February 19, 2025
File No. 27221251.02

Texas Commission on Environmental Quality
Air Permits Initial Review Team (APIRT)
MC 161
P.O. Box 13087
Austin, Texas 78711-3087
Submitted via STEERS

Subject: Permit-by-Rule (PBR) Application
Seaboard Foods LLC (CN603155748)
Registered Entity #: RN104397385
Sparky Biogas
Sherman County, Texas

Dear Sir or Madam:

On behalf of Seaboard Foods LLC (Seaboard), SCS Engineers (SCS) is submitting this Texas Commission on Environmental Quality (TCEQ) application to voluntarily register the below PBR:

- PBR 106.183 for the proposed construction and operation of a new boiler

Seaboard has a new biogas scrubbing facility at the Sparky project site located approximately 1 mile south of CR 17 and FM 1573 in Stratford, Sherman County, Texas. The facility will anaerobically digest swine manure produced at Seaboard's Sparky Farm to produce biogas. The biogas will subsequently be collected, piped to a central processing unit, scrubbed, and injected into an interstate pipeline network to be used for sale as renewable natural gas (RNG).

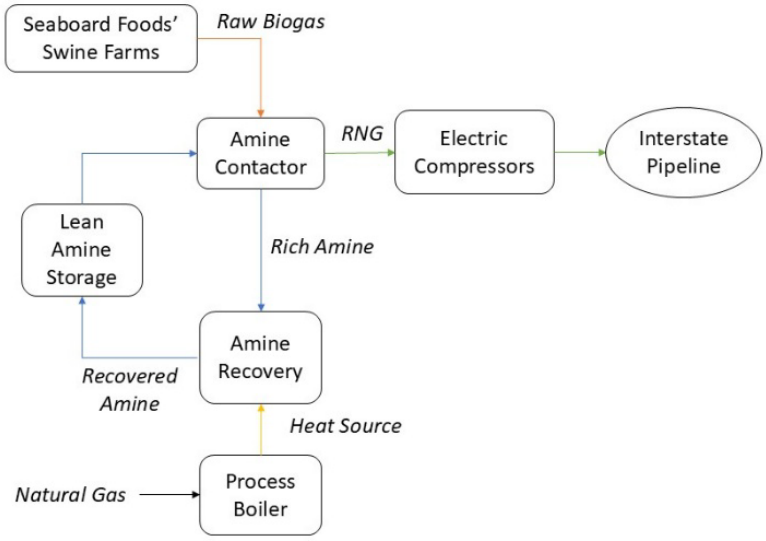
The Sparky Farm and lagoons are currently licensed to operate under the Air Standard Permit for Animal Feeding Operations at 30 TAC 321.43 and Confined Animal Feeding Operation Water Quality General Permit TXG920906.

The required TCEQ PI-7 form and associated PBR checklists are included in **Attachment A**. Provided herein is a discussion of process description, emission calculations, and resulting permit applicability.

PROCESS DESCRIPTION

The raw biogas generally consists of 60 percent methane (CH_4) and 40% carbon dioxide (CO_2). The biogas generated in the covered anaerobic digesters, located at the Sparky Farm, will be transported via pipeline to the RNG plant. The collected biogas is processed through an amine scrubber, wherein the CO_2 is adsorbed in the amine solution, resulting in processed RNG consisting of roughly 99% CH_4. The RNG is subsequently compressed to the required pressure through electric compressors prior to injection in the interstate pipeline.

The rich amine stream from the scrubber is processed through a series of vessels to flash off the CO_2 and recover the amine for reuse. The heat required for the biogas treatment process is provided by a natural gas fired boiler. A simple process flow diagram is shown below.



A summary of the proposed emission points included in the application is provided in the table below.

Emission Point	Description
EP-1	Amine Reboiler

Biogas generation will typically decrease during the colder seasons. Therefore, the RNG plant may only operate nine months a year, during seasonal peak biogas production in the covered lagoons. Biogas will be stored in the covered lagoons when the RNG plant is not in operation. Off-spec gas that cannot be sent to the pipeline network will be routed back to the nearest covered lagoon for temporary storage before re-processing.

EMISSION CALCULATIONS & PERMIT APPLICABILITY

The construction and operation of the project will create emissions of criteria pollutants, as well as hazardous air pollutants (HAPs). Emissions were calculated using the maximum design rate of the reboiler and emission factors from AP-42.

