008	16.764		Elevated Source: Not on or adjacent to Building	ľ			35
BERTH-1	B01_0009	16.764		Elevated Source: Not on or adjacent to Building				35
BERTH-2	B02_0001	16.764		Elevated Source: Not on or adjacent to Building				35.0
BERTH-2	B02_0002	16.764		Elevated Source: Not on or adjacent to Building				35
BERTH-2	B02_0003	16.764		Elevated Source: Not on or adjacent to Building				35.0
BERTH-2	802_0004	16.764		Elevated Source: Not on or adjacent to Building	S		1	35
BERTH-2	802_0005	16.764		Elevated Source: Not on or adjacent to Building				35.0
BERTH-2	B02_0006	16.764		Elevated Source: Not on or adjacent to Building				32
BERTH-2	B02_0007	16.764		Elevated Source: Not on or adjacent to Building				0.35
BERTH-2	B02_0008	16.764	1.52	Elevated Source: Not on or adjacent to Building	16.00			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			ncomplete
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			0.00		0.00			Incomplete
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# Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW)

Permit

Permit #: \_TBD

Company Name: Lone Star Ports, LLC

Volume Source Parameters

Emissions released from multiple vents at the top of the ship. Per TCEQ guidance Emissions released from multiple vents at the top of the ship. Per TCEQ guidance Emissions released from multiple vents at the top of the ship. Per TCEQ guidance Emissions released from multiple vents at the top of the ship. Per TCEQ guidance Emissions released from multiple vents at the top of the ship. Per TCEQ guidance Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures. Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures. Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures. the top of the ship. Per TCEQ guidance the ships are not downwash structures. the top of the ship. Per TCEQ guidance the top of the ship. Per TCEQ guidance the ships are not downwash structures. the top of the ship. Per TCEQ guidance the ships are not downwash structures. Volume Source Size Justification Berth 1 Loading Fugtives (Ships) Berth 1 Loading Fugtives (Ships) Berth 1 Loading Fugrives (Ships) Berth 2 Loading Fugtives (Ships) Berth 2 Loading Fugtives (Ships) Berth 1 Loading Fugtives (Ships) Berth 2 Loading Fugtives (Ships) Source Description Base Elevation [m] 0 0 0 0 0 0 0 0 0 0 0 0 3,081,473 3,081,496 3,081,507 3,081,518 3,081,530 3,081,541 3,081,572 3,081,571 3,081,569 3,081,462 3,081,553 3,081,484 Northing: Y [m] 9690,636 690,435 690,293 690,322 690,350 878,069 890,575 690,605 690,209 690,237 690,265 690,407 Easting: X [m] Modeling Scenario Dimension SigmaZ [m] Vertical 0.35 0.35 0.35 0.35 0,35 0.35 0.35 0.35 0.35 0.35 0.35 0.35 Laferal Dimension SigmaY [m] 14.18 14.18 14.18 14.18 14.18 14.18 14,18 14.18 14.18 14,18 14,18 14,18 Length X Modeled 30,48 30.48 30.48 30.48 30.48 30,48 30,48 30.48 30.48 30.48 30.48 30.48 Έ Release Height [m] Modeled 16.00 16.00 16.00 16.00 16,00 16.00 16.00 16.00 18,00 16.00 16,00 16,00 B01\_0005 B02\_0003 B01\_0002 B01\_0003 B01\_0006 BO1\_0008 B01\_0004 801\_0007 BD1\_0008 B02\_0002 B01\_0001 B02\_0001 Model ID BERTH-2 BERTH-2 BERTH-1 BERTH-1 BERTH-1 BERTH-1 BERTH-2 BERTH-1 BERTH-1 BERTH-1 BERTH-1 BERTH-1 EPN Facility:

Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW)
Volume Source Parameters

Permit #: \_TBD\_

Name: Lone Star Ports, LLC	9)	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.	Emissions released from multiple vents at the top of the ship. Per TCEQ guidance the ships are not downwash structures.	Emissions released from multiple roof vents at the top of tank	Emissions released from multiple roof	Representative of the piping fugitive emissions that would occur	Representative of the area the MSS	Representative of the area the pigging emission could occur	Striction course cours				
Company Name:	Source Description	Elerth 2 Loading Fugtives (Ships) t	Berth 2 Loading Fugtives (Ships) tt	Berth 2 Loading Fugtives (Ships) ti	En Berth 2 Loading Fugtives (Ships) th	Berth 2 Loading Fugtives (Ships) ti	Berth 2 Loading Fugtives (Ships) tf	Recycle Tank No. 1	Recylce Tank No. 2	Piping Fugitive Components	MSS Emissions Cap	Pipeline pigging					
	Base Elevation [m]	0	0	0	0	0	0	2.19	2.2	1.77	1.77	2.38					
Volume Source Parameters	Northing: Y [m]	3,081,568	3,081,567	3,081,565	3,081,564	3,081,562	3,081,561	3,081,787	3,081,820	3,081,634	3,081,634	3,081,813					
Source P	Easting: X [m]	999'069	269'069	690,727	690,758	690,788	690,819	690,222	690,262	690,474	690,474	690,063					
Volume	Modeling Scenario				i			,									
	Vertical Dimension SigmaZ [m]	0.35	0.35	0.35	0.35	0.35	0.35	6.80	6.80	0.85	0.85	0.85					
	Lateral Dimension SigmaY [m]	14.18	14.18	14.18	14.18	14.18	14.18	20.0	0.07	28.35	1.42	0.35					
	Modeled Length X [m]	30.48	30.48	30.48	30.48	30.48	30.48	0:30	0.30	121.92	6.10	1.52					
	Modeled Release Height [m]	16.00	16.00	16.00	16.00	16.00	16.00	14.63	14.63	0.91	0.91	0.91					
	Model ID	B02_0004	B02_0005	802_0006	Boz_0007	B02_0008	B02_0009	TK50_1	TK50_2	FUG	MSS_FUG	Pigging					
	EPN	BERTH-2	BERTH-2	ВЕКТН-2	ВЕКТН-2	ВЕКТН-2	BERTH-2	50-1	50-2	FUG	MSS	MSS					

Permit #: \_TBD\_

Date: 5/30/2019

Company Name: Lone Star Ports, LLC

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook (EMEW)
Point + Flare Emissions

Afodol II	Modeling	C. C	Modeled Averaging			Intermittent	Modeled Emission		Scalars or
5 	Scenario	Pollutant	- ime	Standard Type	Review Context	Source?	Rate [lb/hr]	Basis of Emission Rate	Factors Used?
	9	XOX	1 <del>-</del> hr	NAAGS	SIL analysis	No	12,53	Maximum Allowable	S.
		XON	1-hr	NAAQS	SIL analysis	oN.	12,53	Maximum Allowable	2
	-   -	ŇŎN	1-hr	NAAQS	SIL analysis	οN	12,53	Maximum Allowable	No
	> 6	XON	1-hr	NAAQS	SIL analysis	No	12,53	Maximum Allowable	No.
	5	XON	1-hr	NAAQS	SIL analysis	οN	12.53	Maximum Allowable	No
	5	NOX	1-hr	NAAQS	SIL analysis	N <sub>o</sub>	12,53	Maximum Allowable	SZ.
ſ	<b>□</b>	XON	1-hr	NAAQS	SIL analysis	oN.	12.53	Maximum Allowable	Ž
	o	NOx	1-hr	NAAQS	SIL analysis	S	12.53	Maximum Allowable	2
T_COMB_1	o .	NOX	1-hr	NAAQS	SIL analysis	ON	300	Maximim Allowable	2 2
MSS_CONT	n	XON	1-11	NAAQS	SIL analysis	No.	1 99	Maximum Allowable	2 2
	Þ	\$02	1+1	NAAQS	Sil. analysis	cN.	1, 70	Maximum Allowable	2 2
	6	802	1-hr	NAAOS	SII analysis	No.	2, 70	Movimina Allowable	2 2
	0	SO2	1-hr	NAAOS	St. analysis	S N	02.11	Maximum Arrowable	2 :
	b	202	1-hr	NAAOS	Cil andivola	ON V	02	Maximum Allowable	2
	6	200		NO V V	oil, analysis	ON	11.78	Maximum Allowable	S N
1	3 6	302	1-ur	WALLS	SIL analysis	No	11.79	Maximum Allowable	Š
		202	1-hr	MAAUS	SIL analysis	No	11.79	Maximum Allowable	å
	-	SO2	1-ir	INAAQS	SIL analysis	No	62.11	Maximum Allowable	oN.
	n	802	141	NAAQS	SIL analysis	No	62.77	Maximum Allowable	2 2
T_COMB_1	n	802	1-hr	NAAQS	SIL analysis	No	88.	Maximum Allowable	2 2
MSS_CONT	n	802	1-hr	NAAQS	SIL analysis	S.	0.250	Maximum Alfowable	2 2
		802	3-hr	NAAOS	SIL analysis	8	62.77	Maximim Allowable	2 2
	n n	802	3-hr	AAO	SIL analysis	o <sub>N</sub>	97.1,	Maximim Allowable	2 2
	0	S02	3-hr	AAO	SJL analysis	Ŷ.	62.77	Maximum Allowable	2 2
	0	S02	3-hr	AAO	SIL analysis	ž	67.	Maximum Allowable	2 2
	0	202	3-hr	AAQe	SIL analysis	No	6/ 1	Maximum Allowable	2 2
	2	S02	3-hr	AAOs	SIL analysis	No	11 /8	Maximum Allowable	2
	5	802	3-hr	AAOs	SIL analysis	S.	11 79	Maximum Allowable	2
	0	802	3-hr	AAOs	SIL analysis	2	11.79	Maximum Allowable	2 2
T_COMB_1	<b>&gt;</b>	SO2	3-hr	AAOs	SIL analysis	S <sub>S</sub>	1.88	Maximum Allowable	2 2
MSS_CONT	<b>D</b>	SO2	3-hr	AAOs	SIL analysis	Νο	05/20	Maximum Allowable	2
	- ·	802	24-hr	AAOS	SIL analysis	Š	11.79	Maximum Allowable	2
	o 0	SO2	24-hr	SOAA	SIL analysis	Š	11 79	Maximum Allowable	2
	o •	SO2	24-hr	AAOS	SIL analysis	e e	11 79	Maximum Allowable	2 2
	o (	802	24-hr	AAOS	SIL analysis	2	11.79	Maximum Allowable	2 2
	5	802	24-hr	AAOS	SIL analysis	Š	11.79	Maximum Allowable	S
	n	802	24-hr	SCAA	SIL analysis	8	11.79	Maximum Allowable	2 2
		802	24-hr	NAAOS	SIL analysis	Š	11.79	Maximum Allowable	2 2
ĺ	<b>&gt;</b>	802	24-hr	SOAA	SIL analysis	oN N	11.79	Maximum Allowable	2
T_COMB_1	0	SO2	24-hr	SOAA	SIL analysis	o <sub>N</sub>	1.88	Maximum Allowable	2
MSS_CONT	0	802	24-hr	N A Orto Li	SIL analysis	Š	0,250	Maximum Allowable	02/2
	0	S02	1-hr	State Property Line	Site Wide	S N	11.79	Maximum Allowable	2 2
	0	S02	4-	State Property Line	Site Wide	S S	11.79	Maximum Allowable	2 2
	0	802	1-hr	State Property ne	Site Wide	Ş	11.79	Movimum Allemahle	2 2
	o	802	1-5,5	State Prope ne	Site Wide	2	14.79	Mosimum Allowable	2
	0	802	14-1		Site Wide	2 4	14.70	Maximum Allowable	Q);

