## **ATTACHMENT 13**

## ENVIRONMENTAL PROTECTION AGENCY RESPONSE TO COMMENTS

#### **DRAFT CAA PART 71 RENEWAL PERMIT**

#### **HARVEST FOUR CORNERS - LOS MESTENIOS COMPRESSOR STATION**

#### Table of Contents

I. Introduction	
II. Summary of Permit Action and Permit History	2
A. Background Information on the 1996 NSR Permit	
B. Background Information on the 2003 Initial Part 71 Permit	14
C. Background information on the 2009 Part 71 Renewal	26
D. Background information on the 2017 Part 71 Renewal Permit	28
E. The 2022 Draft Part 71 Renewal Permit Background	31
1.Summary Detailing Type of MRR Requirements in Renewal Permit	49
III. Comments Received During Public Comment Period	58
Appendix A: EPA-R06-OAR-2023-0250 AR Listing	69
Appendix B: MRR Examples from Harvest Facilities Permitted by NMED	76

# RESPONSE TO COMMENTS DRAFT CAA PART 71 RENEWAL PERMIT

#### HARVEST FOUR CORNERS - LOS MESTENIOS COMPRESSOR STATION

#### I. Introduction

The United States Environmental Protection Agency (EPA) proposed the Clean Air Act (CAA) draft renewal title V (TV) operating permit for the Harvest Four Corners, LLC (Harvest) Los Mestenios Compressor Station (Facility) on October 26, 2023. The TV permit was developed in accordance with the TV regulations governing EPA-issued permits (40 CFR Part 71).

The 30-day public comment period for the proposed draft renewal Part 71 permit included a scheduled public hearing, through the public notice published on EPA's website<sup>1</sup>. Notification was given for this draft renewal permit to the permit applicant, the affected tribe, the affected state, the tribal and local air pollution control agencies, the city and county executives, and the state and federal land managers which have jurisdiction over the area and within 50-mile radius of where the source is located. Notification letters and the public notice of this Part 71 renewal permit action was sent by electronic mail in accordance with 40 CFR §71.8. A notification letter was also provided to all persons who have submitted a written request to be included on the notification list. The public notice was provided at https://www.epa.gov/publicnotices giving opportunity for public comment on the draft renewal Part 71 permit and the opportunity to request a public hearing.

The administrative record (AR) for the permitting action included the permit applications, draft permits, statement of basis, supplemental information submitted by the applicant, and other supporting documentation for the draft renewal Part 71 permit for the Facility. The AR and AR index for development of the draft renewal Part 71 permit was made available for public review at the time of public notice at www.regulations.gov website under docket identification number: **EPA-R06-OAR-2023-0250.** <sup>2</sup>

EPA did not receive a written request for a public hearing during the public comment period. In accordance with the details provided in the public notice, EPA cancelled the public hearing and posted the cancellation notice on EPA's website on November 13, 2023. EPA received one comment letter during the 30-day public comment period, which is posted to the draft proposed Part 71 docket and will be included in the updated AR and AR index for the final permit action<sup>3</sup>.

Section III of this Response to Comment (RTC) summarizes the one public comment letter received by EPA on the draft permit and provides EPA's response to each comment raised in the letter, including an

<sup>&</sup>lt;sup>1</sup> EPA provides public notices about regulatory and other actions it takes and provides this information at: https://www.epa.gov/publicnotices/notices-search/location/new%20mexico.

<sup>&</sup>lt;sup>2</sup> The documents listed in the Region's AR are available at www.regulations.gov under "EPA-R06-OAR-2023-0250". Also, the AR listing is located in the Appendix of this document The documents in the AR are separated into sections and are numbered. In this response to comment document, we cite to documents in the administrative record using "AR" followed by the section (§) and the document number. For example, the Draft Renewal Permit entitled "Harvest Los Mestenios Part 71 draft permit" AR § 1 Doc. No. 1 (Harvest Los Mestenios Draft Permit).

<sup>&</sup>lt;sup>3</sup> See, "Harvest Los Mestenios Part 71 Final Permit" AR § 15 Doc No 1 (Harvest Los Mestenios Final Permit)

explanation of what changes have been made, if any, in the final permit for the Facility as a result of EPA's consideration of the public comments. **See, Harvest Los Mestenios Draft Permit and Harvest Los Mestenios Final Permit.** In some instances, similar comments are grouped together by topic into one comment summary and addressed by one EPA response. For ease of reading and brevity, we have generally removed citations and reference to attachments from our comment excerpts and summaries, but those citations may be found in the original comment available in the Part 71 public docket for this permit action<sup>4</sup>. The full text of the public comment letter and other documents relevant to our Part 71 permit decision for the Facility are available through the online Part 71 renewal permit docket, including the Basis of Decision<sup>5</sup> prepared for EPA issuance of the final CAA permit. Of note, the one public comment received was from Harvest, the current permit applicant (or "Permittee").

#### II. Summary of Permit Action and Permit History

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan. 42 U.S.C. § 766la(a), 766lb. 766lc(a). The TV operating permit program generally does not impose new substantive air quality control requirements, but it does require that each permit contain adequate monitoring, recordkeeping, reporting (MRR), and other requirements to assure compliance with applicable requirements.<sup>6</sup> 40 C.F.R. § 71.1(b); 42 U.S.C. § 7661c(c). This RTC discusses the specific requirements that were challenged by Harvest in the comment letter. Also, the RTC discusses any changes that EPA made to the draft permit before the final issuance in response to the comments in the letter. All changes to the draft permit before final issuance are discussed in the *Basis of Decision* document.

One purpose of the TV program is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." 40 CFR Part 70 Operating Permit Program, 57 Fed. Reg. 32250, 32251 (July 21,1992),

<sup>&</sup>lt;sup>4</sup> See, "HarvestLosMest-TVPermitRenewalCommentLetter" AR 15 Doc No 5 (Harvest Comment Letter)

<sup>&</sup>lt;sup>5</sup> See, "BasisofDecisionTVFinalPermitLosMest" AR § 15 Doc No 2 (**Basis of Decision for Final Permit**); EPA's Basis of Decision document for details regarding the issuance of the final permit that authorize the renewal of the Part 71 permit for the Harvest Four Corners, LLC – Mestenios Compressor Station a natural gas compressor station located within the boundaries of Jicarilla Apache Reservation in Rio Arriba County, New Mexico. The facility accepts produced natural gas gathered at various wellheads from the surrounding gas fields and compresses this gas for delivery to various natural gas processing facilities.

<sup>&</sup>lt;sup>6</sup> See Sierra Club v. EPA, 536 F.3d 673 (D.C. Cir. 2008); See, e.g., In the Matter of Piedmont Natural Gas, Inc. Wadesboro Compressor Station, Petition No. IV-2014-13, Order on Petition (March 20, 2019), at 2.

<sup>&</sup>lt;sup>7</sup> In the Matter of Piedmont Natural Gas at 2; see also Sierra Club v. Johnson, 541 F.3d 1257, 1260 (11th Cir. 2008) ("Title V does not generally impose new substantive air quality control requirements."); Ohio Pub. Interest Research Group, Inc. v. Whitman, 386 F.3d 792, 794 (6th Cir. 2004) ("Title V does not impose new obligations; rather, it consolidates pre-existing requirements into a single, comprehensive document for each source, which requires monitoring, record-keeping, and reporting of the source's compliance with the Act."); Sierra Club v. Leavitt, 368 F.3d 1300, 1302 (11th Cir. 2004) ("Title V imposes no new requirements on sources. Rather, it consolidates existing air pollution requirements into a single document ...."); Lafleur v. Whitman, 300 F.3d 256, 262 (2d Cir. 2002) ("Although these operating permit programs do not impose new substantive air quality control requirements, the permits themselves must include limitations on emissions and other conditions (such as regular monitoring, recordkeeping, and reporting) necessary to ensure compliance with the provisions

Page 3 of 87

and 40 CFR Part 71 Federal Operating Permit Program, 61 FR 34202 (July 1, 1996) and 64 FR 8247 (February 19, 1999) As stated in the Part 71 preamble, the Part 71 Federal Operating Program procedures were modeled on those required by the Part 70 Operating Program. The RTC does use Part 70 and 71 citations interchangeably in some cases throughout the document and refers to both as the TV operating program. Thus, the TV operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source's emission units and ensuring that there is adequate monitoring, recordkeeping, and reporting such that the permit assures compliance with those applicable requirements.<sup>8</sup>

"Monitoring" refers to many different types of data collection, including continuous emission or opacity monitoring, and measurements of various parameters of process or control devices (e.g., temperature, pressure drop, fuel usage) and recordkeeping of parameters that been limited, such as hours of operation, production levels, or raw material usage. Monitoring must be sufficient to yield data that is representative of the source's operations and compliance with the standard or limitation over the life of the permit.<sup>9</sup>

For EPA to address the comments made by the Permittee in the comment letter received during the public comment period, it is important for EPA to present the permitting history of the Facility up to the recent renewal permit action. The following sections provide a summary of the permitting history of the Facility. Most of the documents used to discuss the Facility's permitting history were in the AR at the time of the public notice of the draft permit. However, due to the comment letter received from Harvest and the assertions made in the letter, the AR was amended to include additional technical documents and guidance to address the assertions in the letter according to 40 CFR §71.11(j). The AR Index delineates the additional documents used in responding to the comments received.