The project is considered a minor source of emissions and is below the PBR thresholds listed in 30 TAC 106.4. A summary of the project's actual emissions compared to the PBR thresholds is provided in the table below. Detailed emission calculations are provided in **Attachment B**.

Pollutants	30 TAC 106.4 PBR Threshold (tons/yr)	Project Emissions (tons/yr)
$PM_{2.5}$	10	0.55
PM_{10}	15	0.55
PM	25	0.55
VOC	25	0.40
CO	250	6.1
NO_x	250	7.2
SO_2	25	0.04
Total HAPs	25	0.14

(PM: Particulate Matter; VOC: Volatile Organic Compounds; CO: Carbon Monoxide; NO_x: Nitrogen Oxides; SO_2: Sulfur Dioxide)

FEDERAL REGULATIONS

The amine reboiler (EP-1) is a steam-generating unit and is subject to NSPS Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. The boiler only combusts natural gas; therefore, there are no applicable emission standards under this subpart.

We appreciate your review of this PBR application. If you have any questions regarding this submittal or require additional information, please contact Stephanie Taylor at 913-749-0733 or staylor@scsengineers.com.

Sincerely,

Stephanie Taylor
Project Manager
SCS Engineers

Tia Jeter, P.E.
Project Director
SCS Engineers

SLT/TMJ

cc: Jennifer Nelson, Seaboard Foods
Katie Doherty, Seaboard Foods

Attachment A TCEQ Forms and Checklists
Attachment B Emission Calculations

Attachment A

TCEQ Forms and Checklists

Registration for Permits by Rule (PBR)
Form PI-7
(Page 1)
Texas Commission on Environmental Quality

I.	**Registrant Information**
A.	Company or Other Legal Customer Name: Seaboard Foods, LLC
B.	Company Official Contact Information (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Other:) _____
Name: Jennifer Charno Nelson	
Title: Associate General Counsel – Environmental & Regulatory Compliance	
Mailing Address: 9000 W. 67th Street, Suite 200	
City: Shawnee Mission	
State: Kansas	
ZIP Code: 66202	
Telephone Number: 913-261-2651	
Fax Number:	
Email Address: Jennifer.nelson@seaboardfoods.com	
All PBR registration responses will be sent via email.	
C.	Technical Contact Information (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:) _____
Name: Fielding Lewis	
Title: Managing Director of RNG Operations	
Company Name: Seaboard Foods LLC	
Mailing Address: 2801 Hurliman Rd	
City: Guymon	
State: Oklahoma	
ZIP Code: 73942	
Telephone Number: 580-461-1839	
Fax Number:	
Email Address: fielding.lewis@seaboardfoods.com	

Registration for Permits by Rule (PBR)
Form PI-7
(Page 2)
Texas Commission on Environmental Quality

II. Facility and Site Information
A. Name and Type of Facility
Facility Name: Sparky Biogas
Type of Facility: ☒ Permanent ☐ Temporary
For portable units, please provide the serial number of the equipment being authorized below.
Serial No(s):
B. Facility Location Information
Street Address: 12545 County Road 17
If there is no street address, provide written driving directions to the site and provide the closest city or town, county, and ZIP code for the site (attach description if additional space is needed).
City: Stratford
County: Sherman
ZIP Code: 79084
C. TCEQ Core Data Form
Is the Core Data Form (TCEQ Form Number 10400) attached? ☐ YES ☒ NO
If "NO," provide customer reference number (CN) and regulated entity number (RN) below.
Customer Reference Number (CN):603155748
Regulated Entity Number (RN):104397385
D. TCEQ Account Identification Number (if known):
E. Type of Action
☒ Initial Application ☐ Change to Registration
For Change to Registration provide the Registration Number:
F. PBR number(s) claimed under 30 TAC Chapter 106
(List all the individual rule number(s) that are being claimed.)
106.183