5/30/2019 Date:

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

Point + Flare Emissions

Permit #: TBD

Lone Star Ports, LLC Scalars or Factors Used? 원원 ŝ £ £ 운 ę. 운 ž ž ŝ ŝ ટ્ટ ဥ £ £ ę Company Name: Basis of Emission Rate Maximum Allowable Maximum Alfowable Maximum Allowable Modeled Emission Rate [lb/hr] 11.79 1.88 0.250 25.05 25.05 25.05 25.05 4.00 25.05 25.05 25.05 25.05 25.05 25.05 25.05 4.00 2.66 0.930 0.930 0.930 0.930 0.930 0.930 0.930 0.930 0.930 0.930 0.930 0.930 0.100 Intermittent Source? 2222 ٤ ŝ ŝ ŝ ŝ 의 일일 2222 ş 2222 22222 ŝ 위 읟 윈 위 ı٤ 2222 Ŷ 윈온 운 Review Context SIL analysis StL analysis StL analysis StL analysis StL analysis SIL analysis
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MVCU-8

MVCU-1

MVCU-1

MVCU-3

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MVCU-6

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MVCU-7

MVCU-8 MVCU-5 MVCU-6 MVCU-7 MVCU-1

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Date: 5/30/2019 Permit #: TBD

Electronic Modeling Evaluation Workbook (EMEW)

Point + Flare Emissions

Company Name: Lone Star Ports, LLC Scalars or Factors Used? Basis of Emission Rate Maximum Allowable Modeled Emission Rate [lb/hr] Intermittent Source? No Review Context Site Wide Standard Type Health Effects Modeled Averaging Time 1-hr Pollutant Health Effects Pollutant Modeling Scenario Model ID T\_COMB\_1 EPN T-COMB-1

Page 3

Date: 5/30/2019 Permit #: TBD

Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW)
Point + Flare Emissions

Lone Star Ports, LLC	£ .	; 1	ľ	ľ	ſ	İ		1	İ	i	i	<b>i</b> i	' i	İ	ĺ	[	i	i	•	İ	i	l	İ	ĺ				ļ	j	ĺ	j	İ	İ	İ	İ		j	İ	i	Ī	İ	į	1	ì	į į	ì	ì		<b>j</b>	
Lone Sta	Scalars or Factors Used?	Z	2	2	Š	2	2	2	2	2	2	ON	Ŷ.	2 Z	g.	2 2	2 2	2	2 2	2	2	2	e 2	å	o <sub>N</sub>	No	o <sub>N</sub>	۶	Š	S.	Q Z	2 2	Š	S	8	Š	S S	S <sub>O</sub>	<u>۶</u>	Š ż	0 <del>2</del>	2 2	2	ę.	οN	SN <sub>O</sub>	S.	oN	2	:
Company Name:	Basis of Emission Rate	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Mourable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Altowable	Maximum Alfowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Alfowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Management Alleringhia
	Modeled Emission Rate [lb/hr]		0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.0200	3,00E-04	12.53	12.53	12.53	10.53	12.53	12 53	12.53	3.00	8,	11.79	11.79	11.79	11.79	11.79	11.79	11.79	11.79	1.88	0.250	0.830	0.930	0.930	0.930	0.930	0.930	0.930	0.150	2, 70	11.79	11.79	11.79	11.79	11.79	11.79	11.79	1,88	0,250	
	Intermittent Source?	οÑ	Ŷ	o <sub>N</sub>	No	Š	No	No	o <sub>N</sub>	No	°N	Ŷ.	o Z	2	2 2	2 2	2 2	ç	2	2	o Z	o N	oN	o N	å	Š	Ž:	<u>۶</u>	2 :	2 2	2 2	2	2	СN	N <sub>O</sub>	ŝ	o Ž	2	ON S	2 2	2 2	2 2	2	S N	oN	ON.	οN	2	2 2	
Point + Flare Emissions	Review Context	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Minor Full NAAQS	Minor Full NAAOS	Minor Full NAAUS	Minor Full NAAOS	Minor Full NAAOS	Minor Full NAAOS	Minor Full NAAOS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAOS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Euli NAAOS	Minor Full NAAOS	Minor Full NAAOS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAQS	Minor Full NAAOS	
Point + Flare	Standard Type	Health Effects	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	NAAOS	NAAUS	NAAOO	NAAOS	NAAOS	NAAOS	NAAGS	NAAGS	NAAQS	NAAGS	NAAGO	MAAGS	NAAOS	NAAGS	NAAGS	NAAGS	NAAGS	NAAOS	NAAGS	NAAQS	NAAOS	NAAOS	NAAOS	NAAQS	NAAOS													
	Modeled Averaging Time	1-hr	1-hr	£-hr	1-hr	Ŧ	1-hr	<u>-</u> -	1-hr	1-hr	Ę	1-hr	J-D.	18-1	14.	1	1-1-1	1-1-1	1-hr	1-hr	1-hr	1-11-	ţ	- <del></del>	Ę	Ę.	J-91	100	7	- P	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	70-4-DF	24-hr	24-hr	3-hr	34r	3-hr	3.hr	3-hr	34г	34.	3-hr	- F	3-nr	
	Pollutant	Health Effects Pollutant	H2S	H2S	H2S	HZS	H2S	H2S	H2S	H2S	H2S	HZS	XON Z	NOX	XON NO.	Ň	Ň	XON	NOX	NOX	NOx	802	802	S02	S02	202	202	305	300	SO2	PM2.5	PM2.5	PM2.5	PM2.5	PM2.5	PM2.5	PMZ.3	PMZ.3	PM2.5	502	802	205	805	802	SO2	205	205	SOZ	202	
	Modeling Scenario	0	0	0	-	3	P (	- F	2 6	2	-	7		 	6	0	0	0	0	0	0	0	5 6		,	, =	,	,		0	0	0	٥	٥	ء د			0	٥	0	0	0	0	0			٥		, c	,
	Model ID	MSS_CONT	MVCU1	MVCU2	MVCU3	MVCU4	MVCU5	MVCU6	MVCU/	MVCUB	-COMB-1	MSS_CON!	MAZCHO	MVCII3	MVCU4	MVCUS	MVCUB	MVCU7	MVCU8	T_COMB_1	MSS_CONT	MVCU1	MVCU2	MVCU3	MVCU4	W.C.L.	MVCIIZ	MVCIIR	T COMB 1	MSS CONT	MVCU1	MVCU2	MVCU3	MVCU4	MVCUS	MVCU6	MYCIB	T COMB 1	MSS CONT	MVCU1	MVCU2	MVCU3	MVCU4	MVCU5	MVCU6	MVCU7	MVCU8	MSS CONT	MVCI11	
	EPN	MSS	MVCU-1	MVCU-2	MVCU-3	MVCU4	MVCU-5	MVCU-6	MVCU-/	MVCU-8	I-COMB-1	MOS	MA/CL13	MVC[13	MVCU4	MVCU-5	MVCU-6	MVCU-7	MVCU-8	T-COMB-1	MSS	MVCU-1	MVCU-2	MVCU-3	MVCU-4	S CONM	MVC1-7		Ļ		MVCU-1	MVCU-2	MVCU-3	MVCU4	MVCU-6	MVCU-8	MVCILA	T-COMB-1	MSS	MVCU-1	MVCU-2	MVCU-3	MVCU-4	MVCU-5	WACU-6	MVCU-7	MVCU-8		-	

# Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW) Point + Flare Emissions

Date: 5/30/2019 Permit #: TBD

					Point + Flar	Point + Flare Emissions			Company Name:	Company Name: Lone Star Ports, LLC	
		Modeling		Modeled Averaging			fntermittent	intermittent   Modeled Emission		Sculare or	
EPN	Model ID	Scenario	IPPo ant	Time	Standard Type	Review Context	Source?	Rate [lb/hr]	Basis of Emission Rate	Factors Used?	
MVCU-2	MVCU2	0	802	24-hr	NAAQS	Minor Full NAAQS	<u>ي</u>	11.79	Maximum Allowable	2	
MVCU-3	MVCU3	0	SO2	24-hr	NAAQS	Minor Full NAAQS	2	11.79	Maximum Allowable	2	
MVCU-4	MVCU4	0	802	24-hr	NAAQS	Minor Full NAAOS	2	11.79	Maximum Allowable		
MVCU-5	MVCU5	0	SO2	24-hr	NAAQS	Minor Full NAAQS	2	11.79	Maximum Allowable	2 2	
MVCU-6	MVCU6	0	802	24-hr	NAAQS	Minor Full NAAQS	2	11.79	Maximum Allowable	2	
MVCU-7	MVCU7	0	SO2	24-hr	NAAQS	Minor Full NAAQS	Š	11.79	Maximum Allowable	2	
MVCU-8	MVCUB	0	SO2	24-hr	NAAQS	Minor Full NAAQS	S <sub>N</sub>	11.79	Maximum Allowable		

Date: 5/30/2019 Permit #: TBD

## Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW) Point + Flare Emissions

