FEDERAL OPERATING PERMIT - TECHNICAL REVIEW SUMMARY

SITE OPERATING PERMIT (SOP) MINOR REVISION

Permit #: O4169 Company: Gulf Coast Growth Ventures LLC

Project #: **32277** Site: **Gulf Coast Growth Ventures**Regulated Entity #: **RN109753731** Application Area: **Olefins, Derivative and Utilities**

Region: **14** Customer #: **CN605632439**

NAICS Code: **325199** County: **San Patricio**

Permit Reviewer: Rick Goertz, NAICS Name: All Other Basic Organic Chemical

P.E. Manufacturing

SITE INFORMATION

Physical Location: 6414 County Road 1612

Nearest City: Gregory

Major Pollutants: CO, HAPS, NOX, PM, VOC

Additional FOPs: None

PROJECT SUMMARY

Gulf Coast Growth Ventures LLC's Gulf Coast Growth Ventures site, Olefins, Derivative and Utilities area, is an Organic Chemical Manufacturing facility and a major source of emissions. It is subject to 30 TAC Chapter 122 which requires it to apply and obtain a Federal Operating Permit (FOP). FOP O4169 was initially issued on 12/30/2020. An application for a minor revision to the FOP was received by TCEQ on 06/10/2021 that includes the following changes.

- 1. Update terms and conditions.
- 2. Update preconstruction authorizations.
- 3. Add new units and associated requirements.
- 4. Delete units no longer at the site.
- 5. Update unit attributes and requirements for existing units.
- 6. Remove existing units from existing groups and add units to new groups.
- 7. Incorporate AMOCs 138 and 181 into the permit where applicable.
- 8. Remove reference to flare UFFLARE01 from additional monitoring requirements.
- 9. Updates to existing applicable requirements.
- 10. Incorporate Form OP-PBRSUP information into the application and permit.

Note: A petition was filed by Environmental Integrity Project (EIP) with EPA on 02/24/2021 objecting to the issuance of FOP O4169 on 12/30/2020 based on the presence of high-level solution sets in the permit. Resolution of these objections was the creation of manual solution sets for units UCCT01, ZTTK04, and GRPHFOTANK associated with MACT YY.

The project was reassigned from a previous permit reviewer on 07/26/2021.

PROCESS DESCRIPTION

Gulf Coast Growth Ventures LLC (GCGV) is a grassroots olefin and derivatives manufacturing complex located near Gregory in San Patricio County, which includes a process unit that will convert market pipeline ethane to olefins ("the Olefins unit") and multiple derivative units which will receive the ethylene, produced in the Olefins unit, as feed. The derivative units include two polyethylene units and a Mono-Ethylene Glycol (MEG) Unit. The utilities and infrastructure onsite support facilities include steam, rail, cooling water, liquid transport, and wastewater treatment.

TECHNICAL REVIEW

Summary of Revision

The following changes were requested in this project:

- 1. Update Terms and Conditions based on updated representations.
- 2. Unit UFFLARE01: Update index number from R-1111-2 to R1111-2A. Add index number 63CC-01 for MACT CC and update requirements based on overlap provisions of NESHAP FF, MACT FFFF, and MACT YY.
- 3. Unit PROPEMCPU: Add new unit and MACT FFFF applicability.
- 4. Unit PROMEGCMPU: Update applicability to MACT F (index number 63F-1).
- 5. Unit DREFUSTN: Update unit description and NSR authorization.
- 6. Group GRPHFOTANK: Remove associated control device UFFLARE01 from index number R5112-21 and from associated periodic monitoring requirement; add index number R5112-21A incorporating AMOC 138; update existing manual solution sets for index numbers 63YY-BLR, 63YY-FL, and 63YY-INC associated with MACT YY to add requirements and remove citations deemed not to apply; and add new manual solution sets (index numbers 63YY-FLA and 63YY-INC1) for MACT YY. Index 63YY-FLA incorporated MACT CC overlap provisions.
- 7. Unit ZTD08: Remove associated control device UFFLARE01 from index number R5112-26 and from associated periodic monitoring requirement; add index number R5112-26A incorporating AMOC 138 ("** See Alternative Requirement" was manually added to index number R5112-26A); remove applicability to NSPS Kb (index 60Kb-22) along with associated periodic monitoring; update requirements for operating scenarios to add requirements associated with tank degassing; and add index number 63FFFF-5A for MACT FFFF to incorporate overlap provisions of 63.2535(m) for flares.
- 8. Units O-VENTGAS, E-VENTGAS, C-VENTGAS, GRPCPEBPV, GRPEMPEBPV, GRPCPECPV, and GRPEMPECPV: Remove associated control device UFFLARE01 from index number R5121-16 and from associated periodic monitoring requirement; and add index number R5121-16A incorporating AMOC 138 ("** See Alternative Requirement" was manually added to index number R5121-16A).
- 9. Unit ZTD12: Update attributes for index number 61FF-10; remove association of control device UFFLARE01 from index number 61FF-11; and add index number 61FF-11A with overlap provisions of 63.1095(b)(3) for flares.
- 10. Unit PRO-RJT01: Remove unit from permit.
- 11. Units GRPUNLOAD, MEOHUNLOAD, RLOAD-C3, and SLOPUNLOAD: Add alternate operating scenario for 30 TAC Chapter 115, Subchapter C. Update Chapter 115 requirements to remove requirements related to gasoline as represented transfer operations (unloading) does not involve gasoline. Requested citations to be removed include 115.214(b)(1)(C), 115.216, 115.216(3)(A), 115.216(3)(A)(ii), 115.216(3)(A)(iii).
- 12. Group GRPBOILER (units USSG01A, USSG01B, and USSG01C): Incorporate AMOC 181. New monitoring/testing citation of "** See Alternative Requirement" was manually added to index numbers 60Db-1 and 60Db-2 for the pollutant SO2.
- 13. Units CCR01 and CDFIL01: Remove units from group GRPCPEBPV and add to new group GRPCPEBPL; add applicability to Chapter 115, Subchapter B along with associated compliance assurance monitoring; add index number 63FFFF-14A to MACT FFFF incorporating overlap provisions of 63.2535(m) for flares: and add index number R5121-16A incorporating AMOC 138 ("** See Alternative Requirement" was manually added to index number R5121-16A).
- 14. Units ECR01 and EDFIL01: Remove units from group GRPEMPEBPV and add to new group GRPEMPEBPL; add applicability to Chapter 115, Subchapter B along with associated compliance assurance monitoring; add index number 63FFFF-14A to MACT FFFF incorporating overlap provisions of 63.2535(m) for flares; and add index number R5121-16A incorporating AMOC 138 ("** See Alternative Requirement" was manually added to index number R5121-16A).
- 15. Units PROGRANULE and PROLOADOUT: Remove units from permit.
- 16. Group GRPFURNACE: Remove MACT YY applicability.
- 17. Units PROGRANUL1, PROGRANUL2, PROGRANUL3, PROLDOUT1, and PROLDOUT2: Add new units and associated applicability citations.
- 18. Unit UCCT01: Remove applicability to MACT FFFF and update existing manual solution set for MACT YY (index number 63YY-CT) to add and remove citations.

- 19. Unit ZTTK04: Update existing manual solution set for MACT YY (index number 63YY-1) to add and remove citations.
- 20. Groups GRPCPECPV and GRPEMPECPV: Add index number 63FFFF-1A to incorporate overlap provisions of 63.2535(m) for flares.
- 21. Groups GRPCPEBPV and GRPEMPEBPV: Add index number 63FFFF-10A to incorporate overlap provisions of 63.2535(m) for flares.
- 22. Unit GREFUSTN: Update preconstruction authorizations.
- 23. Unit PE-REGEN: Remove negative applicability and add applicability to MACT FFFF.
- 24. Add form OP-PBRSUP information to application representation and permit.

Permit Content Summary

1. '	Was Periodic Monitoring (PM) required and added during this revision?	No
2. \	Was Compliance Assurance Monitoring (CAM) required and added during this revision?	Yes
	Was case-by-case PM or CAM added during this revision?	
4.	Identify if the following are applicable for this project:	
	(a) Manually-built applicable requirements	Yes
	(b) Customized Special Terms and Conditions	Yes
	(c) Manual changes to the IMS-generated applicable requirements	Yes
5.	Did the applicant's review/comments on the working draft permit result in changes	
	to the permit content?	Yes
6. \	Will the draft permit be sent to public announcement with unresolved issues	
	(i.e., disagreements with applicant)?	No

Permit reviewer notes:

Customized Terms and Conditions

1. Permit Term 21 (IMS Term B.142) was customized to identify the current project number and submittal date on Form OP-PBRSUP

Compliance Assurance Monitoring

- 1. Units CCR01 and CDFIL01: Units were removed from group GRPCPEBPV and added to new group GRPCPEBPL. Applicability to Chapter 115, Subchapter B along with associated preapproved compliance assurance monitoring were added to the new group at the time of group creation and are carryovers from the prior group.
- Units ECR01 and EDFIL01: Units were removed from group GRPEMPEBPV and added to new group GRPEMPEBPL. Applicability to Chapter 115, Subchapter B along with associated preapproved compliance assurance monitoring were added to new group at the time of group creation and are carryovers from the prior group.