II. Facility and Site Information *(continued)*		
G. Historical Standard Exemption or PBR		
Are you claiming a historical standard exemption or PBR?		☐ YES ☒ NO
If "YES," enter rule number(s) and associated effective date in the spaces provided below.		
Rule Number(s):	Effective Date:	
Rule Number(s):	Effective Date:	
Rule Number(s):	Effective Date:	
H. Previous Standard Exemption or PBR Registration Number		
Is this authorization for a change to an existing facility previously authorized under a standard exemption or PBR?		☐ YES ☒ NO
If "YES," enter previous standard exemption number(s) and PBR registration number(s) and associated effective date in the spaces provided below.		
Standard Exemption and PBR Registration Number(s):		
Effective Date:		
Standard Exemption and PBR Registration Number(s):		
Effective Date:		
I. Other Facilities at this Site Authorized by Standard Exemption, PBR, or Standard Permit		
Are there any other facilities at this site that are authorized by an Air Standard Exemption, PBR, or Standard Permit?		☒ YES ☐ NO
If "YES," enter standard exemption number(s), PBR registration number(s), and Standard Permit registration number(s), and associated effective date in the spaces provided below.		
Standard Exemption and PBR Registration Number(s): Standard Permit # 30 TAC 321.43 Air Standard Permit for Animal Feeding Operations		
Effective Date:		
Standard Exemption and PBR Registration Number(s):		
Effective Date:		
J. Other Air Preconstruction Permits		
Are there any other air preconstruction permits at this site?		☐ YES ☒ NO
If "YES," enter permit number(s) in the spaces provided below.		
Permit Number(s):		
Permit Number(s):		

II.	**Facility and Site Information *(continued)***
K.	Affected Air Preconstruction Permits
Does the PBR being claimed directly affect any permitted facility? No	
If "YES," enter the permit number(s) in the spaces provided below.	
Permit Number(s):	
Permit Number(s):	
L.	Federal Operating Permit (FOP) Requirements (30 TAC Chapter 122 Applicability)
Is this facility located at a site that is required to obtain an FOP pursuant to 30 TAC Chapter 122?	☐ YES ☒ NO ☐ To Be Determined
If the site currently has an existing FOP, enter the permit number:	
1.	Check the requirements of 30 TAC Chapter 122 that will be triggered if this claim is accepted *(check all that apply)*.
☐ Initial Application for an FOP ☐ Significant Revision for an SOP ☐ Minor Revision for an SOP	
☐ Operational Flexibility/Off Permit Notification for an SOP ☐ Revision for a GOP	
☐ To Be Determined ☒ None	
2.	Identify the type(s) of FOP issued and/or FOP application(s) submitted/pending for the site. (*check all that apply*)
☐ SOP ☐ GOP ☐ GOP Application/Revision (submitted or under APD review)	
☒ N/A ☐ SOP Application/Revision (submitted or under APD review)	
III.	**Fee Information** *(see Section VII. for address to send fee or go to www.tceq.texas.gov/epay to pay online)*
A.	Fee Requirements
Is a fee required per 30 TAC § 106.50?	☒ YES ☐ NO
If "NO," specify the exception. There are three exceptions to paying a PBR fee. *(check all that apply)*	
1.	Registration is solely to establish a federally enforceable emission limit. ☐
2.	Registration is within six months of an initial PBR review, and is addressing deficiencies, administrative changes, or other allowed changes. ☐
3.	Registration is for a remediation project (30 TAC § 106.533). ☐

III. Fee Information *(see Section VII. for address to send fee or go to www.tceq.texas.gov/epay to pay online)*	
B. Fee Amount	
1. A $100 fee is required if *any* of the answers in III.B.1 are "YES."	
This business has less than 100 employees.	☐ YES ☒ NO
This business has less than $6 million dollars in annual gross receipts.	☐ YES ☒ NO
This registration is submitted by a governmental entity with a population of less than 10,000.	☐ YES ☒ NO
This registration is submitted by a non-profit organization.	☐ YES ☒ NO
2. A $450 fee is required for all other registrations.	
C. Payment Information	
Check/money order/transaction or voucher number:	
Individual or company name on check:	
Fee Amount: $450	
Was fee paid online?	☒ YES ☐ NO
IV. Selected Facility Reviews and Voluntary Registrations *Only*	
Note: *If registering any of the PBRs listed in IV.B., or if voluntarily registering any other PBR(s), complete this section, then skip to Section VI. below:*	
A. List any PBRs that are being voluntarily registered.	
106.183	
106.	
B. PBR Checklists	
If you are registering any of the following PBRs, did you attach the applicable PBR checklists that shows your facility meets all general and specific requirements?	☒ YES ☐ NO
• *Animal Feeding Operations § 106.161, Livestock Auction Facilities § 106.162, Saw Mills § 106.223, Grain Handling, Storage and Drying § 106.283, Auto Body Refinishing Facilities § 106.436,* or *Air Curtain Incinerator § 106.496.* (If "NO" then you ***must*** provide ***all*** technical information outlined in Section V.)	
C. Distances to Property Line and Nearest Off-Property Structure	
Distance from this facility's emission release point to the nearest property line:	247 feet
Distance from this facility's emission release point to the nearest off-property structure:	7,300 feet