					Point + Flar	Foint + Flare Emissions			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	802	24-hr	NAAOS	Minor Full NAAQS	ž	1.88	Maximum Allowable	o <sub>Z</sub>
MSS	MSS_CONT	> 1	202	24-hr	NAAQS	Minor Full NAAQS	oN	0.250	Maximum Allowable	- ON
MVCU-1	MVCU1	o 6	NOX	Annual	NAAQS	SIL analysis	٥N	1.68	Maximum Allowable	- oN
MVCU-2	MVCU2	2 6	Ň	Annual	NAAOS	SIL analysis	Š	1.68	Maximum Allowable	- ON
MVCU-3	MVCU3		×ON	Annual	NAAQS	SIL analysis	°N°	1.68	Maximum Allowable	oN
MVCU4	MVCU4	0 6	XON	Annual	NAAQS	SIL analysis	o <sub>N</sub>	1.68	Maximum Allowable	ON.
WACU-5	MVCUS	2 6	XON	Annual	NAAQS	SIL analysis	No	1.68	Maximum Allowable	No
MVCU-6	MVCU6		NOX	Annual	NAAQS	SIL analysis	οN	1.68	Maximum Allowable	QN
MVCU-7	MVCU7		NOX	Annual	NAAQS	SIL analysis	οN	1.68	Maximum Allowable	QN.
MVCU-8	MVCU8		NOx	Annuaí	NAAQS	SIL analysis	٥N	1.68	Maximum Allowable	No.
T-COMB-1	T_COMB_1		NOX	Annual	NAAQS	SfL analysis	οN	1,27	Maximum Allowable	QN.
MSS	MSS_CONT	) k	XON	Annual	NAAQS	SIL analysis	N <sub>o</sub>	0.144	Maximum Allowable	Q.
MACU-I	MVCUI		802	Annual	NAAOS	SIL analysis	ŝ	2.58	Maximum Allowable	No
MVCU-Z	MVCUZ		502	Annual	NAAOS	SIL analysis	운	2.58	Maximum Allowable	oN.
MVCU-3	MVCU3	) 	502	Annual	NAAQS	SIL analysis	ž	2.58	Maximum Allowable	No.
MVCU4	MVCU4	-	802	Annual	NAAQS	SIL analysis	£	2.58	Maximum Allowable	Ŷ.
WACU-5	MVCUS	> =	S02	Annual	NAAQS	SIL analysis	o <sub>N</sub>	2.58	Maximum Allowable	ON.
MVCU-6	MVCU6	7	802	Annual	NAAQS	SIL analysis	Ņ.	2.58	Maximum Allowable	ON.
MVCU-7	MVCU7	<b>→</b>	SO2	Annual	NAAOS	SIL analysis	g	2.58	Maximum Allowable	<u>8</u>
MVCU-8	MVCU8	2	S02	Annual	NAAQS	SIL analysis	Š	2.58	Maximum Allowable	o <sub>N</sub>
T-COMB-1	T_COMB_1	> =	S02	Annual	NAAQS	SIL analysis	ŝ	0.0135	Maximum Allowable	ON.
MSS	MSS_CONT	>	S02	Annual	NAAQS	SIL analysis	Ŷ	0.177	Maximum Allowable	ON.
MVCU-1	Mvcu1	2	SO2	Annual	NAAQS	Minor Full NAAQS	£	2.58	Maximum Allowable	02
MVCU-2	MVCU2	) E	S02	Annual	NAAQS	Minor Full NAAQS	No	2.58	Maximum Allowable	No
MVCU-3	MVCU3	3	SO2	Annual	NAAQS	Minor Full NAAQS	o <sub>N</sub>	2.58	Maximum Allowable	ļ OZ
MVCU4	MVCU4	0	SO2	Annual	NAAQS	Minor Full NAAQS	ş	2,58	Maximum Allowable	No.
MVCU-5	MVCUS	2	S02	Annual	NAAQS	Minor Full NAAQS	No	2,58	Maximum Allowable	No
WACO-8	MVCUB		802	Annual	NAAQS	Minor Full NAAQS	- P	2.58	Maximum Allowable	No.
MVCU-/	MVCU/	•	SO2	Annual	NAAOS	Minor Full NAAQS	2	2.58	Maximum Allowable	No.
MVCU-8	MVCUB	3 6	502	Annual	NAAQS	Minor Full NAAQS	oN	2.58	Maximum Allowable	No
1-COMB-1	T_NOC CONT		502	Annual	NAAQS	Minor Full NAAQS	Š	0.0135	Maximum Allowable	ON
Mass	MSS CON	, =	S02	Annual	NAAQS	Minor Full NAAQS	S	0.177	Maximum Allowable	No
I-COAN	MACUT		PM2.5	Annual	NAAQS	SIL analysis	2	0.126	Maximum Allowable	No
MACO-2	MVCUZ	,	PM2.5	Annual	NAAQS	SIL analysis	oN.	0.126	Maximum Allowable	No
MVCC	MVCD3	,	PM2.5	Annual	NAAQS	SIL analysis	ON.	0.126	Maximum Allowable	ON
TOO W	MVCD4		PM2.5	Annual	NAAQS	SIL analysis	Š	0.126	Maximum Allowable	ON
WACI-8	MACUS		PM2.5	Annual	NAAQS	SIL analysis	o <sub>N</sub>	0.126	Maximum Allowable	No
MVC1L7	MVC117	0	FIN 6.0	Annuar	NAAQS	SIL analysis	SN :	0.126	Maximum Allowable	No
MVCLLS	MVCIIS	0	DM9 6	Annual	NAACS	SfL analysis	ON :	0.126	Maximum Allowable	No
T-COMP-1	T COMB 1	0	DM2 E	Ammal	NAACIS	SIL analysis	2	0.126	Maximum Allowable	oN N
MSS	MSS CONT	0	PM2.5	Janua V	NAMUS	SIL analysis	S z	D.U632	Maximum Allowable	No
MVCIJ-1	MVCI11	-	Hoolth Effects Pollutant	Amina	WAALS	SIL analysis	ON :	0.00708	Maximum Allowable	No
MVCIL-2	MVCIIZ	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	o <sub>Z</sub>		Maximum Allowable	No
MVCU-3	MVCU3	0	Health Effects Pollutant	Annual	Hooffh Cifforts	Site Wide	2 2		Maximum Allowable	No
MVCU-4	MVCD4	0	Health Effects Pollutant	Jernay	Hoolik Effects	Site vine	S Z		Maximum Altowable	ON
MVCU-5	MVCUS	o	Health Effects Pollutant	Annual	Health Effects	Site Wide	S .		Maximum Allowable	No
MVCU-6	MVCU6	0	Health Effects Pollutant	Annisal	Health Effects	Cite Wide	o č		Maximum Allowable	S.
MVCU-7	MVCU7	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	2 2		Maximum Allowable	ON I
MVCU-8	MVCUB	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	2 2		Maximum Allowable	No.
T-COMB-1	T_COMB_1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	ŽŽ		Maximum Allowable	92 32
MSS	MSS_CONT	·	Health Effects Pollutant	Annual	Health Effects	Site Wide	2 2		Maximum Allowable	ON ON
•		-				200	) !		Maxillulii Alluwable	ON

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

Volume Source Emissions

Permit #: \_TBD\_

Company Name: Lone Star Ports, LLC

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?
B01_0001	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	οN		Maximum Allowable	oN.
B01_0002	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	٥N		Maximum Allowable	S.
B01_0003	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Z		Maximum Allowable	ž
B01_0004	0	Health Effects Pollutant	1-hr	Heath Effects	Site Wide	Z		Maximum Allowable	Š
B01_0005	D	Health Effects Pollutant	1-1-1	Health Effects	Site Wide	Z		Maximum Allowable	S.
B01_0006	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Z		Maximum Allowable	Š
B01_0007	n	Health Effects Pollutant	1-hr	Health Effects	Site Wide	No		Maximum Allowable	S.
B01_0008	0	Health Effects Pollutant	1-1-	Health Effects	Site Wide	ON.		Maximum Allowable	Š
B01_0009	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Š		Maximum Allowable	S.
B02_0001	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	<sup>o</sup> Z		Maximum Allowable	S
B02_0002	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Š		Maximum Allowable	Š
B02_0003	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	ĝ		Maximim Allowable	2
B02_0004	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Š		Maximum Allowable	2 2
B02_0005	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Š		Maximum Allowable	2 2
B02_0006	0	Health Effects Pollutant	1.hr	Health Effects	Site Wide	2		Maximum Allowable	2 2
802_0007	0	Health Effects Pollutant	- 1-hr	Health Effects	Site Wirde	2		Maximum Allowalia	2 2
802 0008	0	Health Effects Pollutant	14.	Health Effects	Sile Mide	2 2		Maximum Allowable	ON TA
B02_0009	0	Health Effects Pollutant	1.hr	Health Effects	Site Mide	2 2		Movimum Allowable	ON 1
TK50 1	0	Health Effects Pollutant	14.	Health Effects	Site Wide	2 2		Maximus Allowable	Q -
TK50 2	0	Health Effects Pollutant	1-1-1	Health Effects	Site Wide	2 2		Maximum Allowable	ON I
FUG	0	Health Effects Pollutant	14	Hoalth Effects	Site Mide	2 2		Waxiinurii Allowable	Q ;
MSS FUG	•	Health Effects Pollutant	14	Hoalth Effects	Olic Vido	2 1		Maximum Allowable	0N :
Pigging		Health Effects Pollutant	1	Hoalth Effects	Site vylde	o i		Maximum Allowable	8
BO4 0001	c	Hooff Effects Ordinant		Health Ellects	ania Ania	oZ :		Maximum Allowable	ON N
RO1 0002	, 0	Health Effects Pollutant	Annual	Health Effects	Site Wide	<b>Q</b> :		Maximum Allowabte	S N
804 0003	c	Heater Effects Policities	VIII (B)	neall Clears	Sile vvide	2		Maximum Allowable	No
BO1_0004		Health Effects Pollutari	Annual	Health Effects	Site Wide	2/2		Maximum Allowable	S S
1000		The all I me at Policism	Annual	Health Effects	Sife Wide	Z.		Maximum Allowable	S <sub>N</sub>
BO1_0008	- C	Health Effects Pollutant	Annual	Health Effects	Site Wide	₹:		Maximum Allowable	o <sub>N</sub>
0000		realin Enects Pollutant	Annuai	Health Effects	Site Wide	2		Maximum Allowable	οN
0007	, -	Health Effects Pollutant	Annual	Health Effects	Site Wide	Ž.	4	Maximum Allowable	No
B01_0008	) c	Health Effects Pollutant	Annual	Health Effects	Site Wide	2		Maximum Allowable	No
5000 000	, c	Health Effects Pollutant	Annual	Health Effects	Site Wide	윈		Maximum Allowable	No No
B02_0001	) c	Health Effects Pollutant	Annual	Health Effects	Site Wide	2		Maximum Allowable	No
2007_0002	, ,	Health Effects Pollutant	Annual	Health Effects	Site Wide	₹		Maximum Allowable	No
802_0003	- E	Health Effects Pollutant	Annual	Health Effects	Site Wide	<sup>Q</sup>		Maximum Allowable	No
505_0004	) c	Health Effects Pollutant	Annual	Health Effects	Site Wide	운		Maximum Allowable	No
802_0005	3 6	Health Effects Pollutant	Annual	Health Effects	Site Wide	운		Maximum Allowable	Ñ
B02_0006	3 6	Health Effects Pollutant	Annual	Health Effects	Site Wide	ž		Maximum Allowable	Ñ
802_0007	s &	Health Effects Pollutant	Annual	Health Effects	Sile Wide	S.		Maximum Allowable	2
802_0008	3 4	Health Effects Pollutant	Annual	Health Effects	Site Wide	<sup>S</sup>		Maximum Allowable	S.
802_0009	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	Ŷ.		Maximum Allowable	ž
TK50_1	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	₹		Maximum Allowable	2
TK50_2	٥	Health Effects Pollutant	Annual	Health Effects	Site Wide	Ŷ		Maximum Allowable	2
FUG	٥	Health Effects Pollutant	Annual	Health Effects	Site Wide	No.		Maximum Allowable	2
MSS_FUG	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	οN		Maximum Allowable	2
Pigging	0	Health Effects Pollutant	Annual	Health Effects	Site Wide	ŝ		Maximum Allowable	2
801_0001	٥	H2S	14r	State Property Line	Site Wide	oN.	0.00100	Maximum Allowable	o <sub>N</sub>
B01_0002	0	H2S	14.	State Property I ine	Cito Mido	Ž	00,000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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Date: 5/30/2019 Permit #: TBD