This RTC looks at the emission units that have been added and the variability of the Facility's emission rates as a result, from the emission units over the Facility's permitting history to help address the commentor's assertions. The emission rates are directly determined from the permit applicant's potential to emit (PTE) calculations for the emission units at the facility. Due to the emission unit and rate changes that have occurred since the initial New Source Review Permit (NSR) construction permit was issued in September 1996, EPA has copied and pasted in the RTC, the emission tables from the past and current Part 71 permits that were issued to the Permittee to authorize operation of the Facility. The information from the applications was provided by each Permittee of the Facility at the time of each permit action. Therefore, EPA has also copied and pasted some relevant pages extracted from the applications that were submitted by the Permittee of the Facility for each permit action. This is all for ease of readability and quick reference for the reader. However, each document containing this information is cited and can be found in its entirety in the AR as well.

of the CAA, including the PSD program (if applicable)"); *United States v. E. Ky. Power Coop., Inc.*, 498 F. Supp. 2d 1010, 1011 (E.D. Ky. 2007) ("Title V permits were not intended to impose new substantive requirements.") (citing 57 FR 32,250, 32,250 (July 21, 1992)) See, "*EPA\_R5\_Veolia\_1-18-17*" AR § 14 Doc No 1; and "*EPA\_R5\_Veolia\_1-18-17*" AR § 14 Doc No 2; and See "*Final\_TV\_Petition\_US\_Steel\_Clairton\_Coke*" AR § 14 Doc No 3; and See, "*40\_CFR\_Operating\_Program\_32247-32312*" AR § 14 Doc No 4

<sup>8</sup> See, e.g., In the Matter of Piedmont Natural Gas at 2

<sup>&</sup>lt;sup>9</sup> See, "periodmonitorguide Sept15 98" AR § 14 Doc No 35 (pmguide)

When the 1996 NSR construction permit for the Facility was issued, the Permittee informed EPA of a Solar Saturn Turbine and a Caterpillar Internal Combustion (IC) engine (Unit 1 and Unit 2). The construction permit was issued with MRR requirements for these emission units. However, subsequent additions of emission units and changes to the Facility's PTE have occurred without the corresponding additions of MRR for these added emission units and emission rates to assure compliance. This RTC only addresses the MRR inadequacy for the emission units that have been added since the 1996 NSR construction permit was issued. The information contained in this RTC will show that this final permit action is not "imposing new substantive emission requirements and associated MRR requirements", as the commenter has asserted. This final permit action is only implementing MRR for emission units that were added, at the request of the applicant, since the issuance of the 1996 construction permit.

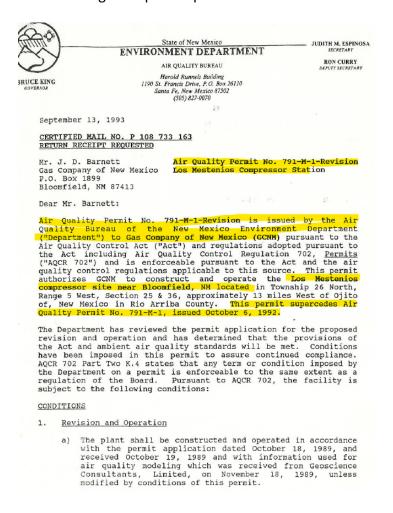
The Facility's actual emissions must be calculated to demonstrate compliance with the Facility's emission limit which in this case is the Facility's PTE in accordance with Title V of the CAA. 42 U.S.C. § 7661c(c). The Permittee submitted a calculation methodology in the permit application that uses operating parameters of the emission units as inputs to this methodology to calculate the emissions from the emission units. The determination of the requisite MRR requirements utilizes this calculation methodology with inputs collected from actual operating parameters from the Facility. Since the current permit does not assure compliance with the emission limits in the permit (due to the absence of MRR requirements in the existing permit), EPA addressed these MRR deficiencies by adding the following MRR sections for the identified emission units in the Facility's draft permit renewal: the Condensate Storage Tanks (T1 and T2) in Section 6.3, truck loading (L1) in Section 6.4, planned startup, shutdown, and maintenance (SSM) activities in Section 6.5, and piping, valve and flanges equipment leaks (F1) in Section 6.6. The emissions from these emission units are a part of the Facility's emission limit, in this case also the Facility's PTE and are part of the final permit renewal action currently. See Harvest Los Mestenios Final Permit for the Facility's PTE listed in Table 4.

When flash emissions for the condensate storage tank were added in 2003 at the request of the Permittee for the Facility's initial TV permit, the initial TV permit was issued to incorporate this significant emission increase with a high VOC content. This Facility was issued an initial TV Permit because it is subject to 40 CFR Part 71, as it is located in Indian Country. **See, §71.2 Definition of Major Source.** 

It is important to mention that the current Permittee's request for a change of status (COS) from a TV source to a NSR minor source submitted on January 21, 2022, and subsequently revised on February 14, 2022, prior to submitting a TV renewal permit application, lacked supporting data necessary to substantiate the requested change. The Permittee merely cited changes to the concentration of the condensate material that is processed through the Facility and stored in the condensate storage tanks before being hauled off by trucks. The Permittee stated in the COS request that the composition change (VOC content) resulted in a reduction in flash emissions. The Permittee stated that a reduction of propane (C3) and butane (C4) in the condensate resulted in a reduction in flash emission, since C3 and C4 are drivers of flash emissions. However, the Permittee, did not support these claims with enough actual data and corroborating information collected from the Facility's operations. EPA's determination of a Facility's COS relies on the provision and validity of the data collected to substantiate or support such a claim. As expected, a necessary and indispensable component of evaluating the sufficiency of MRR requirements in a TV permit is data collection.

### A. Background Information on the 1996 NSR Permit

On September 13, 1993, the New Mexico Environment Department (NMED) issued a construction permit 791-M-1-Revision to the owner at the time, the Gas Company of New Mexico (GCNM) for the Los Mestenios Compressor Station (Facility). The GCNM was the owner/operator of the Los Mestenios Compressor Station at the time. This construction permit replaced the air permit 791-M-1, issued on October 6, 1992<sup>10</sup>. On March 9,1995, GCNM submitted a *Streamline and General Compressor Permit Application and Notice of Intent for the State of New Mexico* to NMED for the Facility. When 791-M-1 and 791-M-1-Revision were issued, both the GCNM and NMED assumed the Facility was on State land. The following excerpts are provided from available NMED permit records for the Facility.



<sup>&</sup>lt;sup>10</sup> See "NMED issued NSR permit" AR § 14 Doc No 7 (NMED issued NSR permit)

<sup>&</sup>lt;sup>11</sup> See "NSR orig applic to NM" AR § 9 Doc No 7 (NSR orig applic to NM)

Revised: September 25, 1992

NMED - Air Pollution Control Bureau P.O. Box 26110 Santa Fe, NM 87502 Telephone: 505-827-0070

## STREAMLINE AND GENERAL COMPRESSOR PERMIT APPLICATION AND NOTICE OF INTENT FOR THE STATE OF NEW MEXICO

Refer to the attached instructions for footnotes and directions on how to fill out this application form

#### Section 1: General Information:

1. Name of Company: Gas Company of New Mexic	2. Date Submitted: March 9, 1995
Name of Facility: Los Mestenios Compressor Sta	
Purpose of facility: Natural gas compression	
3. Main Office Address: Alvarado Square, Albuquero	que, New Mexico 87158
	4. Phone No.: (505) 241-2385
5. Person to contact: Nancy Norem	6. Title: Senior Engineer
7. Location of the plant:	
Section: 25 & 26 Range: 5W Township:	26N County: Rio Arriba
UTM Zone: 13 UTMH: 292.4 km UT	TMV: 4036.3 km
Plant Elevation: 6,660 ft. above mean sea level.	
Approximate location from nearest town (direction an	nd distance) 24 km northwest
Name of nearest town and Zip Code: Gavilan, New	Mexico 87029
8. Is this site permanent? X Yes No If not ho	ow long is it expected to be occupied? N/A
9. Is this a new plant? Yes X No	
Date of anticipated start of construction: Mo N/A	Day N/A Yr N/A
<ol> <li>Date of anticipated startup: Mo N/A</li> </ol>	Day N/A Yr N/A
11. Was this plant constructed prior to Aug. 31, 1972?	Yes X No
12. Is the plant currently operating in New Mexico?	X Yes No
13. Has the plant been modified or the capacity increase	ed since Aug. 31, 1972? Yes _X No
If yes, briefly describe	
<ol> <li>Normal operating hours: 24 hrs/day 7</li> </ol>	days/wk
4.2 wk/mo 12	mos/yr
15. Specify maximum operating periods, if any: none	
<ol> <li>Estimated percent annual 25 Dec Feb.,</li> </ol>	25 Mar May
production by quarters: 25 June - Aug.,	25 Sep Nov.
17. Class of land at plant site (private, State, Federal, In	dian, etc.) Indian
18. SIC Code: 4923	