V.	**Technical Information Including State and Federal Regulatory Requirements** **Check the appropriate box to indicate what is included in your submittal.** ***Note:*** *Any technical or essential information needed to confirm that facilities are meeting the requirements of the PBR must be provided. Not providing key information could result in a deficiency of the project.*
A.	PBR requirements (Checklists are optional; however, your review will go faster if you provide applicable checklists.)
Did you demonstrate that the general requirements in 30 TAC § 106.4 are met?	☒ YES ☐ NO
Did you demonstrate that the individual requirements of the specific PBR are met?	☒ YES ☐ NO
B. Confidential Information Included (If confidential information is submitted with this registration, all confidential pages must be properly marked "CONFIDENTIAL.")	☐ YES ☒ NO
C. Process Flow Diagram?	☒ YES ☐ NO
D. Process Description?	☒ YES ☐ NO
E. Maximum Emissions Data and Calculations?	☒ YES ☐ NO
Note: *If the facilities listed in this registration are subject to the Mass Emissions Cap & Trade program under* ***30 TAC Chapter 101****,* ***Subchapter H, Division 3****, the owner/operator of these facilities must possess* NO_x *allowances equivalent to the actual* NO_x *emissions from these facilities.*	
F. Distance from Property Line and Nearest Off-Property Structure	
Distance from this facility's emission release point to the nearest property line: 247	feet
Distance from this facility's emission release point to the nearest off-property structure: 7,300	feet
G. Project Status	
Has the company implemented the project or waiting on a response from TCEQ?	☒ Implemented ☐ Waiting
H. Projected Start of Construction and Projected Start of Operation Dates:	
Projected Start of Construction (provide date):	
Project Start of Operation (provide date):	
VI.	**Delinquent Fees and Penalties**
This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ is paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ website at www.tceq.texas.gov/agency/financial/fees/delin/index.html.	

VII. Copies of the Registration

Processing delays may occur if copies are not sent as noted. Copies must be sent as listed below:

Who	*Where*	*What*
Air Permits Initial Review Team (APIRT)	Regular, Certified, Priority Mail MC 161, P.O. Box 13087 Austin, Texas 78711-3087 Hand Delivery, Overnight Mail MC 161, 12100 Park 35 Circle, Building C, Third Floor Austin, Texas 78753	Originals of Form PI-7, Core Data Form, and all attachments. Not required if using ePermits[1]
Revenue Section, TCEQ	Regular, Certified, Priority Mail MC 214, P.O. Box 13088 Austin, Texas 78711-3088 Hand Delivery, Overnight Mail MC 214, 12100 Park 35 Circle, Building A, Third Floor Austin, Texas 78753	Original Money Order or Check, Copy of Form PI-7, and Core Data Form. Not required if fee was paid using ePay[2].
Appropriate TCEQ Regional Office	To find your Regional Office address, go to the TCEQ website at www.tceq.texas.gov//agency/directory/region or call (512) 239-1250.	Copy of Form PI-7, Core Data Form, and all attachments. Not required if using ePermits[1].
Appropriate Local Air Pollution Control Program(s)	To Find your local or Regional Air Pollution Control Programs go to the TCEQ, APD website at www.tceq.texas.gov/permitting/air/local_programs.html or call (512) 239-1250	Copy of Form PI-7, Core Data Form, and all attachments

[1] ePermits located at www3.tceq.texas.gov/steers/
[2] ePay located at www.tceq.texas.gov/epay/

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), "Requirements for Permitting by Rule." Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists, and guidance documents are available from the TCEQ, Air Permits Division website at: www.tceq.texas.gov/permitting/air/nav/air_pbr.html.