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

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Lone Star Ports, LLC																																													
J	Scalars or Factors Usedo	No	No	No	2	0   1	ON I	ON	ON I	S N	2	2	OZ Z	02	2	ON I	No	2 2		DN I	NO		AT WHITE								AMMIN A			7MM/w	-				***************************************						
Company Name:	Basis of Emission Rate	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Allowable	Maximum Albumble	Maximulii Allowable	Maximum Allowable						 				**************************************	- Allhano			- Author		- AMARINA		A A A A A A A A A A A A A A A A A A A	***************************************	7000000				
	Modeled Emission Rate [b/hr]	0.00100	0,00100	0.00100	0.00100	0.00100	0,00100	0.000	0,00100	0,00100	0.00100	0.00100	0.00100	0.00100	000000	0.00100	4.00E-04	4.00E-04	0.0067	0.0207	0.0000									***************************************												Manual Transfer of the Control of th			
SI	Intermittent Source?	No	οN	S.	<u>2</u>	Q.	ON .	SK	္ :	S	S.	No.	ON T	2	ON :	ON :	ON.	ON:	24	ON ON	ON			- Company							***************************************														
rce Emission	Review Context	Site Wide	Site Wide	Site Wide	Site Mide	Site Wide	Site vwde	Site wide	Site voice	One yade	Site Wide	Site Wide	Site Wide	OFF AND	Olle Valle	anna ano	***************************************	- AMMON						***************************************	,						 		- Million	- Annual Control of the Control of t	***************************************										
Volume Source Emissions	Standard Type	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line	State Property Line					Account of the las											-	- Allendary		*					
- Channel Control of the Control of	Modeled Averaging Time	1-hr	t-hr	14-1	141	1-hr	1-11	141	1-hr	1 <del>-</del> hr	1-hr	1.41	11-11			141	1-hr	1-1-1	32 4	1-II	10-1									Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua Annua An															
A THE SAME AND A SAME	Poliutant	H2S	H2S	H2S	H2S	HZS	128	HZS	H2S	H2S	H2S	HZS	971	871	271	271	HZS	HZS	971	97H	871			*****					***************************************		***************************************		***************************************	THE PROPERTY OF THE PROPERTY O	WW.		 	***************************************	A	***	***************************************			***	
	Modeling Scenario	ō	0	0	٥	o i	a	٥	0	a	a	a					0	2 0			-																								
	Model ID	B01_0004	B01_0005	801_0006	B01_0007	B01_0008	B01_0009	B02_0001	B02_0002	B02_0003	B02_0004	B02_0005	802_0008	802_000/	802 00.8	B02_0009	TK50_1	1K50.2	100	MSS_FUG	Figging.		- Andrews	-																					
	P	BERTH-1	BERTH-1	BERTH-1	BERTH-1	BERTH-1	BERTH-1	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BEKIH-2	BEKIN-2	SEK IT	DEK 111-2	50-1	50-2	200	Mos	MGG				***	W			***	***************************************	***	***											The state of the s		

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

Speciated Emissions

Permit #: \_TBD\_

Company Name: Lone Star Ports, LLC

Speciated Emissions by Model ID	by Model ID							
CAS#	Chemical Species	Other Species	Short-Term ESL. (µg/m³)	Long-Term ESL (µg/m²)	Modeled Project Wide Emission 전 [개시네] 의용지 그것	Modeled Site Wide Emission Rate	Modeled Project Wide Emission	Modeled Site Wide Emission Rate [tpt]
N/A	Other (Please specify):	crude oil, < 1% benzene	3500	350	12.53	12.53	6.07	6.07
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Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW)

Speciated Emissions

Permit #: \_TBD\_\_

Company Name: Lone Star Ports, LLC

	nolasim∃ əbiW iəlebelimisələn Rate [li\ldi]	MVCU6	12.53			l									i								!				T			
	Modeled Site Wide Emission Rate	MVCU6	6.07				ļ												İ									Ì		
	noiszim∃ ebiW tɔəlorl PoleboM [yqr] əisR	MVCUS	6.07																											
	Modeked Site Wide Emission Rate [17/14]	MVCUS	12.53	İ																										
	Modeled Project Wide Emission Rate [lb/ht]	MVCUS	12.53		İ																									
	Modeled Site Wide Emission Rate	MVCU4	6.07																											
	Modeled Project Wide Emission Rate (tpy)	MVCU4	6,07								i																			
	Modeled Sife Wide Emission Rate	MVC U4	12.53																	į										
	Modeled Project Wide Emission Rate [lh/hr]	MVC04	12.53														,		į				ĺ							
	Modeled Sife Wide Emission Rate [tp]	MVCUS	6.07																											
	Modeled Project Wide Emission	200	6.07										ļ		ŀ															
	eds: Modeled Sib Wide Emission Rate [1/1/d]	3	12.53											į	i	j		İ		İ						•				
	Modeled Project Wide Emission	200	12.53						į																					
	Modeled Site Wide Emission Rate	ZO A E	6.07																					T						
	Modeled Project Wide Emission £	1000	6.07																											
	Modeled Site Wide Emission Rate	202 4	12.53																											
	Modeled Project Wide Emission \$\frac{\chi}{2} Rate [lb/hr]		12.53																											
Speclated Emissions	# ************************************	500	A/A																											
Speciated Emiss	Q 40	# 974	¥/Z																										_	

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

Speciated Emissions

Permit #: \_\_<del>TBD</del>\_\_\_\_

Company Name: Lone Star Ports, LLC

S Modele C [lb/hr] 0.660 Modeled Site Wide Emission Rate MSS\_CON 0.660 Rate [lb/hr] Modeled Project Wide Emission T COMB 0.240 [tbk] Modeled Site Wide Emission Rate P Modeled P Rate [tpy] 0.240 Modeled Project Wide Emission T\_COMB\_ 5.00 Modeled Site Wide Emission Rate T\_COMB\_ Modeled Project Wide Emission Rate [lb/hr] 2.00 **MVCU8** 6.07 Modeled Site Wide Emission Rate MVCUB Rate [tpy] 6.07 Modeled Project Wide Emission MVCUB 12.53 Modeled Site Wide Emission Rate MVCUB 12.53 [rirl\di] etes? Modeled Project Wide Emission MVCU7 Modeled Site Wide Emission Rate MVCU7 Rate [tpy] Modeled Project Wide Emission MVCU7 Modeled Site Wide Emission Rate MVCU7 Rate [lb/hr] Modeled Project Wide Emission MVCU6 6.07 Modeled Site Wide Emission Rate

MVCU6

MVCU6 12.53

CAS#

6.07

Rate [tpy]

Modeled Project Wide Emission

Modeled Site Wide Emission Rate

Speciated Emissions

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Permit #: \_TBD\_

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

Company Name: Lone Star Ports, LLC

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

Permit #: TBD

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Electronic Modeling Evaluation Workbook (EMEW)
Speciated Emissions

Texas Commission on Environmental Quality

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

Speciated Emissions

Modeled Project Wide Emission Rate [tpy]

Speciated Emissions

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Permit #: \_TBD\_

Company Name: Lone Star Ports, LLC

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Company Name: Lone Star Ports, LLC

Electronic Modeling Evaluation Workbook (EMEW) Speciated Emissions

Texas Commission on Environmental Quality

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

Combined Emissions

Lone Star Ports, LLC Modeled Emission Rate [lb/hr] 12.53 11.79 12.53 12.53 12.53 12.53 11.79 12.53 12.53 12.53 3.00 1.99 11.79 11.79 11.79 1.88 11.79 11.79 11.79 11.79 11.79 11.79 11.79 11.79 11.79 11.79 11.79 11.79 1.88 0.25 1.88 Type Point Polnt Point Point Point Point Point Point Polnt Point Point Point Por Point Company Name: Intermittent SIL analysis Site Wide State Property Line Standard Type NAAQS NAAOS NAAQS NAAQS NAAQS NAAQS NAAQS NAAOS Modeled Averaging 24-hr 24-hr 24-hr 24-hr 24-hr 24-hr 1-hr 14-14-구두 1-hr 누 누 1-hr 1-hr 루 1-4-3-hr 3-hr 유등등 3-hr 3-hr 유 충동 후후 1<u>-</u>h 1-hr ğğğ **SO2** \$02 \$02 \$02 \$02 \$02 \$02 \$02 \$02 \$02 Modeling Scenario 0 0 0 0 0 0 O 0 00 0 0 ٥l 0 O 00 0 0 O. o O  $\circ$ O 0 0 0 O O 0 O L\_COMB\_1 MSS\_CONT MSS CONT COMB\_1 MSS\_CON COMB 1 MSS\_CONT T\_COMB\_1 MVCU3 MVCU5 MVCU6 MVCU5 MVCU6 MVCU7 MVCU5 MVCU6 MVCU7 MVCU4 MVCU2 MVCU2 MVCU4 **MVCU5** MVCU6 MVCU1 MVCU3 MVCU3 MVCU4 MVCU4 **MVCU8 MVCU2** MVCU7 MVCU8 MVCUB MVCU3 MVCU1 **MVCU2** MVCU1 MVCU7 MVCU1 MVCU8 F-COMB-1 -COMB-1 MVCU-5 -COMB-MVCU-5 -COMB-1 MVCU-6 MVCU-7 MVCU-5 AVCU-2 MVCU-3 AVCU-6 MVCU-7 MVCU-8 MVCU-3 AVCU-6 MVCU-7 MVCU-8 WVCU-3 MVCU-4 MVCU-8 MVCU-5 MVCU-6 MVCU-7 MVCU-2 MVCU4 MVCU-2 MVCU-3 MVCU-1 MVCU-1 **MVCU-2** MVCU-4 MVCU-8 MVCU-1 MVCU-1 MVCU-1 NSS N MSS **NSS** 