## Public Service Company of New Mexico

March 14, 1995

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Ms. Adele Cardenas U.S. Environmental Protection Agency 1445 Ross Avenue MC(6T-AN) Dallas, TX 75202-2733

Subject: Los Mestenios Compressor Station - Permit Revision V

Dear Ms. Cardenas:

On March 1,1995, I called you in regards to the permit status of Los Mestenios Compressor Station (Los Mestenios) operated by the Gas Company of New Mexico (GCNM), an unincorporated division of the Public Service Company of New Mexico (PNM). Los Mestenios is located on Jicarilla Apache Indian Land and hepce is no longer regulated by the New Mexico Environment Department (NMED). The most recent permit for the compressor station was issued by the NMED in September 1993. The permit required a compliance test for the Solar Saturn 1200 turbine located at the site. The turbine is an NSPS unit. The turbine was tested January 25-26, 1995. These test results indicate the NO, emission rate is higher than the permitted emission rate. In the past, GCNM would have filed a permit revision with an emission increase with the NMED, but this now falls under Region VI's jurisdiction. You indicated in our conversation that this revision could be handled in the operating permit application or a revised permit could be issued by Region VI. GCNM prefers to have an air permit issued reflecting the test results and not waiting to make these changes in the operating permit application.

I have included the most recent permit (September 1993) issued by the NMED, a copy of the 1995 turbine emission test results, and a copy of the permit application GCNM would have submitted to the NMED for the emissions increase revision. Hopefully, this information will facilitate your review and permit issuance.

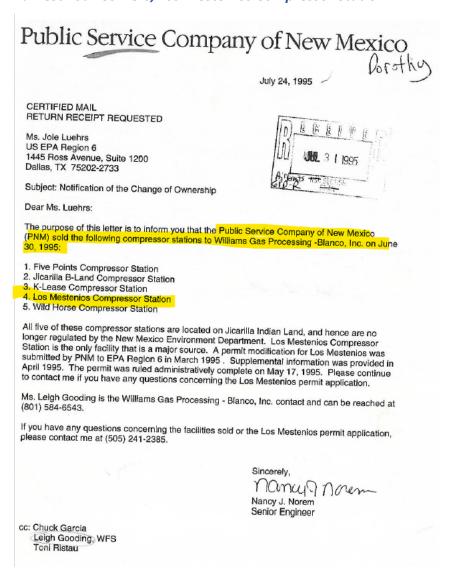
With respect to operating permits, Los Mestenios is a major source due to CO emissions greater than 100 tons per year. Again, GCNM would have filed an operating permit application with the NMED, but they no longer regulate the facility. Instead, an operating permit application will be filed with EPA Region VI in accordance with the regulatory requirements. You have requested some basic information for your record keeping purposes on this facility. I believe the information provided as part of the permit revision describes the facility and the emissions quite well.

Albarado Square Albaquerque, New Mexico 67158.

If you have any questions regarding the permit revision information or need more information on the facility for the operating permit program, please call me at 505-848-2385.

Sincerely,

Mancy J. Norem Senior Engineer



The Public Service Company of New Mexico, the parent Company of GCNM (having determined that it was not on state land), contacted EPA Region 6 to confirm that the Facility was not regulated by NMED, and the construction permits that were issued previously should have been issued by EPA.

In a letter dated July 24, 1995, Public Service of New Mexico notified EPA that the Los Mestenios Compressor Station had been sold to Williams Gas Processing- Blanco, Inc. (Williams) on June 30, 1995. 12

<sup>&</sup>lt;sup>12</sup> See, "Notif\_change\_ownersh\_1995" AR § 14 Doc. No. 52 (1995 Ownership Change)



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

OCT - 1 17:1

Ms. Leigh Gooding Ms. Leigh Gooding Environmental Specialist Williams Field Services Mail Stop 2G-1 295 Chipeta Way Salt Lake City, UT 84158

Permit NM-791-M2 - Williams Gas Processing -Los Mestenios Compressor Station - Jicarilla Apache

Dear Ms. Gooding:

On March 17, 1895, the Environmental Protection Agency received your application for a permit to operate the Los Mestenios compressor station located in Rio Arriba County, New Mexico, approximately 15 miles northwest of Gavilan, New Mexico. We have completed the review of the application. The enclosed permit, NM-791-M2, is your authorization to operate the compressor station under the conditions stipulated. The entire file is documented and available for review at our office at 1445 Ross Avenue, Dallas, Texas 75202. at 1445 Ross Avenue, Dallas, Texas 75202.

Any person who filed comments on the draft permit, or participated in a public hearing for this permit, may petition the Administrator to review any condition of the permit decision. Any person who failed to file comments, or failed to participate in the public hearing on the draft permit, may petition for administrative review of the permit only to the extent of the changes from the draft to the final permit decision, if any (see 40 Code of Federal Regulations 124.19). The original and one copy of any petition for review must be filed within 30 days from the date this letter is received by the permittee. It should be addressed as follows: addressed as follows:

> Headquarters Hearing Clerk 401 M Street Southwest Mail Code 1900 U.S. Environmental Protection Agency Washington, DC 20460

HecyclediRecyclable + Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postcon

2

If such a review is requested, the permit decision is not a final agency action, and the permit is not effective. A petition for review is, under 5 United States Code 704, a prerequisite to the seeking of judicial review of the final agency action.

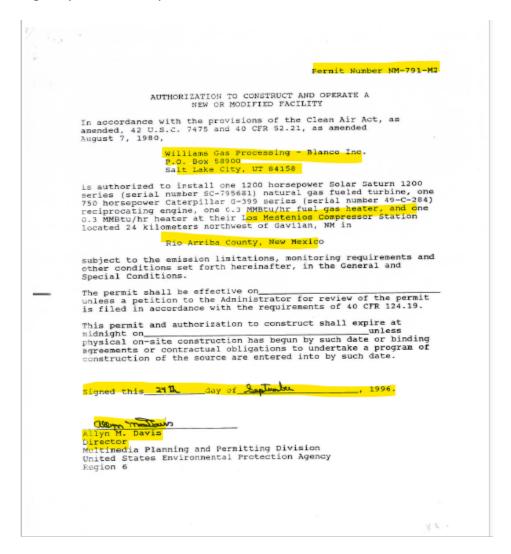
If you have any questions concerning this permit, please contact Mr. Samuel R. Mitz of my staff at (214) 665-8370.

Sincerely yours, allen m Tours Allyn M. Davis Multimedia Planning and Permitting Division

cc: President Leonard Atole
Jicarilla Apache Tribe

Mr. Mark Weidler New Mexico Environment Department

Ms. Nancy Norem Public Service Company of New Mexico On March 17, 1995, GCNM submitted to EPA the application originally submitted to NMED.<sup>13</sup> This was to establish federally enforceable provisions in a construction permit and regulatory compliance, per the Permittee's initial request letter dated March 14, 1995.<sup>14</sup> On September 24, 1996, EPA issued the NSR construction permit NM-791-M2 for the Facility to Williams, based upon the permit application originally submitted by GCNM in 1995.<sup>15</sup>



Under the Special Conditions of this permit, it says, "This permit covers only those sources of emissions listed in the attached table entitled *Table 1 – Maximum Allowable Emission Rates* and those sources are limited to the **emission limits** and other conditions specified in that attached table". The language in this permit *explicitly* says the maximum allowable emission rates found in Table 1 are emission limits. **See, 1996 NSR Permit.** 

<sup>&</sup>lt;sup>13</sup> See, "NSR orig applic to NM", see AR § 8 Doc No 7 (1996 NSR Permit Appl)

<sup>&</sup>lt;sup>14</sup> See, "March-1995\_Permit\_ Status" AR § 14 Doc No 8 (March\_1995\_Permit\_Status)

<sup>&</sup>lt;sup>15</sup> See "Los Mestenios EPA NSR permit" AR § 9 Doc. No. 15 (1996 NSR Permit)

#### SPECIAL CONDITIONS

#### NM-791-M2

- This permit covers only those sources of emissions listed in the attached table entitled "Table 1 Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table.
- 2. The Solar gas turbine (emission point #1) is subject to new source performance standards (NSPS), 40 CFR 60, Subpart A, General Provisions, and Subpart GG, Standards of Performance for Stationary Gas Turbines and shall comply with both the notification requirements in Subpart A and with the specific requirements of Subpart GG. In particular, the following emission limitations apply:
  - a. The nitrogen dioxide  $({\rm NO_2})$  concentration in the exhaust gas from the turbine shall not exceed 150 ppmv at 15 percent oxygen on a dry basis.
  - b. The sulfur dioxide concentration in the exhaust gas from the turbine shall not exceed 0.015 percent by volume at 15 percent oxygen  $(0_2)$  and on a dry basis, or the fuel burned in the turbine shall not exceed 0.8 percent by weight.
- 3. Fuel fired in the turbine and internal combustion (IC) engine, identified as emission points #1 and #2 respectively, is limited to sweet natural gas of pipeline quality containing a maximum of 0.25 grains of  $\rm H_2S$  per 100 cubic ft.
- Emissions from the turbine and IC engine shall not exceed 5 percent opacity, as determined by EPA Reference Method 9.