1. 30 TAC § 106.4(a)(1) and (4): Emission Limits	**Answer**
List emissions in tpy for **each** facility (add additional pages or table if needed):	
Are the SO_2, PM_{10}, VOC, or other air contaminant emissions claimed for **each** facility in this PBR submittal less than 25 tpy?	☒ YES ☐ NO
Are the NO_x and CO emissions claimed for each facility in this PBR submittal less than 250 tpy?	☒ YES ☐ NO
*If the answer to both is "Yes," continue to the question below. If the answer to either question is "No," a **PBR cannot be claimed**.*	
Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.)	☐ YES ☒ NO
If "Yes," skip to Section 2. If "No," continue to the questions below.	
If the site has had no public notice, please answer the following:	
Are the SO_2, PM_{10}, VOC, or other emissions claimed for **all** facilities in this PBR submittal less than 25 tpy?	☒ YES ☐ NO
Are the NO_x and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy?	☒ YES ☐ NO
If the answer to both questions is "Yes," continue to Section 2.	
*If the answer to either question is "No," **a PBR cannot be claimed**. A permit will be required under Chapter 116.*	

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

2. 30 TAC § 106.4(a)(2): Nonattainment Check	Answer
Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county?	☐ YES ☒ NO
If "Yes," please indicate which county by checking the appropriate box to the right.	
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties:	☐ HGB
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties:	☐ DFW
If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.	
Does this project trigger a nonattainment review?	☐ YES ☐ NO
Is the project's potential to emit (PTE) for emissions of VOC or NO_x increasing by 100 tpy or more?	☐ YES ☐ NO
PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rules, or made federally enforceable by a certification.	
Is the site an existing major nonattainment site and are the emissions of VOC or NO_x increasing by 40 tpy or more?	☐ YES ☐ NO
If needed, attach contemporaneous netting calculations per nonattainment guidance.	
Additional information can be found at: www.tceq.texas.gov/permitting/air/forms/newsourcereview/tables/nsr_table8.html and www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html	
*If "Yes," to any of the above, the project is a major source or a major modification and **a PBR may not be used**. A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.*	
3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check	
Does this project trigger a review under PSD rules?	
To determine the answer, review the information below:	
Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source?	☐ YES ☒ NO
Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source?	☐ YES ☒ NO
Are emissions increasing above significance levels at an existing major site?	☐ YES ☒ NO
PSD information can be found at: www.tceq.texas.gov/assets/public/permitting/air/Forms/NewSourceReview/Tables/10173tbl.pdf and www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html	
*If "Yes," to any of the above, **a PBR may not be used**. A PSD Permit review must be completed to authorize the project.*	
If "No," continue to Section 4.	

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

4. 30 TAC § 106.4(a)(6): Federal Requirements	Answer
Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)?	☒ YES ☐ NO ☐ NA
If "Yes," which Subparts are applicable? *(answer below.)*	
NSPS Subpart Dc	
Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards?	☐ YES ☐ NO ☒ NA
If "Yes," which Subparts are applicable? *(answer below.)*	
Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)?	☐ YES ☐ NO ☒ NA
If "Yes," which Subparts are applicable? *(answer below.)*	
If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.	
5. 30 TAC § 106.4(a)(7): PBR prohibition check	
Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs?	☐ YES ☒ NO
If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.	
List permit number(s):	
6. 30 TAC § 106.4(a)(8): NO_x Cap and Trade	
Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County?	☐ YES ☒ NO
If "Yes," answer the question below.	
If "No," continue to Section 7.	
Will the proposed facility or group of facilities obtain required allowances for NO_x if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)?	☐ YES ☐ NO

Texas Commission on Environmental Quality
Permit by Rule Applicability Checklist
Title 30 Texas Administrative Code § 106.4