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### Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

Combined Emissions

Lone Star Ports, LLC Modeled Emission Rate [lb/hr] 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 25.05 1.88 0.25 4.00 2.66 4.00 2.66 0.93 0.93 0.93 0.93 0.93 0.93 Source Por Point Point Point Point Point Point Point Point Point Point Pornt Pornt Point Polnt Point Point Point Company Name: Intermittent 2222 Review Context SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis Site Wide Site Wide SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis SIL analysis Site Wide Site Wide Site Wide Site Wide Site Wide Site Wide State Property Line State Property Line State Property Line State Property Line State Property Line State Property Line State Property Line State Property Line State Property Line NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAOS NAAQS NAAQS NAAQS NAAQS NAAQS NAAOS NAAQS NAAOS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS NAAQS Modeled Averaging 24-hr 24-hr 24-hr 24-hr 24-hr 24-hr 24-hr 후후 8<del>-</del>1 8-hr 1-hr 1-hr 1-hr 1-h 1-hr 후두 8-hr 8-h 8-hr 8-hr 8-hr 8-hr 녛 24-hr 투 1-hr 툿 1-hr 1-hr Ξ PM 10 PM 10 PM10 PM 10 PM10 PM10 PM10 PM10 ₽₩ <u>ා</u>තනකකකකකකකකකකක Scenario Modeling Ю 0 0 MSS\_CONT MVCU1 MSS\_CONT MSS\_CONT MSS CONT MVCU5 MVCU5 MVCU5 COMB\_1 COMB MVCU3 MVCU8 **MVCU5** MVCU8 **MVCU2** MVCU6 MVCU3 MVCU6 MVCU4 MVCU6 MVCU8 MVCU4 MVCU1 MVCU<sub>2</sub> COMB **MVCU2** MVCU3 MVCU6 COMB **MVCU3** MVCU2 MVCU7 MVCU1 MVCUS MVCU7 MVCU7 MVCU4 MVCU7 **MVCU8** EPN -COMB-T-COMB-1 -COMB-1 T-COMB-1 MVCU-6 MVCU-6 NVCU-8 MVCU-4 WCU-4 AVCU-5 MVCU-4 MVCU-5 MVCU-8 MVCU-1 MVCU-3 MVCU-5 MVCU-8 MVCU-3 MVCU-6 MVCU-2 MVCU-3 MVCU-7 MVCU-2 ₫VCU-5 MVCU-2 AVCU-7 MVCU-1 MVCU-4 MVCU-7 MVCU-2 MVCU-3 MVCU-6 MVCU-8 MVCU-1 MVCU-7

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MVCU1 **MVCU2** 

MVCU-1 MVCU-2

MSS

Date: 5/30/2019 Permit #: TBD

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

Combined Emissions

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MVCU-4	MVCU4	0	PM2.5	24-hr	NAAGS	SIL analysis	2 S	Point	0.93
MVCU-5	MVCU5	0	PM2.5	24-hr	NAAQS	SIL analysis	2	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	NAAGS	SIL analysis	S <sub>N</sub>	Point	0.93
MVCU-8	MVCU8	٥	PM2.5	24-in	NAAQS	SIL analysis	oN O	Point	0.93
T-COMB-1	T_COMB_1	0	PM2.5	24-hr	NAAQS	SIL analysis	2	Point	0.15
MSS	MSS CONT	٥	PM2.5	24-hr	NAAQS	SIL analysis	2	Point	0,10
MVCU-1	MVCU1	0		1-hr	Health Effects	Site Wide	Š	Point	
MVCU-2	MVCU2	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	Š	Point	1
MVCU-3	MVCU3	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	N <sub>o</sub>	Point	# -
MVCU-4	MVCU4	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	S.	Point	
MVCU-5	MVCU5	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	S.	Point	
MVCU-6	MVCU6	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	N <sub>o</sub>	Point	
MVCU-7	MVCU7	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	N <sub>o</sub>	Point	
MVCU-8	MVCU8	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	2	Point	
T-COMB-1	T_COMB_1	0	Health Effects Pollutant	1-hr	Health Effects	Site Wide	o <sub>N</sub>	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	°N	Point	0.13
MVCU-2	MVCU2	0	H2S	1-hr	State Property Line	Site Wide	°N	Point	0.13
MVCU-3	MVCU3	0	H2S	1-hr	State Property Line	Site Wide	N <sub>o</sub>	Point	0.13
MVCU-4	MVCU4	0	H2S	1-hr	State Property Line	Site Wide	<sup>8</sup>	Point	0.13
MVCU-5	MVCU5	0	H2S	1-hr	State Property Line	Site Wide	Š	Point	0 (3
MVCU-6	MVCU6	0	H2S	1-hr	State Property Line	Site Wide	°N	Point	0 13
MVCU-7	MVCU7	0	H2S	{-hr	State Property Line	Site Wide	No	Point	0.13
MVCIJ-8	MVCU8	0	H2S	1-hr	State Property Line	Site Wide	N <sub>O</sub>	Point	0.13
T-COMB-1	T_COMB_1	0	H2S	1-hr	State Property Line	Site Wide	oN No	Paint	0.02
MSS	MSS CONT	0	H2S	1-hr	State Property Line	Site Wide	o <sub>N</sub>	Point	0.00
MVCU-1	MVCUT	0	XON	1-hr	NAAQS	Minor Full NAAQS	ON	Point	12.53
MVCU-Z	MVCUZ	0	XON	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
MVCU-3	MVCU3	0	XON	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
4 10 S	MVCU4	0	XON	1-hr	NAAQS	Minor Full NAAQS	No	Point	12.53
NIVCO-9	MVCUS	n	XON	1-hr	NAAQS	Minor Full NAAQS	No	Point	12,53
MVCU-6	MVCU6	0	NOX	1-hr	NAAQS	Minor Full NAAQS	Š	Point	12.53
MVCU-/	MVCU7	٥	NOX	1-hr	NAAQS	Minor Full NAAQS	2	Point	12.53
MVCU-8	MVCU8	0	NOX	1차.	NAAQS	Minor Full NAAQS	N <sub>o</sub>	Point	12.53
-COMB-1	T_COMB_1	0	×ON	1-hr	NAAOS	Minor Full NAAQS	S.	Point	3.00
MSS	MSS_CONT	0	NOX	1-hr	NAAQS	Minor Full NAAQS	N <sub>O</sub>	Point	1.99
MVCU-1	MVCU1	0	SO2	1-hr	NAAQS	Minor Full NAAQS	2	Point	11,79
MVCU-2	MVCU2	0	SO2	1-hr	NAAQS	Minor Full NAAQS	å	Point	11.79
MVCU-3	MVCU3	0	S02	1-hr	NAAQS	Minor Full NAAQS	N.	Point	11.79
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Date: 5/30/2019 Permit #: TBD

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

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200		Building.	- - -	Middeled Averaging				Source	Modeled Emission
Z.	Model ID	Scenario	Pollutant	time	Standard Type	Review Context	Intermittent	Type	Rate [lb/hr]
	MVCU4	0	802	1-hr	NAAQS	Minor Full NAAQS	οN	Point	11.79
	MVCU5	0	802	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU6	0	S02	1-hr	NAAQS	Minor Full NAAQS	N <sub>o</sub>	Point	11.79
	MVCU7	0	802	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU8	0	802	1-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
<u>_</u>	T_COMB_1	0	SO2	1-hr	NAAQS	Minor Full NAAQS	No	Point	1.88
	MSS CONT	0	802	1-hr	NAAQS	Minor Full NAAQS	No	Point	0,25
	MVCU1	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
	MVCU2	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
1	MVCU3	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
	MVCU4	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
	MVCU5	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
	MVCU6	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
	MVCU7	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
	MVCUB	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.93
-COMB-1	T_COMB_1	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	S N	Point	0.15
	MSS_CONT	0	PM2.5	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.10
	MVCU1	0	S02	3-hr	NAAQS	Minor Full NAAGS	No	Point	11.79
	MVCU2	0	802	3-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
MVCU-3	MVCU3	0	S02	3-hr	NAAQS	Minor Full NAAQS	ON	Point	11.79
	MVCU4	0	S02	3-hr	NAAQS	Minor Full NAAQS	ŝ	Point	11.79
	MVCU5	0	802	3-hr	NAAQS	Minor Full NAAQS	SN N	Point	11.79
	MVCU6	0	S02	3-hr	NAAQS	Minor Full NAAQS	ON	Point	11.79
	MVCU7	0	S02	3-hr	NAAGS	Minor Full NAAQS	NO	Point	11.79
	MVCU8	0	s02	3-hr	NAAQS	Minor Full NAAQS	No	Point	11 79
_	T COMB 1	0	SO2	3-hr	NAAQS	Minor Full NAAQS	No	Point	1.88
	MSS_CONT	0	S02	3-hr	NAAQS	Minor Full NAAQS	No	Point	0.25
	MVCU1	0	S02	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU2	0	S02	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU3	0	\$05	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU4	0	S02	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU5	0	802	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
i	MVCU6	0	S02	24-hr	NAAQS	Minor Full NAAQS	No	Point	11.79
	MVCU7	0	S02	24-hr	NAAQS	Minor Full NAAQS	S <sub>O</sub>	Point	11.79
	MVCUB	0	S02	24-hr	NAAQS	Minor Full NAAQS	Š	Point	11.79
F-COMB-1	T_COMB_1	0	S02	24-hr	NAAQS	Minor Full NAAQS	S.	Point	1,88
	MSS CONT	0	S02	24-hr	NAAQS	Minor Full NAAQS	No	Point	0.25
	MVCU1	0	NOX	Annual	NAAQS	SIL analysis	No	Point	1.68
	MVCU2	0	XON	Annual	NAAQS	SIL analysis	Š	Point	1.68
	MVCU3	0	NOx	Annual	NAAQS	SIL analysis	ž	Point	1.68
	Z : : : :		2		004414				