#### CONTINUOUS DETERMINATION OF COMPLIANCE

5. Compliance tests may be required by the permitting authority for nitrogen oxides (No<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) for the turbine to demonstrate compliance with NSPS subpart GG for Special Condition 2. Compliance tests may also be required by the permitting authority to determine actual emission rates from any other point for which an emission test method is established.

When testing is required, the tests shall be conducted in accordance with EPA Reference Methods contained in the 40 CFR 60, Appendix A, and with the requirements of subpart A, General Provisions, 60.8(f). Tests shall be conducted within ninety (90) days of written notice from EPA that a test is required. The results of the NO, tests shall be expressed as NO<sub>2</sub> using a molecular weight of 46 lb/lb mole in all calculations (each ppm of NO/NO<sub>2</sub> is equivalent to 1.194 lb/standard cubic foot).

For reciprocating engines, Method 7 (A-E) shall be used to determine  $NO_x$ , and Method 10 shall be used for CO. For stationary gas turbines, Method 20 shall be used to determine  $NO_x$ ,  $SO_2$ , and  $O_2$ , concentrations, and method 10 shall be used for CO. Methods 1 through 4 shall be used for flow rate determinations as appropriate. To determine compliance with the applicable

Table 1 - Maximum Allowable Emission Rates

Emission Point Number	Emission Point Number	Hours of Operation (hr/yr)	NO <sub>x</sub>	co	VOCs
1	Solar Saturn 1200 Turbine 1200 HP	8760	4.4 lb/hr 19.4 tpy	2.6 lb/hr 11.4 tpy	0.09 lb/hr 0.4 tpy
2	Caterpillar Model G-399-TA IC engine 750 HP	8760	14.4 lb/hr 63.1 tpy	52.2 lb/hr 228.0 tpy	0.6 lb/hr 2.6 tpy
3	Fuel Gas Heater 0.3 MMBtu/hr	8760	0.04 lb/hr 0.18 tpy	0.0084 lb/hr 0.04 tpy	0.0015 lb/hr 0.0067 tpy
4	Heater 0.3 MMBtu/hr	8760	0.04 lb/hr 0.18 tpy	0.0084 lb/hr 0.04 tpy	0.0015 lb/hr 0.0067
Total	-	-	18.9 lb/hr 82.9 tpy	54.8 lb/hr 239.5 tpy	0.7 lb/hr 3.0 tpy

The table below is the emission information Williams submitted in the 1996 NSR construction permit application. **See, 1996 NSR Permit Appl.** The table represents that there were no pollution control devices for any of the emission units at the Facility. The emission calculation from each unit is based on uncontrolled emissions at maximum capacity. In other words, the emission limits for each emission unit found in the permit table "Maximum Allowable Emission Rates was based on the PTE. **See, 1996 NSR Permit.** 

	Max. Pollutant Emissions (1), (2), (5) Hours of (lb/hr) Basis for Type of (ton/yr) Emission Control		Control Equipment  Manufacturer	Control Equipment Efficiency									
	(7)	Ur	controlled	(3)		Control	led (4) 5 to	39.2	(5)	Equipment	and		
	(daily) (year)	NOx	СО	NMHC	NOx (Kg/ki)	CO (Q.V)	NMHC	SO2		(6)	Model No.	% By Weight	Basis
1	24	4.42	2.59	0.09	2 4.42	2.59	0.09	- N	test	N/A	N/A	N/A	N/A
	8760	19.4	11.4	0.4	\$19.4	11.4	0.4		data				
2	24	14.4	52.16	0.6	14.4	52.16	0.6		test	N/A	N/A	N/A	N/A
	8760	63.1	228	2.6	63.1	228	2.6		data				
3	24	0.040	0.0084	0.0015	0.040	0.0084	0.0015		AP-42	N/A	N/A	N/A	N/A
	8760	0.175	0.037	0.0067	0.175	0.037	0.0067		data				
4	24	0.040	0.0084	0.0015	0.040	0.0084	0.0015		AP-42	N/A	N/A	N/A	N/A
	8760	0.175	0.037	0.0067	0.175	0.037	0.0067		data	1			
					82.85	231.93	3.01						
			*										
					ed Section of								
				- 13. 15.									
			4										

When a permit contains no limits on capacity utilization or hours of operation, the PTE calculation assumes *operation at maximum design* or *achievable capacity* (whichever is higher) and *continuous operation* (8760 hours per year). <sup>16</sup> Therefore, the Facility's emission limits are the PTE based upon operations of the different emission units. Specifically, the emissions rates that were submitted by Williams in the NSR construction permit application are the same emission limits that are in the NSR construction permit that was issued. **See, 1996 NSR Permit Appl and 1996 NSR Permit.** 

EPA used the application submitted by Williams to develop and issue the 1996 NSR construction permit. EPA incorporated information drawn from what Williams had submitted in their permit application, as the emission rates that were calculated at maximum capacity, in order to establish the emission limits in the 1996 NSR construction permit. Of note, EPA did *not* include any restrictions on emission rates in the 1996 NSR construction permit.

<sup>&</sup>lt;sup>16</sup> See, "Guidance on Limiting PTE in NSR permitting\_june13\_89" AR § 14 Doc No 9; "Limiting Potential to Emit in NSR Permitting", June 13,1989; Air Enforcement Division Office of Enforcement and Compliance Monitoring, Terrell Hunt; Stationary Source Compliance Division OAQPS, John Seitz

#### B. Background Information on the 2003 Initial Part 71 Permit

On October 5, 1999, Williams submitted an initial permit application requesting a Part 71 operating permit.<sup>17</sup> The 2003 draft initial permit was public noticed for comments to be submitted on or before July 14, 2003.<sup>18</sup> However, before the initial TV permit was issued, the Permittee submitted comments to revise the information submitted in the initial TV permit application on July 9, 2003.

In the comments to revise the permit, the Permittee stated that they had become aware of an <u>undocumented source of emissions</u> at the Facility, specifically, the *flash emissions* from a 500-barrel condensate tank (TK-1). Therefore, in addition to working and breathing losses, flash emissions were also occurring. <sup>19</sup> The initial Part 71 permit was issued on November 17, 2003. <sup>20</sup> The excerpts that follow are taken from the initial permit issuance record, with the first excerpt merely being the cover page of the 2003 initial TV permit indicating issuance date for easy reference.

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

#### FEDERAL CLEAN AIR ACT TITLE V OPERATING PERMIT

Issue Date: 11/17/2003 Permit Number: R6FOPP71-04
Effective Date: 12/16/2003 Replaces Permit Number: N/A

Expiration Date: 11/16/2008

In accordance with the provisions of Title V of the Clean Air Act and 40 CFR Part 71 and applicable rules and regulations,

Williams Field Services Los Mestenios Compressor Station Rio Arriba County, New Mexico

<sup>&</sup>lt;sup>17</sup> See "Initial TV Application 2003" AR § 9 Doc No. 12 (2003 TV Permit Appl)

<sup>&</sup>lt;sup>18</sup> See, "PN\_2003\_TV\_Permit" AR § 14 Doc No.8 (PN\_2003\_TV\_Permit)

<sup>&</sup>lt;sup>19</sup> See "Permittee Initial TV Comments" AR § 9 Doc No 18 (2003 Permittee Comments)