7. Highly Reactive Volatile Organic Compounds (HRVOC) check		
Is the facility located in Harris County?		☐ YES ☒ NO
If "Yes," answer the next question. If "No," skip to the box below.		
Will the project be constructed after June 1, 2006?		☐ YES ☐ NO
If "Yes," answer the next question.		
If "No," skip to the box below.		
Will one or more of the following HRVOC be emitted as a part of this project?		☐ YES ☐ NO
If "Yes," complete the information below:		
Information	**lb/hr**	**tpy**
► 1,3-butadiene		
► all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])		
► alpha-butylene (ethylethylene)		
► beta-butylene (dimethylethylene, including both cis- and trans-isomers)		
► ethylene		
► propylene		
Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County?		☐ YES ☒ NO
If "Yes," answer the next question. If "No," the checklist is complete.		
Will the project be constructed after June 1, 2006?		☐ YES ☐ NO
If "Yes," answer the next question. If "No," the checklist is complete.		
Will one or more of the following HRVOC be emitted as a part of this project?		☐ YES ☐ NO
If "Yes," complete the information below:		
Information	**lb//hr**	**tpy**
► ethylene		
► propylene		

Save Form Reset Form

Boilers, Heaters, and Other Combustion Devices
Air Permits by Rule (PBR) Checklist
Title 30 Texas Administrative Code § 106.183

Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the rule number. The PBR forms, tables, checklists, and guidance documents are available from the TCEQ, Air Permits Division Web site at: www.tceq.texas.gov/permitting/air/nav/air_pbr.html.

This PBR (§ 106.183) **does not require registration**. However, you may register the facility and its emissions with the commission's Office of Air in Austin. The facility may be registered by completing Form PI-7, "Registration for Permits by Rule," or Form PI-7-CERT, "Registration and Certification for Permits by Rule." This checklist should accompany the registration form.

For additional assistance with your application, including resources to help calculate your emissions, please visit the Small Business and Local Government Assistance (SBLGA) webpage at the following link: www.TexasEnviroHelp.org

Please Complete the Following:
Will the equipment to be authorized include only boilers, heaters, drying or curing ovens, furnaces, or other combustion units? ☒ YES ☐ NO *If "NO," this PBR cannot be claimed.* **Note:** *Stationary internal combustion engines and turbines may require registration under **30 TAC § 106.512**. A **§ 106.512 Checklist** is available to help verify compliance with the requirements.* Check all that apply: ☒ boilers ☐ heaters ☐ drying or curing ovens ☐ furnaces ☐ other combustion unit (If other please specify):_____
Have you included a **Table 4 (Combustion Units)** or a **Table 6 (Boilers and Heaters)** with the registration? ☒ YES ☐ NO ☐ Table 4 ☒ Table 6
Are the only emissions from the facility products of combustion? ☒ YES ☐ NO
If "NO," the facility does not qualify for this PBR.
What is the maximum heat input of the facility? (MBtu/hr.)16.8
If the facility has a heat input greater than 10 MMBtu/hr (higher heating value), what is the emission rate of nitrogen oxides? (1b/MMBtu) 0.1 lb/MMBtu
What type of fuel is used? (Check all that apply) ☒ sweet natural gas ☐ liquid petroleum gas ☐ fuel gas with ≤ 0.1 grain total sulfur compounds per dscf
Is the distillate fuel oil used only as a backup fuel? ☐ YES ☒ NO
Total hours of operation (hr./yr): 8760
Note: *If distillate fuel oil is used, firing cannot exceed 720 hours per year.*
If "YES," please continue. *If "NO," the remaining questions do not apply.*

Boilers, Heaters, and Other Combustion Devices
Air Permits by Rule (PBR) Checklist
Title 30 Texas Administrative Code § 106.183

Please Complete the Following:	
What is sulfur content of the distillate fuel oil (% sulfur by weight)?	
Is the distillate fuel oil blended with waste oils or solvents?	☐ YES ☐ NO
Will records of hours of fuel oil firing and fuel oil purchases be maintained on-site for at least two years and made available upon request to the commission or any local air pollution control program having jurisdiction?	☐ YES ☐ NO
Other Applicable Rules and Regulations **If assistance is needed in determining other applicable rules and regulation please contact the Rule Registrations Section, Air Permits Division at (512) 239-1250.**	
Is the facility subject to 30 TAC Chapter 117, Subchapter B? Why or Why Not: Not a major source or in a nonattainment area	☐ YES ☒ NO
Is the facility subject to 30 TAC Chapter 117, Subchapter D? Why or Why Not: Not in a nonattainment area	☐ YES ☒ NO
Is the facility subject to 40 CFR Part 60, NSPS Subpart D? Why or Why Not: Less than 250 MMBtu/hr	☐ YES ☒ NO
Is the facility subject to 40 CFR Part 60, NSPS Subpart Da? Why or Why Not: Not an electric utility	☐ YES ☒ NO
Is the facility subject to 40 CFR Part 60, NSPS Subpart Db? Why or Why Not: Less than 100 MMBtu/hr	☐ YES ☒ NO
Is the facility subject to 40 CFR Part 60, NSPS Subpart Dc? Why or Why Not: Less than 100 MMBtu/hr but greater than 10 MMBtu/hr	☒ YES ☐ NO
Is the facility subject to 40 CFR Part 60, NSPS Subpart UUU? Why or Why Not: Not a calciner or dryer	☐ YES ☒NO