Date: <u>5/30/2019</u> Permit #: <u>TBD</u>

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

Combined Emissions

Company Name: <u>Lone Star Ports, LLC</u> Modeled Emission Rate [lb/hr] 1.68 1.68 1.68 2.58 2.58 2.58 2.58 2.58 2.58 2.58 0.18 2.58 2.58 2.58 2.58 2.58 2.58 0.18 0.13 9.0 2.58 0.01 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.06 00 ı Point Intermitten S Z 222222222222 Š 222 22 2 22 Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS Minor Full NAAQS SIL analysis Site Wide Site Wide Site Wide Site Wide Site Wide Standard Type Health Effects Health Effects Health Effects Health Effects Health Effects NAAQS Modeled Averaging Annual Annual Annual Annual Annual Annual Annual Annual Annual Annuai Annual Annua Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant S02 PM2.5 PM2.5 PM2.5 PM2.5 PM2,5 PM2.5 PM2.5 PM2.5 \$02 \$02 \$02 \$02 \$02 \$02 \$02 XON **SO2** Modeling Scenario 0 0 0 0 0 0 0 0 T\_COMB\_1 MSS\_CONT MVCU1 MSS\_CONT MSS\_CONT MSS CONT COMB\_1 **MVCU5** COMB MVCU2 Model ID **MVCU5** MVCU3 MVCU4 MVCU6 MVCU4 MVCUB MVCU7 MVCU3 MVCU1 MVCU7 MVCU8 **MVCU3** MVCU7 MVCU1 MVCU4 MVCU8 MVCU4 **MVCU6** MVCUB **MVCU2** MVCU3 MVCU1 **MVCU5** MVCU6 COMB MVCU2 **MVCU5** MVCU6 MVCU<sub>2</sub> **MVCU5** -COMB-1 -COMB--COMB-1 MVCU-5 MVCU-6 MVCU-3 MVCU-6 -COMB-MVCU-2 MVCU-3 MVQU-2 AVCU-4 NVCU-6 AVCU-4 IVCU-4 MVCU-5 MVCU-1 AVCU-8 MVCU-5 AVCU-7 AVCU-8 VCU-1 1VCU-7 AVCU-5 AVCU-1 **NCU-2** AVCU-3 AVCU-8 1VQU-1 NVCU-7 AVCU-8 MVCU-3 MVCU-6 MVCU-2 MVCU4 ACU-7 MVCU-5 SSIV VSS/ <u>38</u>

Date: 5/30/2019 Permit #: TBD

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

Combined Emissions

Lone Star Ports, LLC	Modeled Emission	Rate [lb/hr]	ı	1							]	1						1	1	1					1	,		1	1	1		1	i	ı	1	1			ŧ	1	       	1	-
	l을	Type	Point	Point	Point	Point	Point	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volu je	Volume	Volume	Volu	Volume	Volune	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume
Company Name:		Intermittent	No N	o <sub>N</sub>	2	2	2	S S	No	2	N <sub>o</sub>	Z Z	2	Z	Z C	N CO	N <sub>O</sub>	S <sub>O</sub>	No	No	No	No	No	N <sub>O</sub> N	No	N	N <sub>O</sub>	N <sub>o</sub>	No	o <sub>N</sub>	N <sub>O</sub>	No	No	No	o <sub>N</sub>	<b>2</b>	o N	S <sub>O</sub>	οN	N <sub>O</sub>	Š	oN	S <sub>O</sub>
		Review Context	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide	Site Wide
missions		Standard Type	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects	Health Effects
Combined Emissions	Modeled Averaging	time	Annual	Annual	Annual	Annual	Annual	1-hr	1-hr	1 <b>-hr</b>	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	1-hr	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
		rollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant	Health Effects Pollutant
	Modeling	Scenario	o (	ه د	0	<b>5</b>	٥	0	o l	0	0	0	0	0	0	o i	)	2	>	0			Ĭ					0	<b>-</b>	<b>-</b>												0 (	0
		Ol lengin	MACOB	MVCU/	MVCU8	L COMB 1	MSS_CONT	B01_0001			B01_0004	B01_0005	B01_0006	B01_0007	B01_0008	B01_0009	B02 0001	B02_0002	B02_0003	B02_0004	B02_0005	B02_0006	B02_0007	B02_0008	B02_0009	TK50_1	TK50_2	FUG	MSS_FUG	Pigging	B01_0001	B01 0002		- 21			B01_000/	B01_0008	B01_0009	B02_0001	B02_0002	B02_0003	B02_0004
	NO.		9-00AM	MVCU-/	MVCU-8	I-COMB-1	MSS	BERTH-1	BERTH-1	BERTH-1	BERTH-1	BERTH-1	BERTH-1	BERTH.1	BERTH-1	BERTH-1	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BERTH-2	BERTH-2	50-1	50-2	FUG	MSS	MSS	BEK H-1	BEK   N-1	מבת חייו	מבועום.	-LI-010	סבאותיין	BERIH-1	BERIH-1	BERIH-1	BERTH-2	BERTH-2	BEKIH-2	BEKIH-2

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Date: 5/30/2019
Permit #: TBD

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

Combined Emissions

Company Name: Lone Star Ports, LLC Modeled Emission Rate [lb/hr] 8 8 8 8 0.0 0.0 0.0 0.0 00'0 000 0.00 000 00.0 000 000 00.0 0.00 9.0 0.00 0.0 1 Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Source Volume Type Intermittent 22 Review Context Site Wide State Property Line Standard Type Health Effects Health Effects Health Effects Health Effects Health Effects Health Effects Health Effects Health Effects Health Effects Health Effects Modeled Averaging Annual Annual Annual Annual Annual Annual Annual Annual Annuai Annual 幸 후 수 수 돌돌돌 수 수 1-hr 1<del>-</del>hr <u> 부</u> 두 후후 후투투 1-hr 亨 후 Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant Health Effects Pollutant 72S H2S H2S H2S H2S H2S H2S H2S H2S H2S H2S H2S Modeling Scenario Ю 0 0 0 0 O Ю Ю О Ю 0 0 0 o 0 0 0 0 B02\_0006 B02\_0007 B01\_0006 B01\_0007 B01\_0002 B01\_0003 B01\_0004 B01\_0009 B02\_0001 B02 0002 B02 0003 B02 0004 B02 0005 B02 0006 B02 0007 MSS FUG B02\_0008 B02 0009 B01\_0008 B02\_0005 Pigging B01\_0005 B02\_0008 B02\_0009 MSS\_FUG B01\_0001 Model ID TK50 1 TK50 1 TK50\_2 Plaging FUG EP N BERTH-2 BERTH-2 BERTH-2 BERTH-2 BERTH-2 **BERTH-2** BERTH-2 BERTH-2 **BERTH-2 BERTH-2** BERTH-2 BERTH-2 BERTH-1 BERTH-1 BERTH-1 **BERTH-1** BERTH-1 BERTH-1 BERTH-1 BERTH-1 BERTH-1 **BERTH-2** MSS MSS 50-2 FUG SSE MSS 50-1 50-1

Electronic Modeling Evaluation Workbook (EMEW)

**Monitor Calculations** 

Company Name: Lone Star Ports, LLC

Date: <u>5/30/2019</u> Permit#: <u>.T.R.D</u>

Pollutant:	PM <sub>2.5</sub>			
AQSID:	4835	50034	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 (µg/m³)	2nd Year Concentration (µg/m³)	3rd Year (most recent) Concentration (μg/m³)	Calculated Background Concentration (µg/m³)
24-hr 98 percentile	23.00000	25.00000	29.00000	26
Annual Average	9.40000	8.60000	8.10000	8.7

Pollutant:	NO <sub>2</sub>			
AQSID:	4803	91016	Street Address and City:	109b Brazoria Hwy 332 West
Link to Data Source:	www.epa.gov/outdoor-air-	quality-data/monitor-values	County:	Brazona
Select metric for short term averaging time below:	1st Year Concentration (µg/m³)	2nd Year Concentration (µg/m³)	3rd Year (most recent) Concentration (µg/m³)	Calculated Background Concentration (µg/m³)
1-hr 98 percentile	35.72000	35.72000	33.84000	35
Annual Average				0

Pollutant:	SO <sub>2</sub>			
AQSID:	4835	50025	Address:	orpus Christi State School (Airport I
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 (µg/m³)	2nd Year Concentration (µg/m³)	3rd Year (most recent) Concentration (µg/m <sup>3)</sup>	Calculated Background Concentration (µg/m³)
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

Electronic Modeling Evaluation Workbook (EMEW)

Monitor Calculations

Permit#: <u>况</u>

Date: <u>5/30/2019</u>

Pollutant:	PM <sub>10</sub>			
AQSID:	4835	50034	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 (µg/m³)	2nd Year Concentration (µg/m³)	3rd Year (most recent) Concentration (μg/m³)	Calculated Background Concentration (µg/m³)
H2H 24-hr Avg	36.00000	43.00000	79.00000	79

Pollutant:	со			
AQSID:			Address:	
Link to Data Source:			County:	
Select metric for short term averaging time below:	1st Year Concentration (µg/m³)	2nd Year Concentration (µg/m³)	3rd Year (most recent) Concentration (µg/m³)	Calculated Background Concentration (µg/m³)
Choose an item				. 0
Choose an item				0

Pollutant:	Pb	
AQSID:		Address:
Link to Data Source:		County:
Select metric for short term averaging time below:	Concentration (µg/m³) from 38 Month Sample Period	Calculated Background Concentration (µg/m³)
Ch <b>o</b> ose an item		0

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Permit #: \_TBD\_\_\_

Date: 5/30/2019

Pollutant:	PM <sub>2.5</sub>					
AQS ID:		483550034				
Соппту:	Ņ	Nueces				
Distance to Project Site (km):	36	38.0				
			Monitor Justification Data			
Category:	10 Kilometer PM <sub>2.5</sub> Emissions Comparison	Types of Nearby Sources	County PM <sub>2.5</sub> Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:	4 tpy	Fabrication Facility			Undeveloped/water/residenti al	coastal
Monitor:	1257 tpy	multiple refinertes			industrial	coastal
Data Source:	nttps://www.tceq.texas.gov/ assets/public/implementatia n/air/ie/pseisums/2013thru2					
			Additional Information			
How are off-property sources accounted for?	The monitor was used in lieu o project site. Very minor source	of explicitly modeling off-propose adjacent to the project site.	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.	aniity of emissions near the	monitor compared to the quar	itity of emissions near the
Monitoring data set year(s)/Additional Justification:	2016-2018, Major industry ne	ear monitor, compared to rural	2015-2018, Major industry near monitor, compared to rural nature of the project site, which is very conservative.	is very conservative.		

## Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW) Background Justification

Permit #: \_TBD\_

Date: 5/30/2019

Pollutant:	NO <sub>2</sub>		· 			Company Name:
AGS ID:		480391016				
County:	Braz	Brazorija				
Distance to Project Site (km):	200	204.0				
			Monitor Justification Data			
Category:	10 Kilometer NO <sub>2</sub> Emissions Comparison	Types of Nearby Sources	County NO <sub>2</sub> Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:	3 tpy	Fabrication Facility	7041 tpy	340223	Undeveloped/water/residenti al	coastal
Monitor:	2487 tpy	Large chemical plants	6364 tpy	3313166	Urban/industrial	coastal
Data Source:	nttps.//www.tceq.texas.gov/ assets/public/implementatio n/airfie/pseisums/2013thru2		ftp://ftp.epa.gov/EmisInvent ory/2014/tier_summaries	0.3. Census bureau (Jany 1, 2017 Estimate) https://factinder.census.gov		
			Additional Information			
How are off-property sources accounted for?	The monitor was used in lieu of explicitly modeling off-proproject site. Very minor source adjacent to the project site.	of explicitly modeling off-prop is adjacent to the project site.	erty sources considering the c	uantity of emissions near the	plicitly modeling off-property sources considering the quantity of emissions near the monitor compared to the quantity of emissions near the acent to the project site.	ntity of emissions near the
Monitoring data set year(s)/Additional Justification:	2016-2018, Major industry ne	ar monitor, compared to rural	2016-2018, Major industry near πonitor, compared to rural nature of the project site, which is very conservative.	ch is very conservative.		5 5

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Permit #: \_<del>TBD</del>\_

Date: 5/30/2019

						Regional Considerations	coastal	coastal			emissions near the	
						Land Use Comparison Regi	Undeveloped/water/residenti	industrial	10		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.	
						County Population Comparison					uantity of emissions near the r	h is very conservative.
					Monitor Justification Data	County SO <sub>2</sub> Emissions Comparison	3			Additional Information	dy sources considering the qu	nature of the project site, which
	0025	88		0		Types of Nearby Sources	Fabrication Facility	multiple refineries			of explicitly modeling off-prope adjacent to the project site.	ar monitor, compared to rural r
SO <sub>2</sub>	483550025	Nueces		37.0		10 Kilometer SO <sub>2</sub> Emisstons Compartson	0.1 tpy	524	assets/public/implementation/alrife/pselsums/2013thru2		The monitor was used in lieu of e project site. Very minor source ac	2016-2018, Major Industry near monitor, compared to rural nature of the project site, which is very conservative.
Pollutant:		County:	Distance to Project	Site (km):		Category:	Project:	Monitor:	Data Source:		How are off-property sources accounted for?	Monitoring data set year(s)/Additional

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook (EMEW)
Background Justification

Permit #: \_TBD\_\_

Date: 5/30/2019

						Company Name:
Pollutant:	<b>P.M.</b> 10					
AQS ID:	4835	483550034				
County:	N	Nueces				
Distance to Project Site (km):						
			Monitor Justification Data			
Category:	10 Kilometer PM <sub>10</sub> Enfsslons Comparison	Types of Nearby Sources	County PM <sub>10</sub> Emissions Comparison	County Population Comparison	Land Use Comparison	Regional Considerations
Project:						
Monitor:						
Data Source:						
			Additional Information			
How are off-property sources accounted for?						
Monitgring data set year(s)/Additional Just iffcation:						

Electronic Modeling Evaluation Workbook (EMEW)

**Background Justification** 

Permit #: \_TBD\_\_

Date: 5/30/2019

Pollutant:	00					
County:						
Distance to Project Site (km):						
			Monitor Justification Data			
Category:	10 Kilometer CO Emissions Comparison	Types of Nearby Sources	County CO Emissions Compartson	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:		ļ				

Electronic Modeling Evaluation Workbook (EMEW)

Background Justification

Permit #: \_TBD\_

Date: 5/30/2019

Poliutant:	Δd					
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 Compartson	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

Company Name: Lone Star Ports, LLC

Date: 5/30/2019

Permit #: \_TBD\_

Pollutant:	O <sub>3</sub> (for Tier 3 Analysis)					Company Marile. Colled
AQS ID:						
County:						
Distance to Project Site (km):						
		:				
Category:	10 Kilometer NO <sub>x</sub> Emissions Comparison	10 Kilometer VOC Emissions Comparison	Types of Nearby Sources	County NO <sub>x</sub> Emissions Comparison	County VOC Emissions Compartson	County Population Comparison
Project:						
Monitor:				7.4		
Data Source:						
				Additiona	Additional Information	
How are off-property sources accounted for?				:		
Additional Justification:						

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

Background Justification

Company Name: Lone Star Ports, LLC

Permit #: \_TBD\_\_

Date: 5/30/2019

	_	 	 	
Regional Considerations				
Land Use Comparson				

Electronic Modeling Evaluation Workbook (EMEW)

Secondary Formation of PM2.5

Permit#: \_\_<del>TBD</del>\_\_\_\_

Date: 5/30/2019

Company Name: Lone Star Ports, LLC

Annual PM<sub>2.5</sub> Total Secondary Value (µg/m³) 24-hr PM<sub>2.5</sub> | Annual PM<sub>2.5</sub> 0.01145 0.35080 10000 Annual Modeled Emission Rates for Precursors (MERPs) Demonstration Tool for Calculating Secondary PM 2.4 Impacts MERP Value 24-hr 2500 Height (m) Selection of Variables Emission Rate (tpy) Source Selection worst-case Project Increases (tpy) 65,23 9132 Nitrogen Oxide (NO<sub>x</sub>) Sulfur Dioxide (SO<sub>2</sub>) Precursor Facility:

245.000	Inte	All merial comments	
		Y	
1801			
343			
	MERPs Demonstration Justification		
worst-case	diversity and after any		
91.32	ication	n in itself.	
Sulfur Dioxide (SO <sub>2</sub> )	MERPs Demonstration Justiff	Use of worst-case is justification in itself.	

Date: 5/30/2019 Permit #: TBD

Company Name: Lone Star Ports, LLC

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

e Property Line	De Minîmis (µg/m³)	
eling Results for State	GLCmax (µg/m³)	
Table 1. Project-Related Modeling Results for State Property Line	Averaging Time	
Table 1	Pollutant	

1	Averaging Time	GLCmax (µg/m³)	De Minimis (µg/m³)
—÷	1-hr	253.10000	20.42
-	1-hr		-
	24-hr		0.3
	1-hr	14.90000	2.18 (If property is residential, recreational, business, or commercial)
	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

	The strength of the strength o		
Pollutant	Averaging Time	GLCmax (µg/m³)	Standard (µg/m³)
°OS	1-br	253.10000	1021
H <sub>2</sub> SO <sub>4</sub>	1 <del>.</del>		99
H <sub>2</sub> SO <sub>4</sub>	24-hr		15
H <sub>2</sub> S	1-hr	14.90000	108 (If property is residential, recreational, business, or commercial)
N₂S	1-hr	14.90000	162 (If property is not residential, recreational, business, or commercial)

Pollutant	Averaging Time	GLCmax (µg/m³)	De Minimis (µg/m³)
so <sub>2</sub>	1-hr	138 25000	7.8*
SO <sub>2</sub>	3-hr	179.70000	25
so <sub>2</sub>	24-hr	73 10000	5
so <sub>2</sub>	Annual	1,07,000	_
PM <sub>10</sub>	24-hr	4.60000	5
NO <sub>2</sub>	-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	122.95000	7.5**
NO2	Annual	0.780	+
co	-th-	356.40000	2000
8	8-hr	211.20000	500

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

\* www.tceq.fexas.gov/assets/public/permitting/air/memos/appwso2.pdf \*\* www.tceq.texas.gov/assets/public/permitting/air/memos/quidance 1hr\_no2naags.pdf

Date: 5/30/2019 Permit #: TBD

Company Name: Lone Star Ports, LLC

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Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Date: 5/30/2019 Permit #: TBD

Company Name: Lone Star Ports, LLC

Table 4. PM2.5 Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax (µg/m³)	Secondary PM <sub>2.5</sub> Contribution (µg/m³)	Total Conc. = Secondary PM <sub>2.5</sub> + GLCmax (µg/m²)	De Minimís (µg/m³)
PM <sub>2.6</sub>	24-hr	3.8	0.35079728	4,15080	1.2*
PM <sub>2,5</sub>	Annual	0.0600	0.011445633	0.07145	0.2*
Additional information www.tceq.texas.gov	tion for the De Minimis values gov/permitting/air/modeling/e	es listed above can be found at:	ound at: 		

Electronic Modeling Evaluation Workbook (EMEW)
NAAQS-SPL Modeling Results

Date: <u>5/30/2019</u> Permit #: TBD

Company Name: Lone Star Ports, LLC

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

Pollutant	Averaging Time	GLС max (µg/m³)	Background (µg/m³)	Total Conc. = [Background + GLCmax] (µg/m³)	Standard (µg/m³)
SO <sub>2</sub>	1-hr	100,96000	10.00	110.96	196
SO <sub>2</sub>	3-hr	179.70000	10.00	189.70	1300
SO <sub>2</sub>	24-hr	73.10000	4.00	77.10	365
SO <sub>2</sub>	Annual	1.07000	1.00	202	SS SS
PM <sub>10</sub>	24-hr		00'62	00.67	150
Pb	3-mo		O	0	7,00
NOz	1-hr	77.41000	35,00	11241	188
NO2	Annual		0	0	00+
00	1-hr		C		40000
8	8-hr		0	2	0000

Electronic Modeling Evaluation Workbook (EMEW)

NAAQS-SPL Modeling Results

Company Name: Lone Star Ports, LLC

Date: 5/30/2019 Permit #: TBD

Standard (µg/m³) 38 2 Total Conc. = [Background + Secondary + GLCmax] 27.98580 (µg/m³) 8.71145 Background (µg/m³) Table 6. Total Concentrations for Minor NSR NAAQS (Concentrations > De Minimis) 25.67 8.70 Contribution (µg/m³) Secondary PM<sub>2,5</sub> 0.35079728  $\operatorname{GLCmax}\left(\mu g/m^3\right)$ 1.96500 Averaging Time Annual 24-hr **Pollutant** PM<sub>2.6</sub> PM<sub>2.5</sub>

Electronic Modeling Evaluation Workbook (EMEW)