<sup>&</sup>lt;sup>20</sup> See, "Los Mestenios Final Permit 2003" AR § 9 Doc No 17 (2003 Final Permit)

will be available for review at the

```
Notice of 'Intent to 'Issue a Clean Air '
                                             EPA Region 6 library, Monday - Friday,
Act, 'Title 'V, 'Federal 'Operating'
                                             from ·7:30 ·a.m ·- ·4:30 ·p.m, ·excluding
Permit, 'United'States Environmental'
                                             Federal holidays. 9
Protection Agency (EPA), Region 6,
Multimedia Planning and Permitting
                                             If 'you 'have 'comments 'on 'the 'draft'
Division. 9
                                             permit, 'you'must'submit'them'on'or'
                                             before 'July '14, '2003. ' 'You have the
q
                                             right to request a public hearing on
Take 'notice 'that 'the 'United 'States '
                                             the draft permit. Requests for a
Environmental Protection Agency has
received an application for an
                                             public hearing must be made by
operating 'permit 'that 'regulates 'air '
                                             July °14, ·2003, ·and ·must ·contain ·your ·
pollution emissions from the
                                             reasons for requesting a hearing. . . If .
following source: 9
                                             a 'public 'hearing 'is 'granted, 'the '
                                             comment 'period' will 'be 'extended'
The ·Williams ·Field ·Services, ·Los ·
                                             through the date of the public
Mestenios · Compressor · Station · is ·
                                             hearing. . . All . comments . and . public .
                                             hearing requests should be addressed.
located about 15 miles northwest of
Galvilan, 'New 'Mexico. 'The 'mailing'
                                             to EPA, Region 6, Attention: Daron
                                             Page, 'Multimedia 'Planning and '
address : is: :Williams :Field :Services, ¶
188 · County · Road · 4900 · Bloomfield, · NM ·
                                             Permitting Division, ·1445 · Ross
-87413.¶
                                             Avenue, 'Dallas, 'Texas '75202, '(214) '
                                             665-7222 or page.daron@epa.gov. All
The 'Williams 'Field 'Services, 'Los'
                                             comments received prior to July 14,
Mestenios · Compressor · Station · is ·
                                             2003, 'and'all'comments'made'during'a'
located on the Jicarilla-Apache
                                             public hearing will be considered in
Reservation, 'Rio 'Arriba' 'County, 'New'
                                             arriving at a final decision on the
Mexico. . . The .source .is .a .natural .gas .
                                             permit. . . The final permit is a public .
compression and transmission facility.
                                             record that can be obtained upon
with opressurized matural cas as its
                                             request. .. A . statement . of . reasons . for .
principal products. . The source emits .
                                             changes made to the draft permit and
the following pollutants: carbon .
                                             responses to comments received will
monoxide, 'particulate'matter'with'a'
                                             be 'sent 'to 'persons 'who 'commented 'on '
diameter ·10 ·microns ·or ·less, ·oxides ·
                                             the draft permit. 9
of 'nitrogen, 'volatile 'organic'
compounds, and hazardous air
                                             If 'you believe any condition of the
pollutants. 9
                                             draft permit is inappropriate or that
                                             our 'initial 'decision 'to 'deny 'an '
This 'source 'is 'subject 'to 'the '
                                             application, 'terminate'a 'permit, 'or'
provisions of EPA permit NM 791-M2 and
                                             prepare 'a 'draft 'permit 'is '
is required to obtain a Clean Air Act
                                             inappropriate, 'you'must'raise'all'
Title 'V 'Permit 'to 'Operate 'in '
                                             reasonably ascertainable issues and
accordance with Part 71 of Title 40
                                             submit all reasonably ascertainable.
of the Code of Federal Regulations.
                                             arguments supporting your position by
The permit will contain all the Clean
                                             the 'end of the comment period. 'Any
Air Act requirements that apply to the
                                             supporting materials that you submit
source and is subject to the
                                             must be included in full and may not
administrative requirements of 40 ·
                                             be 'incorporated by reference, unless'
Code of Federal Regulations 71.11. . . ¶
                                             they are already part of the
                                             administrative record for this permit
Members of the public may review a copy:
                                             proceeding or consist of State,
of the draft permit prepared by EPA,
                                             tribal, 'or 'Federal 'statutes 'and '
the 'statement' of 'basis' for 'the 'draft'
                                             regulations, EPA documents of general:
permit, the application, and all t
                                             availability, or other generally
supporting materials submitted by the
                                             available referenced materials. 9
source at the Jicarilla-Apache
Library, (505) .759-3442. . . Copies . of .
these 'documents 'can'also 'be 'obtained'
at no cost at the EPA Region 6 Web Site,
http://www.epa.gov/earth1r6/6pd/air
/pd-r/wfs-losmen.pdf or by contacting
Daron · Page, · Environmental · Engineer,
1445 'Ross 'Avenue, 'Dallas, 'Texas '
75202, (214) 665-7222, or
page.daron@epa.gov. . . All .documents .
```





Environmental Department 188 County Road 4900 Bloomfield, NM 87413 505/632-4625 505/632-4781 Fax

July 9, 2003

Mr. Carl E. Edlund, P.E. Director, Multimedia Planning and Permit Division U.S. EPA Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Mr. Guy Donaldson, 6PD-R U.S. EPA Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Part 71 Operating Permit R6FOPP71-04

Williams Field Services' Los Mestenios Compressor Station

Dear Sirs.

Thank you for the opportunity to comment on the Statement of Basis and draft permit R6FOPP71-04 for Williams Field Services' Los Mestenios Compressor Station, located within the exterior boundaries of the Jicarilla Apache Reservation in Rio Arriba County, New Mexico. We would like to offer the following comments:

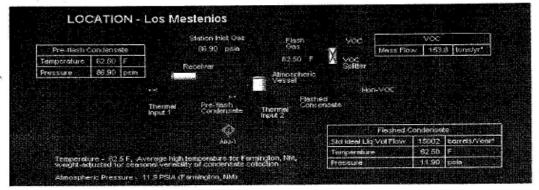
#### Statement of Basis

Paragraph 3.d notes that "this source is subject to the provisions of EPA permit NM-791-M2..." Prior to the determination that facilities within the exterior boundaries of a tribal reservation fell within the jurisdiction of the EPA (or the tribal agency if a Tribal Implementation Plan was approved), this facility had been permitted through the New Mexico Air Quality Bureau as a minor source (not subject to PSD). Although Williams has accepted the permit issued by EPA for a PSD minor source (criteria pollutant emissions less than 250 tpy for a source not in the 28 source categories) as it came about during both the transition from State to Federal jurisdiction, and during a change of ownership, we wish to learn the statutory authority in issuing this minor source permit. Williams has complied with this permit, and will continue to comply with the requirements as incorporated into the draft operating permit, but we would like clarification on the issuance of the minor source NSR permit.

Paragraph 3.e. Table 1: Since submittal of this application, Williams has become aware of an undocumented source of emissions found at this facility. The application currently lists VOC emissions from condensate tank Tk-1 that result solely from working and breathing losses. Williams has determined that flash emissions also occur from this tank, and wish to amend the application to incorporate these flash emissions. The VOC value in Table 1 should be 222 tpy, including both working and breathing losses, and flash emissions. The affected application forms plus tank flash emissions calculations are attached. Note that the Part 71 annual emissions fees paid in March 2003 included these tank flash emissions.

Paragraph 4 typographic correction: NSR permit no. NM-971-M2 should be NM-791-M2.

<u>Paragraph 4.c</u> requires monthly recordkeeping of fuel flow/consumption for emission units 1 and 2 without citing an applicable regulation. If this is a new requirement without a regulatory driver, Williams would suggest changing this fuel flow recordkeeping requirement to an hours of operation recordkeeping requirement consistent with the existing NSR permit.