Boilers, Heaters, and Other Combustion Devices
Air Permits by Rule (PBR) Checklist
Title 30 Texas Administrative Code § 106.183

Record Keeping: In order to demonstrate compliance with the general and specific requirements of this PBR, records of the hours of fuel oil firing and fuel oil purchases must be maintained on-site for at least two years and made immediately available upon request to the commission or any local air pollution control program having jurisdiction. The registrant should also become familiar with the additional record keeping requirements in 30 TAC § 106.8. The records must be made available immediately upon request to the commission or any air pollution control program having jurisdiction. If you have any question about the type of records that should be maintained, contact the Air Program in the TCEQ Regional Office for the region in which the site is located.

Recommended Calculation Method: Emission estimates may be made using the calculation method described in the TCEQ Guidance for Boilers and Heaters at: www.tceq.texas.gov/permitting/air/guidance/newsourcereview/nsr_fac_index.html and/or use the emission factors for each air contaminant from the EPA Compilation of Air Pollutant Emission Factors (AP-42), Fifth Edition, Volume 1, Chapter 11: External Combustion Sources at: www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors. If sufficient records are maintained on-site and all requirements are being met, the registrant and the TCEQ will be able to establish these emission rates if needed.

Texas Commission on Environmental Quality
Table 6
Boilers and Heaters

Equipment Information			
Type of Device: Amine Reboiler			
Manufacturer: Hurst Boiler & Welding Company, Inc.		Model Number: S250W-X-400-150W	
Emission Point Number (EPN) (from Flow Diagram): EP-1			
Fuel Characteristics (choose applicable fuel characteristics, or revise from typical values shown)			
Fuel Type	**Hours Use Per Year**	**Fuel Sulfur Content and Units**	**Higher Heating Value and Units**
☒ Natural Gas	8760	2 gr / 100 dscf	1020 Btu/scf
☐ No. 2 Fuel Oil	760		140 MMBtu/1000 gal
☐ Propane			91.5 MMBtu/1000 gal
☐ Plant Fuel Gas			
☐ Landfill Gas			
☐ Other:_____			
Fuel Firing Rate			
Design Maximum: 16.8		Units (MMBtu/hr is preferred): MMBtu/hr	
Stack Parameters (not required if represented on page 2 of Table 1(a))			
Stack Diameter (ft): 2		Stack Height (ft): 23.75	
Stack gas velocity at maximum fuel flow rate (ft/second): 65			
Stack Gas Temperature (˚F): 475		Exhaust (scfm*): 168,800	
Exhaust Air Flow and Excess Air			
Exhaust Air Flow (scfm*): 168,800			
Percentage of Excess Air: 10			
Control Device (if present)			
Add on Control Device (type, description):			

Texas Commission on Environmental Quality
Table 6
Boilers and Heaters

Characteristics of Output: Outlet Concentrations to be used as Emission Factors (confirm applicable fuel characteristics, revise from typical values shown, or enter applicable value)	
Material	**Chemical Composition of Exit Gas Released (% by volume)**
☐ NO_x	3.5 ppmv corrected to 3% O_2**
☐ CO	88 ppmv corrected to 3% O_2**
☐ VOC	
☐ Formaldehyde (should be subset of VOC)	
☐ SO_2	Assume 100% conversion of fuel sulfur to SO_2**
☐ $PM/PM_{10}/PM_{2.5}$	
☐ Others (such as Ammonia):_____	10 ppmvd at 3% O_2**

Attach an explanation on how temperature, air flow rate, excess air or other operating variables are controlled.