Manually Built Applicable Requirements. All changes were reviewed by Technical Specialist Carolyn Maus.

- 1. Group GRPHFOTANK: Manual solution sets were developed for index numbers 63YY-INC, 63YY-BLR, and 63YY-FL for MACT YY in initial issuance project 29423. Changes to the manual solution sets were made that will both add new requirements and remove requirements deemed not to apply. New manual solution sets (index numbers 63YY-FLA and 63YY-INC1) for MACT YY were added to the permit.
- 2. Unit UCCT01: Update existing manual solution set for MACT YY (index number 63YY-CT) to add and remove citations.
- 3. Unit ZTTK04: Update existing manual solution set for MACT YY (index number 63YY-1) to add and remove citations.

Manual Changes to IMS-generated applicable requirements. All changes were reviewed by Technical Specialist Carolyn Maus.

- 1. Unit ZTD08: IMS generated applicable requirements were updated as follows:
 - a. Requirements for solution set (solution set 117) for MACT FFFF (index number 63FFFF-5A) were updated to incorporate overlap provisions to MACT CC pursuant to 63.2535(m).
 - Added grouped citation for 63.2470(f) for the Related Standard and Monitoring/Testing Requirements and 63.2470(f)(3) for Recordkeeping Requirements to all index numbers for MACT FFFF incorporating requirements related to degassing of storage tanks.

- c. Unit is a storage tank. For index numbers 63FFFF-6, 63FFFF-7, and 63FFFF-8 removed related standard 63.982(c)(2) for process vents and high throughput transfer racks and added 63.982(c)(1) related to storage vessels and low throughput transfer racks.
- d. Index number R5112-26A incorporating AMOC 138 for Chapter 115, Storage of VOCs was added to the permit. Manually added monitoring/testing provision of "** See Alternative Requirement".
- 2. Units O-VENTGAS, E-VENTGAS, C-VENTGAS, GRPCPEBPV, GRPEMPEBPV, GRPCPECPV, and GRPEMPECPV: Index number R5121-16A incorporating AMOC 138 for Chapter 115, Vent Gas Controls was added to the permit. Manually added monitoring/testing provision of "** See Alternative Requirement".
- 3. Unit GRPCPEBPL: Index number R5121-16A incorporating AMOC 138 for Chapter 115, Vent Gas Controls was added to the permit. Manually added monitoring/testing provision of "** See Alternative Requirement".
- 4. Unit GRPEMPEBPL: Index number R5121-16A incorporating AMOC 138 for Chapter 115, Vent Gas Controls was added to the permit. Manually added monitoring/testing provision of "** See Alternative Requirement".
- 5. Group GRPHFOTANK: Index number R5112-21A incorporating AMOC 138 for Chapter 115, Storage of VOCs was added to the permit. Added manual monitoring/testing provision of "** See Alternative Requirement".
- 6. Unit ZTD12: IMS-generated applicable requirements for NESHAP FF (index number 61FF-11A) were updated to incorporate overlap provisions to MACT CC pursuant to 63.1095(b)(3). New citations were added, and existing citations deemed no longer to apply were removed.
- 7. Units GRPUNLOAD, MEOHUNLOAD, RLOAD-C3, and SLOPUNLOAD: Update Chapter 115 requirements to remove requirements related to gasoline as transfer operations (unloading) does not involve gasoline. Requested citations to be removed include 115.214(b)(1)(C), 115.216, 115.216(3)(A), 115.216(3)(A)(i), and 115.216(3)(A)(iii).
- 8. Group GRPBOILER: AMOC 181 was incorporated into the permit. New monitoring/testing citation of "** See Alternative Requirement" was manually added to index numbers 60Db-1 and 60Db-2 for the pollutant SO2.
- Groups GRPCPEBPL and GRPEMPEBPL: IMS-generated applicable requirements for MACT FFFF (index number 63FFFF-14A) were updated to incorporate overlap provisions to MACT CC pursuant to 63.2535(m). New citations were added, and existing citations deemed no longer to apply were removed.
- 10. Groups GRPCPEBPV and GRPEMPEBPV: IMS-generated applicable requirements for MACT FFFF (index number 63FFFF-10A) were updated to incorporate overlap provisions to MACT CC pursuant to 63.2535(m). New citations were added, and existing citations deemed no longer to apply were removed.
- 11. Groups GRPCPECPV and GRPEMPECPV: IMS-generated applicable requirements for MACT FFFF (index number 63FFFF-1A) were updated to incorporate overlap provisions to MACT CC pursuant to 63.2535(m). New citations were added, and existing citations deemed no longer to apply were removed.
- 12. Unit UFFLARE01: Update citations for MACT CC based on overlap with NESHAP FF, MACT FFFF, and MACT YY.