HYSYS Model Results

Location: Los Mestenios Compressor Station

2002 Condensate Volume (post-flash): 15,002 bbls 2002 VOC Emissions: 153,8 Tons

	Pre-flash	Flashed			VOC w/40%
Name	Condensate	Condensate	Flash Gas	VOC	Safety Facto
Vapour Fraction	0.0	0.0	1.0	1.0	
Temperature [F]	62.5	62.5	62.5	75.0	Section I among the second
Pressure [psia]	86.9	11.9	11.9	11.2	
Molar Flow [MMSCFD]	4.936E-02	4.115E-02	8.210E-03	5.591E-03	
Mass Flow [tons/yr*]	2001.7	1816.4	185.2	153.8	215.3
Liquid Volume Flow [barrels/Year*]	17,055.2	15,002.0	2,053.2	1,532.5	
Molecular Weight	84.26	91.71	46.88	57.16	
Name	Pre-flash Condensate	Flashed Condensate	Flash Gas	Tons of VOC (calculated)	Tons of VOC w/ Safety Facto
Comp Mass Frac (CO2)	0.00035	0.00002	0.00351	na	na
Comp Mass Frac (Nitrogen)	0.00000	0.00000	0.00000	na	. na
Comp Mass Frac (Methane)	0.00391	0.00009	0.04135	na	n
Comp Mass Frac (Ethane)	0.01316	0.00178	0.12473	na	n
Comp Mass Frac (Propane)	0.03949	0.01541	0.27559	51.05	71.47
Comp Mass Frac (i-Butane)	0.02248	0.01489	0.09698	17.96	25.15
Comp Mass Frac (n-Butane)	0.05384	0.04074	0.18229	33.77	47.27
Comp Mass Frac (i-Pentane)	0.05596	0.05264	0.08849	16.39	22.95
Comp Mass Frac (n-Pentane)	0.05658	0.05542	0.06797	12.59	17.63
Comp Mass Frac (2-Mpentane)	0.07274	0.07626	0.03821	7.08	9.91
Comp Mass Frac (n-Hexane)	0.05682	0.06046	0.02116	3.92	5.49
Comp Mass Frac (Mcyclopentan)	0.00000	0.00000	0.00000	0.00	0.00
Comp Mass Frac (Benzene)	0.01002	0.01069	0.00348	0.65	0.90
Comp Mass Frac (Cyclohexane)	0.04049	0.04344	0.01153	2.14	2.99
Comp Mass Frac (2-Mhexane)	0.14269	0.15494	0.02252	4.17	5.84
Comp Mass Frac (n-Heptane)	0.05350	0.05833	0.00615	1.14	1.60
Comp Mass Frac (Mcyclohexane)	0.00000	0.00000	0.00000	0.00	0.00
Comp Mass Frac (Toluene)	0.03978	0.04344	0.00383	0.71	0.99
Comp Mass Frac (2-Mheptane)	0.18069	0.19818	0.00917	1.70	2.38
Comp Mass Frac (n-Octane)	0.03318	0.03644	0.00117	0.22	0.30
Comp Mass Frac (E-Benzene)	0.00302	0.00332	0.00009	0.02	0.02
Comp Mass Frac (m-Xylene)	0.02555	0.02809	0.00063	0.12	0.16
Comp Mass Frac (o-Xylene)	0.00000	0.00000	0.00000	0.00	0.00
Comp Mass Frac (n-Nonane)	0.05598	0.06162	0.00063	0.12	0.16
Comp Mass Frac (Cumene)	0.03979	0.04379	0.00051	0.09	0.13
Comp Mass Frac (n-PBenzene)	0.00000	0.00000	0.00000	0.00	0.00
Comp Mass Frac (124-MBenzene)	0.00000	0.00000	0.00000	0.00	0.00
Comp Mass Frac (n-Decane)	0.00000	0.00000	0.00000	0.00	0.00
Comp Mass Frac (n-C11)	0.00000	0.00000	0.00000	0.00	0.00
TOTAL	1,00000	1.00000	1.00000	153.82	215 35

Williams provided the above print-out as part of the revised 2003 TV permit application. This print-out indicates William used the thermodynamic model HYSIS to calculate the flash emissions from TK-1. The recalculated VOC PTE emission limitation of 222 tpy for TK-1 was calculated by Williams and submitted to EPA. See, 2003 Permittee Comments.

#### Emission Unit Identification

Instructions: Assign an emissions unit ID and describe each significant emissions unit at the facility. Control equipment and/or alternative operating scenarios associated with emissions units should by listed on a separate line. Applicants may exclude from this list any insignificant emissions units or activities.

Emissions Unit ID*	Description of Unit								
1	Solar Saturn 10-T1200 Turbine								
2	Caterpillar G-399TA reciprocating engine								
TK-1	500-bbl condensate storage tank								
F-1	Process piping components fugitive emissions								

Williams also identified the added TK-1 and piping component fugitive emissions (F-1) as emission units in the revised application forms submitted. **See, 2003 Permittee Comments.** 

#### 1.2. Source Emission Points

	le 1: Emission Units and Control Devices Field Services, Los Mestenios Compressor S	
Emission Unit ID. No.	Unit Description	Control Equipment
1	Turbine Manufacturer - Solar Saturn Model 1200 Installed in November 15, 1979 Maximum design heat input - 10.3 MMBTU/hr Fuel type - Natural gas w/ Restriction - maximum of 0.25 gr/100 standard cubic feet (scf) Hydrogen Sulfide (H,S) Primary use - Compressor drive Serial Number - 30242 (sc-795681)	None
2	I/C Engine Manufacturer - Caterpillar Model G-399-TA Installed in June 12, 1990 Maximum design heat input - 1.6 MMBTU/hr Fuel type - Natural gas w/ Restriction - maximum of 0.25 gr/100 scf H <sub>2</sub> S Primary use - Compressor drive Serial Number - 49-C-284	None
TK-1	Condensate Storage Tank Type - Fixed roof storage tank Capacity - 500 barrel Manufacturer - unknown Model unknown Installed in - unknown	None
F-1,	FUGVOC Piping component fugitive emissions valves	N/A

Table 2: Williams Field				-			on
Unit ID.	NOx	VDC	SO2	PM10	αο	Lead	HAP**
1, Solar Saturn 1200 Turbine, NGF	19.4	0.4	Neg.	Neg.	11.4	N/A	0.4
2, Caterpillar G-399-TA, NGF Engine	63.1	2.6	Neg.	Neg.	228.0	N/A	0.5
TK-1, Fixed roof storage tank	N/A	222	Neg.	Neg.	N/A	N/A	1.1
F-1, FUGVOC	N/A	3.2	N/A	N/A	N/A	N/A	0.1
TOTALS toy	83	13	N/A	N/A	239	N/A	2

Since flash emissions, which are mainly VOCs, were added to the already existing working and breathing losses of the TK-1 emission calculations, the Total VOC PTE emission limit for the Facility was increased from what was permitted in the existing NSR construction permit totaling only 3 tpy (see the above "Maximum Allowable Emission Rate" table) to 228 tpy in the initial TV permit. See, 1996 NSR permit and 2003 Final Permit.

The emission limits for the construction permit were listed in the "Maximum Allowable Emission Rates". **See, 1996 NSR permit.** In the initial TV permit, this table was renamed as "Potential to Emit in Tons/Year Williams Field Services Los Mestenios Compressor Station". **See, 2003 Final Permit.** The

Facility's PTE presented by Williams classified the Facility as a TV major source with regulated air pollutants greater than the threshold limit of 100 tpy.<sup>21</sup>

It should be noted that the Total VOC PTE cited in Table 2 for the initial TV permit was incorrect. **See, 2003 Final permit.** Prior to the Permittee's revisions to its initial TV permit application the Total VOC PTE was identified as 13 tpy. **See, 2003 TV Permit Appl.** However, after the Permittee submitted the recalculation of emissions and added flash emissions, the Total VOC PTE increased to 228 tpy. **See, 2003 Permittee Comments.** This increase was inadvertently not accounted for in the above PTE Table that was provided as part of the initial TV permit. **See, 2003 Final Permit.** 

	Facility Emissions Summary
	Instructions: Enter potential to emit (PTE) for the facility as a whole for each air pollutant listed below. Enter the name of the single HAP emitted in the greatest amount and its PTE. For all pollutants stipulations to major source statemay be indicated by entering "major" in the space for PTE. Indicate the total actual emissions for fee purposes for the facility in the space provided. Applications for permit modifications need not include actual emissions information
	NOx 83 tons/yr VOC 228 tons/yr SO2 neg. tons/yr
	PM-10 <u>neg.</u> tons/yr CO <u>239</u> tons/yr Lead <u>N/A</u> tons/yr
	Total HAP 10 tons/yr
	Which single HAP emitted in the greatest amount? n-Hexane PTE? 6.6 tons/yr
	of form FXE? 246 tons/yr (from 2002 Emissions Inventory and Annual Fee).
	Annual Fee).
1	Annual Fee).
e z:m	Permit number(s) NM-791-M2 Permit type Authorization to construct
erm	Permit number(s) NM-791-M2 Permit type Authorization to construct sitting authority EPA Region 6  (EPA Region 6 issued this permit to an NSR minor source [PTE = 239.5 tpy CO] on
erm	Permit number(s) NM-791-M2 Permit type Authorization to construct itting authority EPA Region 6  (EPA Region 6 issued this permit to an NSR minor source [PTE = 239.5 tpy CO] on ember 24, 1996)
erm	Permit number(s) NM-791-M2 Permit type Authorization to construct itting authority EPA Region 6  (EPA Region 6 issued this permit to an NSR minor source [PTE = 239.5 tpy CO] on ember 24, 1996)  Emission Unit(s) Covered by General Permits N/A
erm	Permit number(s) NM-791-M2 Permit type Authorization to construct itting authority EPA Region 6 (EPA Region 6 issued this permit to an NSR minor source [PTE = 239.5 tpy CO] on ember 24, 1996)  Emission Unit(s) Covered by General Permits N/A  Emission unit(s) subject to general permit
erm	Permit number(s) NM-791-M2 itting authority EPA Region 6  (EPA Region 6 issued this permit to an NSR minor source [PTE = 239.5 tpy CO] on ember 24, 1996)  Emission Unit(s) Covered by General Permits N/A  Emission unit(s) subject to general permit  Check one:Application madeCoverage grants

Williams submitted the above information in the initial TV application. **See, 2003 TV Appl.** This application includes the PTE for each pollutant for Facility. Also, the 1996 NSR construction permit is listed as under *Existing Federally Enforceable Permits*. The 2003 initial TV application issued cross references information from the NSR construction permit. **See, 2003 TV Appl and 1996 NSR Permit.** 

The above "Source Emission Point" table is in the initial TV permit. See, **2003 Final Permit.** This information was submitted by Williams. **See, 2003 TV Permit Appl.** The table indicates the Facility emission units do not have pollution control devices. The emissions are uncontrolled. There are no

<sup>&</sup>lt;sup>21</sup> see "40 CFR 70 Operating Permit Program 32247-32312" AR 14 Doc No 4 (57 FR 32250, 32279, July 21, 1992) 40 CFR Part 71 Federal Operating Permit Program, 61 FR 34202 (July 1, 1996) and 64 FR 8247 (February 19, 1999)

Page 21 of 87

conditions in the 2003 initial TV permit that restrict the emission rates from the maximum operating capacity of the emission units. The Facility is limited by its maximum operating capacity; therefore, the PTE is the emission limit. The table, "Potential to Emit in Tons per Year" list the PTE<sup>22</sup> for each emission unit per regulated pollutant. The emissions from the Facility's emission units were uncontrolled in NSR construction permit. **See, 1996 NSR Permit.** The tables that presented the Facility's emission limits namely the "Potential to Emit in Tons per Year" table in the 2003 initial TV permit and the "Maximum Allowable Emission Rates" table in the 1996 NSR construction permit are the same.