* Standard Conditions: 68˚F, 14.7 psia

** Values shown are typical for natural gas fired boilers; confirm with your vendor.

Save Form Reset Form

Attachment B

Emission Calculations

Reboiler Combustion Emissions
Seaboard Foods - Sparky Biogas
Sherman County, TX

Boiler Specifications

Max Design Rate (HP)	400	
Max Design Rate (MMBTU/hr)	16.800	(From Manufacturer Spec Sheet)
Heat Value of Natural Gas (BTU/scf)	1,020	
Natural Gas Flowrate (MMscf/hr)	0.0165	
Max. Theoretical Operating Hours	8,760	

Pollutant	Emission Factor ($lb/10^6$ scf) AP-42 Chapter 1.4	Boiler	
		lb/hr	tons/yr
NO_X*	100	1.65	7.2
CO*	84	1.38	6.06
CO_2	120,000	1,976	8,657
PM_{10} (Filterable)	1.9	3.1E-02	0.14
PM_{10} (Condensable)	5.7	9.4E-02	0.41
PM_{10} (Total)	7.6	1.3E-01	0.55
$PM_{2.5}$ (Filterable)	1.9	3.1E-02	0.14
$PM_{2.5}$ (Condensable)	5.7	9.4E-02	0.41
$PM_{2.5}$ (Total)	7.6	1.3E-01	0.55
SO_2	0.6	9.9E-03	0.043
VOC	5.5	9.1E-02	0.40
Lead	0.0005	8.2E-06	3.61E-05
Hazardous Air Pollutants (HAPs)	--	3.1E-02	0.14
HAPs			
2-Methylnaphthalene	2.4E-05	4.0E-07	1.7E-06
3-Methylchloranthrene	1.8E-06	3.0E-08	1.3E-07
7,12-Dimethylbenz(a)anthracene	1.6E-05	2.6E-07	1.2E-06
Acenaphthene	1.8E-06	3.0E-08	1.3E-07
Acenaphthylene	1.8E-06	3.0E-08	1.3E-07
Anthracene	2.4E-06	4.0E-08	1.7E-07
Benz(a)anthracene	1.8E-06	3.0E-08	1.3E-07
Benzene	2.1E-03	3.5E-05	1.5E-04
Benzo(a)pyrene	1.2E-06	2.0E-08	8.7E-08
Benzo(b)fluoranthene	1.8E-06	3.0E-08	1.3E-07
Benzo(g,h,i)perylene	1.2E-06	2.0E-08	8.7E-08
Benzo(k)fluoranthene	1.8E-06	3.0E-08	1.3E-07
Chrysene	1.8E-06	3.0E-08	1.3E-07
Dibenzo(a,h)anthracene	1.2E-06	2.0E-08	8.7E-08
Dichlorobenzene	1.2E-03	2.0E-05	8.7E-05
Fluoranthene	3.0E-06	4.9E-08	2.2E-07
Fluorene	2.8E-06	4.6E-08	2.0E-07
Formaldehyde	7.5E-02	1.2E-03	5.4E-03
Hexane	1.8E+00	3.0E-02	1.3E-01
Indeno(1,2,3-cd)pyrene	1.8E-06	3.0E-08	1.3E-07
Naphthalene	6.1E-04	1.0E-05	4.4E-05
Phenanathrene	1.7E-05	2.8E-07	1.2E-06
Pyrene	5.0E-06	8.2E-08	3.6E-07
Toluene	3.4E-03	5.6E-05	2.5E-04
Arsenic	2.0E-04	3.4E-06	1.5E-05
Beryllium	1.2E-05	2.0E-07	8.7E-07
Cadmium	1.1E-03	1.8E-05	7.9E-05
Chromium	1.4E-03	2.3E-05	1.0E-04
Cobalt	8.4E-05	1.4E-06	6.1E-06
Manganese	3.8E-04	6.3E-06	2.7E-05
Mercury	2.6E-04	4.3E-06	1.9E-05
Nickel	2.1E-03	3.5E-05	1.5E-04
Selenium	2.4E-05	4.0E-07	1.7E-06

* Emission Factor for Uncontrolled Small Boilers (<100 MMBtu/hr)