Health Effect Modeling Results

Company Name: Lone Star Ports, LLC

Permit#: <u>TB</u>D

Date: \_\_\_\_5/30/2019\_

Modeled Health I	Effect Results	(MERA Guidance	):	Step3	Step 4: Production	
Chemical Species	CAS Number	Averaging Time	ESL [µg/m³]	10% ESL Step 3 Modeled GLCmax [µg/m³]	25 % ESL Step 4 Production GLCmax since most recent ste wide modeling [µg/m <sup>3]</sup>	10% ESL Step 4 Production Project Only GLCm [µg/m³]
crude oil < 1% benzene	N/A	1-hr	3500	tha	почення (рупп	[P9711]
crude oil < 1% benzene	N/A	Annual	350	5.31		
Grado Gri, 4 176 Borizerio	1977	- Allings	330	0.31	, <u>.</u> .	
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Electronic Modeling Evaluation Workbook (EMEW)

Health Effect Modeling Results

Company Name:

Date: 5/30/2019 Permit #. \_\_TED

Lone Star Ports, LLC

Facility. Modeled Health Step 4: MSS Step 5: MSS Only Step 5: Hours of Exceedance 50% ESL Step 4 MSS GLCmax 25% ESL Full ESL 1X ESL GLCmax 2X ESL GLCmax 4X ESL GLCmax Step 4 MSS Project Only Step 5 GLCmax since most recent site Step 5 MSS Hours Step 5 MSS Hours Step 5 MSS Hours Chemical Species wide modeling [µg/m³] GLCmax [µg/m³] [µg/m³] of Exceedance of Exceedance of Exceedance crude oil,< 1% benzene crude oil, < 1% benzene

Electronic Modeling Evaluation Workbook (EMEW)

Health Effect Modeling Results

Company Name: Lone Star Ports, LLC

Date: <u>5/30/2019</u> Permit#: <u>,TBD</u>

Modeled Healt	h !	Step6	Step 7: Site Wide		Step 7: Hours of Exc	ceedance
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/m³]	Site Wide GLCni [µg/m³]	1XESL GLCni Hours of Exceed ance	2X ESL GLCma Hours of Exceedance
crude oil, < 1% benzene			14929.00	2569.00	O	28
crude all, < 1% benzene						
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Electronic Modeling Evaluation Workbook (EMEW)

Health Effect Modeling Results

Company Name: Lone Star Ports, LLC

Date: <u>5/30/2019</u> Permit#: <u>TBD</u>

Modeled Health	11	
Chemical Organic	4X ESL GLCmax Hours of	10X ESL GLCmax Hours of
Chemical Species	Exceedance	Exceedance
crude oil, < 1% benzene	1	0
crude oil, < 1% benzene		
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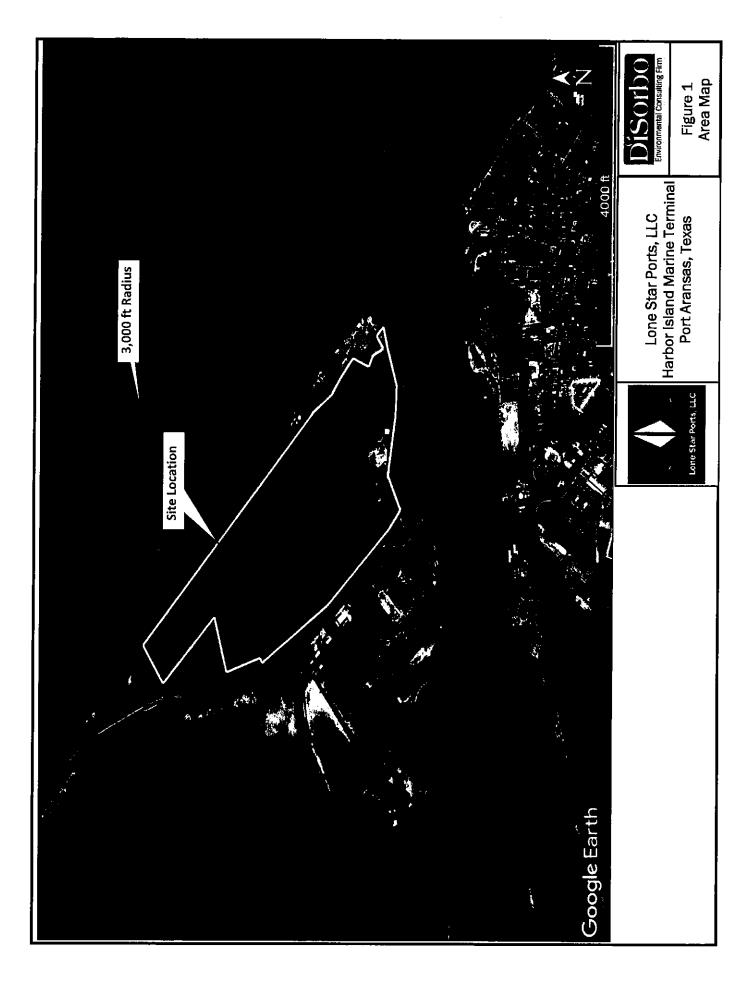
# Texas Commission on Environmental Quality Electronic Modeling Evaluation Workbook (EMEW) Modeling File Names

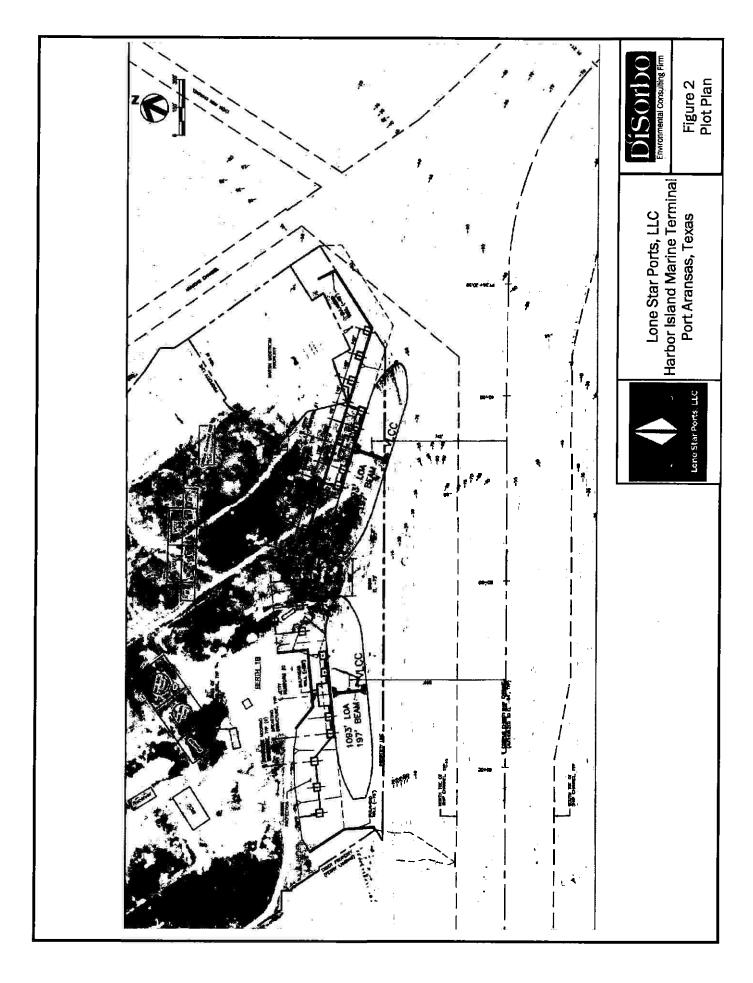
Date: 5/30/2019

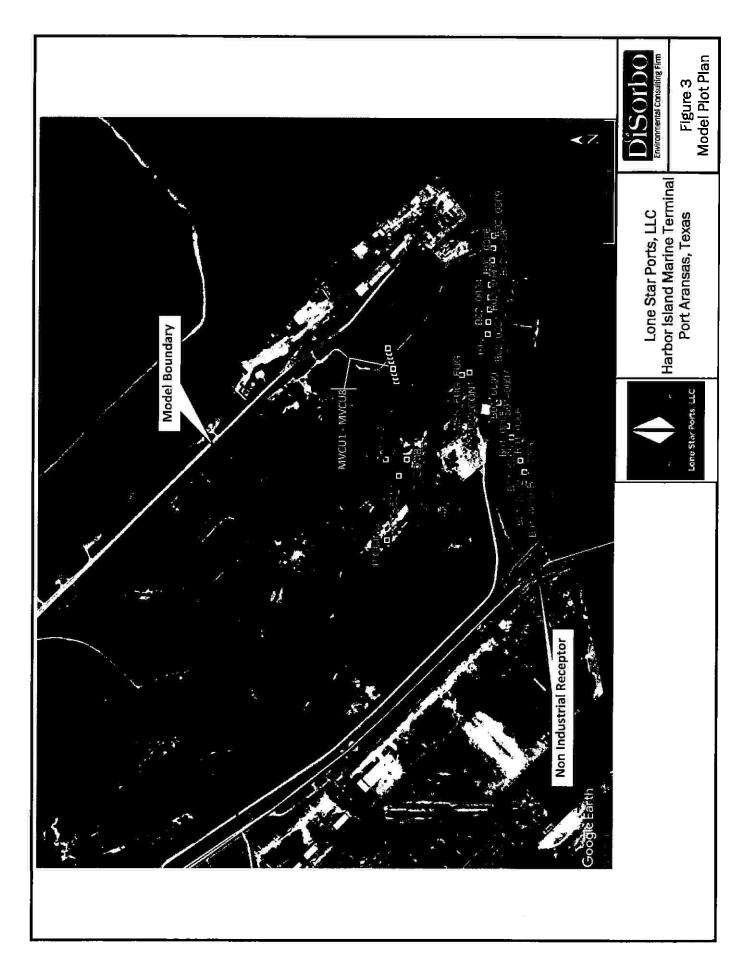
Permit #: \_<del>TBD</del>\_

Company Name: Lone Star Ports, LLC

Model File Base Name	Pollutant	Averaging Time	File Extensions	Additional File Description
Project1yr_2012_CO	00	1-hr	*.dta, *.grf, *.lst, *.sum	project-wíde
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	XON	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	802	Annual	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
ProjectANN 5yrs NO2	NOX	Annual	*.dta, *.grf, *.lst, *.sum	project-wide
Project1yr_2012_CO	00	8-hr	*.dta, *.grf, *.lst, *.sum	project-wide
Project5yr 5yrs SO2_ST	802	1-hr	*.dta, *.grf, *.lst, *.sum	project-wide and site-wide
Project5yr 5yrs SO2 ST	802	3-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Project5yr_5yrs_SO2_ST	802	24-hr	*.dta, *.grf, *.lst, *.sum	project-wide and full NAAQS
Structures	All	Alf	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	Ail	All	*.pfp, *.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
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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.

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