The Permittee represented in the 1996 NSR construction permit application that there were no pollution control devices on any of the emission units therefore the emission limitations that were established in 1996 NSR construction permit were based on uncontrolled emissions; therefore, the emissions are based on the maximum capacity of the emission units that are listed in this permit. **See, 1996 NSR Permit Appl and 1996 NSR Permit.** 

<sup>&</sup>lt;sup>22</sup>See New Source Review Program in Indian Country, 40 CFR § 49.152(d) Definitions PTE means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable as a practical matter. Secondary emissions, as defined at § 52.21(b)(18) of this chapter, do not count in determining the potential to emit of a source.

#### Facility Wide Permit Conditions

#### 3.1. Specific Permit Requirements

The source will continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the source will meet such requirements on a timely basis.

The following Provisions of New Source Review permit number NM-791-M2 are incorporated into this permit by reference:

Provision		Requirement
General	1	Notification of start-up of construction
	2	Notification of start-up of operation
	3	Compliance Testing
	4	Recordkeeping
	5	Notification of non-compliance
	6	Notification of change in emissions
	7	Notification of change of ownership
	8	Inspections by EPA
	9	Reporting
	10	Severability
	11	Excess emissions constitute a Violation
Special	1	Allowed emission units and emission rates
	2	New Source Performance Standards (NSPS) Limits for turbine
	3	Fuel requirements
	4	Opacity limits
	5	Continuous Determination of compliance
	6	NSPS compliance testing
	7	Recordkeeping
	8	Reporting

The permittee shall comply with all the applicable requirements of Federal Regulations. In particular, the permittee shall comply with the following:

Table 3: Applicable Regulations
Williams Field Services, Los Mestenios Compressor Station

Citation	Requirement	Comment
40 CFR 71	Federal Operating Permits Program	
40 CFR 60, Subpart A	General Provisions	
40 CFR 60, Subpart GG	Stationary Gas Turbines	
40 CFR 63, Subpart A	General Provisions	
40 CFR 63, Subpart HH	National Emission Standards for HAPs From Oil and Natural Gas Production Facilities	

The information included in the 2003 initial TV permit issued to Williams shows the incorporation of the terms and conditions from the 1996 NSR construction permit. See, 2003 Final Permit and 1996 NSR Permit. This point is reinforced by the language under the Specific Permit Requirements that says "...that for applicable requirements that will become effective during the term of the permit, the Permittee will meet such requirements." Referring to 40 CFR § 71.2(2), Definitions: Applicable Requirement means all of the following as they apply to emissions units in a part 71 source (including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future-effective compliance dates): ...(2) Any term or condition of any reconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act. The provisions that were incorporated by reference in the 2003 initial TV permit indicated in the table above list the emission units and emission rates, i.e., emission limits which were established in the 1996 NSR construction permit. See, 2003 Final Permit and 1996 NSR Permit. These provisions are identified as applicable requirements. Therefore, the emission units and emission limits in the 2003 initial TV permit are identified as applicable requirements. See, 2003 Final Permit.

Below is a copy of the application form submitted by Williams for the initial TV Permit for the Facility. **See, 2003 TV Permit Appl.** In Section G, the Permittee is asked to provide the Source-Wide PTE Restrictions and Generic Requirements. The answer that Williams indicated is "none". Since Williams didn't indicate PTE restrictions, there was none given by EPA in the permit. **See, 2003 Final Permit.** The information provided by the Permittee in an application is used by EPA to draft a permit unless the information from the Permittee contravenes the CAA.

2	application Type
	Instructions: Mark only one permit application type and answer the supplementary question appropriate for the type marked.
	X Initial Permit Permit Renewal Significant Mod.  Minor Permit Mod. (MPM)
	Group Processing, MPM Administrative Amend.
	For initial permits, when did operations commence?11 _/_15/_79
	For permit renewals, what is the expiration date of the existing permit?
	Applicable Requirement Summary
	Instructions: Mark all applicable requirements that apply.
	SIP X PIP/TIP PSD None ttai
	X Minor source NSR X Section 111 Phase I acid rain Phase II acid rain
	Stratospheric ozone OCS regulations NESHAP Sec. 112(d) MACT
	Sec. 112(g) MACTEarly reduction of HAP Sec. 112(j) MACT RMP [Sec.112(r)]
	Tank vessel regt., section 183(f) Section 129 Standards/Regts.
	Consumer/ commercial prod. reqts., section 183(e) NAAQS, increments or visibility (for temporary sources)
	Has a risk management plan been registered? YESX NO Regulatory agency
	Has a phase II acid rain application been submitted? YES X NO Permitting authority
	Source-Wide PTE Restrictions and Generic Applicable Rquirements
	Instructions: Cite and describe (1) any emissions-limiting requirements that apply facility as a whole, and (2) "generic" applicable requirements that apply broadly or identical fashion to all sources at the facility.
one	
	Process Description

Some sources may wish to limit their PTE by accepting voluntary limits to avoid being subject to more stringent requirements. The voluntary limit must be federally enforceable. This is indicated in the definition of "potential to emit" contained in 40 CFR 70.2. There are several mechanisms that will allow sources to adopt federally enforceable restrictions on their PTE. The preamble discussion on voluntary limits in the Part 70 rule for an operating permits program is a useful summary of these approaches.<sup>23</sup>

"...To appropriately limit potential to emit consistent with the opinion in Louisiana-Pacific, all permits issued pursuant to 40 C.F.R. Sections 51.160, 51.166, 52.21 and 51.165 must contain a production or operational limitation in addition to the emission limitation in cases where the emission limitation does not reflect the maximum emissions of the source operating at full design capacity without pollution control equipment. Restrictions on production or operation that will limit potential to emit include limitations on quantities of raw materials consumed, fuel combusted, hours of operation, or conditions which specify that the source must install and maintain controls that reduce emissions to a specified emission rate or to a specified efficiency level. Production and operational limits must be stated as conditions that can be enforced independently of one another. For example, restrictions on fuel which relates to both

<sup>&</sup>lt;sup>23</sup>see "40 CFR 70 Operating Permit Program 32247-32312" AR 14 Doc No 4 (57 FR 32250, 32279, July 21, 1992)

type and amount of fuel combusted should state each as an independent condition in the permit. This is necessary for purposes of practical enforcement so that, if one of the conditions is found to be difficult to monitor for any reason, the other may still be enforced."<sup>24</sup>

Also, in the later promulgated Federal NSR Tribal rules 76 FR 38788 July 1, 2011, at 40 CFR § 49.152 Definitions(d)

Synthetic minor HAP source means a source that otherwise has the potential to emit HAPs in amounts that are at or above those for major sources of HAP in § 63.2 of this chapter, but that has taken a restriction so that its potential to emit is less than such amounts for major sources. Such restrictions must be enforceable as a practical matter.

Synthetic minor source means a source that otherwise has the potential to emit regulated NSR pollutants in amounts that are at or above those for major sources in § 49.167, § 52.21 or § 71.2 of this chapter, as applicable, but that has taken a restriction so that its potential to emit is less than such amounts for major sources. Such restrictions must be enforceable as a practical matter.