The following changes were made as a result of review of the draft permit

- a. Unit PRO-RJT01 Remove the unit from the permit.
- Unit ZTD08 Remove index numbers 60Kb23A and 60Kb-23B and associated requirements from the permit.
- c. Groups GRPCPEBPL and GRPEMPEBPL Associated AMOC 138 to index number R5121-16A. ("** See Alternative Requirement" was manually added to index number R5121-16A).
- d. Groups GRPCPEBPL and GRPEMPEBPL Requirements for Index numbers 63FFFF-15, 63FFFF-16, and 63FFFF-17 are missing requirements for monitoring/testing, recordkeeping, and reporting (this was a database/macro issue Though specific requirements existed, the macro was seeing it as a high-level citation and putting the corresponding high-level language in the MRRT columns instead of the requirements.)
- e. Groups GRPEMPECPV and GRPCPECPV (SOP Index Nos. 63FFFF-2, 63FFFF-3, & 63FFFF-4) Remove recordkeeping requirement 63.2525(h). Requirement related to a CEMS, and the applicant has indicated a CEMS is not being utilized.
- f. Group GRPHFOTANK Add manual monitoring/testing requirement of 63.1108(b)(1)[G] to index number 63YY-FL.
- g. Group GRPHFOTANK Correct manual reporting requirement for index number 63YY-INC1.
- h. Unit ZTD08 Correct manual monitoring citation for index numbers 63FFFF-5 and 63FFFF-5A.
- i. Unit ZTD08 Add manual recordkeeping and reporting citations 63.670[G] and 63.671[G] to recordkeeping and reporting for index number 63FFFF-5A for purposes of overlap with MACT CC. Also remove citation 63.999(a)(2) as performance testing under MACT SS does not apply.
- j. Unit ZTD08 Add manual grouped monitoring citation 63.2470(f)[G] in lieu of individual citation 63.2470(f) for all MACT FFFF index numbers.
- k. Unit ZTD12 Update attributes for index number 61FF-10.
- I. Unit ZTTK04 Correct solution set for index number 61FF-1 to put back original citations.
- m. Group GRPHFOTANK Correct error in manual main standard for index number 63YY-BLR.

Statement of Basis

A Statement of Basis sets forth the legal and factual basis for the applicable requirements that are included in the FOP. A Statement of Basis was prepared for this project and is included in the permit file.

Delinquent Fee Check

- 1. The delinquent fee check was performed on November 22, 2022.

Public Announcement Information

EPA Review

IMPORTANT MILESTONES

Milestone (Standard)	Start Date	End Date
Date Application Received by TCEQ	06/10/2021	
Date Project Received by Engineer #1	06/14/2021	
Date Project Received by Engineer #2	07/26/2021	
Technical Review Period	08/09/2021	11/28/2022
Working Draft Permit Reviewed by Applicant	02/11/2022	11/28/2022
Date Rvn-5/Draft Permit Mailed	02/01/2023	
Public Announcement Period	02/07/2023	03/08/2023
EPA Review Period	02/07/2023	03/24/2023

Milestone (Optional)	Start Date	End Date
Deficiency Cycle 1	08/11/2021	
Deficiency Cycle 2	11/12/2021	
Date Comment on Draft Permit Received from Public		
Date comment on Draft Permit Received from EPA		
Date Public Hearing Requested		
Date Public Hearing Held		

REVISED PERMIT APPROVAL DATE: April 6, 2023

Rick Goertz, P.E.

Permit Reviewer

Operating Permits Section Air Permits Division

Date

03/29/2023

Elizabeth Moorhead () . /V

Operating Permits Section

Air Permit Division

CONTACT INFORMATION

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