Neither the 1996 construction permit, nor the 2003 initial TV permit incorporated additional limitations on the PTE from the listed methods discussed above. **See, 1996 NSR Permit and 2003 Final Permit.** 

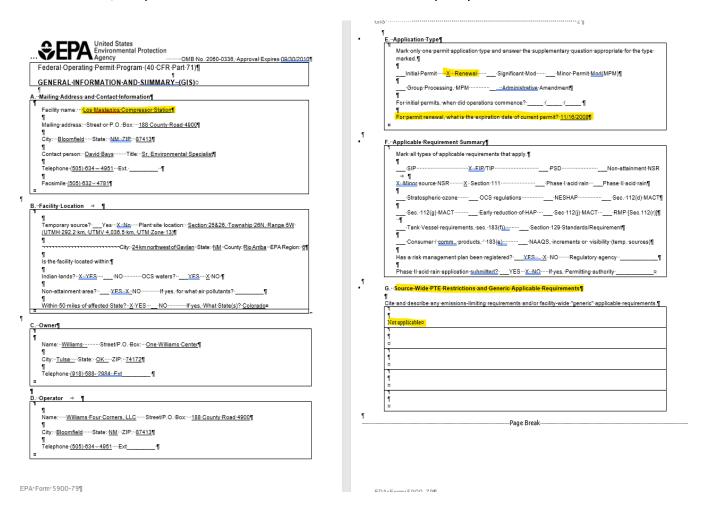
However, Williams did submit changes for the 2003 Final Permit that were not in the 1996 NSR construction permit by submitting revised initial TV permit application forms to address the Facility's undocumented source of emissions. See, 2003 Permittee Comments. A condensate tank (TK-1) and fugitive emissions (F-1) were the emission units added, and the prospective PTE emission rate therefore increased for each emission unit added. Flash emissions from TK-1, which is predominantly VOC, were added which resulted in a significant Total VOC PTE emission increase. The changes to the Facility's process and the resulting permit emission changes did not result in additional MRR requirements for the added emission units to adequately monitor and assure compliance with the emission limits at that time. There were existing MRR and test requirements for the Solar Saturn turbine and Caterpillar IC engine. These MRR and test requirements for the turbine and the engine were present at the time the 1996 NSR construction permit was issued. See, 1996 NSR Permit and 2003 Final Permit. Since Harvest did not comment on existing MRR and test requirements already provided in the NSR and title V permit for the turbine and engine, EPA's RTC is only addressing Harvest's concern pertaining to the added units after the issuance of the 1996 NSR Permit.

<sup>&</sup>lt;sup>24</sup> See, "Guidance on Limiting PTE in NSR permitting\_june13\_89" AR § 14 Doc No 9; "Limiting Potential to Emit in NSR Permitting", June 13,1989; Air Enforcement Division Office of Enforcement and Compliance Monitoring, Terrell Hunt; Stationary Source Compliance Division OAQPS, John Seitz

### C. Background information on the 2009 Part 71 Renewal

EPA received from Williams a permit renewal Part 71 application for the Facility on May 18, 2008. <sup>25</sup> Using this information, EPA developed the draft permit renewal for the Facility. On September 30, 2009, a renewal Part 71 permit was issued to the Permittee. <sup>26</sup> The Facility's Total VOC PTE experienced an emission rate decrease from the 228 tpy, found in the 2003 initial TV permit to 183 tpy, found in the 2009 renewal permit, based upon the Permittee's evaluation with most VOC emissions emanating from the condensate storage tank emissions. **See, 2003 Final Permit and 2009 Final Permit.** The condensate tank 222 tpy VOC PTE that is the emission limit for TK-1 in the 2003 initial TV permit *was reduced* to 176.2 tpy in the 2009 renewal permit, based upon information provided in the Permittee's renewal permit application.

Similar to the 2003 initial TV permit application, the 2009 renewal TV permit application submitted by Williams indicated that no existing PTE restrictions were proposed for the 2009 renewal TV permit. Using this information, EPA drafted and issued the 2009 Final Permit with no PTE restrictions or limitations i.e., the permit emissions limits were at maximum capacity.



<sup>&</sup>lt;sup>25</sup> See, "Williams\_Los Mestenios\_TV\_RenewAppl\_2008" AR § 14 Doc No. 11 (2009 TV Permit Appl)

<sup>&</sup>lt;sup>26</sup> See, "Los Mestenios Final Permit 2009" AR § 9 Doc No 16 (2009 Final Permit)

Table 2: Potential to Emit in Tons per Year (tpy) for Williams Four Corners, LLC, Los Mestenios

Compressor Station

Unit ID.	NOx	voc	SO2	PM10	со	Lead	НАР
1, Solar Saturn 1200 Turbine, NGF	19.3	0.4	Neg.	Neg.	11.4	N/A	0.4
2, Caterpillar G-399-TA, NGF Engine	153	2.9	Neg.	Neg.	107	N/A	0.7
TK-1, Fixed roof storage tank	N/A	176.2	Neg.	Neg.	N/A	N/A	9.3
F-1, FUGVOC	N/A	<mark>3.5</mark>	N/A	N/A	N/A	N/A	0.7
TOTALS tpy	172.3	183	N/A	N/A	118.4	N/A	11.1

Williams submitted the same flash emission calculation results in the 2009 renewal TV permit application that was submitted in the 2003 initial TV Permit application. The flash emissions were estimated using the thermodynamic model HYSIS. The results from the HYSIS model are indicated on a printout included in both the 2003 initial TV application and the 2009 renewal TV applications. The date on the printouts indicates 2002. See, 2009 TV Permit Appl and 2003 TV Permit Appl. Also, a copy of the printout is shown above in the RTC's background discussion pertaining to the 2003 initial permit of this RTC. As a result, EPA concluded that the Permittee's assumption was the condensate concentration remained unchanged from 2003 to 2009. The Permittee didn't indicate in the 2009 TV permit application that a condensate sample was analyzed to make this determination. It is important to note, there are no MRR requirements in the 2003 nor in the 2009 Part 71 permits that compels the Permittee to sample the condensate and have it analyzed on a periodic basis, nor is there MRR requirements that compel the Permittee to use this analysis to calculate flash emissions that more accurately reflects the current operating conditions of the Facility. EPA relies on the permit applications, emission calculations, and supplemental data and information provided by the applicant, in order to ensure that the permit conditions are representative of current facility operations. As stated earlier, adequate MRR requirements for emission units added after the issuance of the 1996 construction do not exist in subsequently issued TV permits. See, 1996 NSR Permit and 2003 Final Permit.

#### D. Background information on the 2017 Part 71 Renewal Permit

On August 8, 2017, a renewal Part 71 permit was issued to the Permittee. <sup>27</sup> This Part 71 renewal permit was developed using information provided by Williams in its 2017 Part 71 renewal application. <sup>28</sup> The Facility's PTE table indicates that the Total VOC PTE emission limitation decreased from the 183 tpy from the 2009 Part 71 renewal permit to 108.9 tpy for the 2017 Part 71 renewal permit with most VOC emissions coming from the condensate storage tanks, due to "repairs that decreased the capacity of the tank" (existing T-1) and another condensate tank being replaced with an overflow tank (T-2) that had only working and breathing emissions added. **See, 2009 Final Permit and 2017 Final Permit.** Since the majority of the Facility's VOC emanate from the condensate tank, it follows that the condensate tank (T-1) VOC PTE estimate decreased from 176.2 tpy in the 2009 Part 71 Final Permit to 86.2 tpy in the 2017 Part 71 Final Permit. <sup>29</sup> **See, 2009 Final Permit and 2017 Final Permit.** 

Williams Four Corners LLC

Los Mestenios Compressor Station

September 2014

#### Section 1

#### **Application Summary**

The WFC Los Mestenios Compressor Station currently operates under Part 71 Title V permit R6NM-04-10-R1M1, issued April 1, 2010. This application is being submitted to renew the Title V permit. No major modifications are being proposed for this renewal.

The Los Mestenios Compressor Station is a natural gas compressor station that accepts produced natural gas gathered from various wellheads from the gas field surrounding the facility, and compresses this gas for delivery to natural gas processing facilities. This is done on a contractual basis.

Under the existing Title V operating permit, the station is currently approved to operate a Solar Saturn T1200 natural gas fired turbine (Unit 1) and a Caterpillar G-399-TA 4SRB RICE (Unit 2), both driving natural gas compressors. The existing permit also includes a 500-bbl condensate storage tank T-1 for which both flashing and working/breathing losses are estimated, a 300-bbl condensate tank, fugitive emissions from valves, flanges, etc. (Unit F-1), fugitive emissions from truck loading losses (Unit F-2) and miscellaneous insignificant emission sources.

In addition to renewing the Part 71 Title V permit, this application proposes to modify emissions for Unit 2, the Caterpillar G-399-TA compressor engine in order to more accurately reflect the unit's Potential to Emit (PTE), in accordance with condition 3.2.4.3 of the Title V permit R6NM-04-10-R1M1. Also, existing startup, shutdown and malfunction (SSM) emissions will be added in this permitting action.

Tank T-1 is an existing tank identified in the current Title V permit as a 500-bbl tank. Repairs have been made to the tank, consisting of the installation of a new floor over the existing leaking floor. These repairs have reduced the capacity of the tank to 490 bbl. Additionally, the existing 300-bbl condensate storage tank was removed in August 2014 with a 400-bbl condensate storage tank T-2 to act as an overflow tank for tank T-1. This will prevent overflows from T-1 during times when haul truck access is limited due to outside factors such as weather and/or road conditions.

<sup>&</sup>lt;sup>27</sup> williams\_four\_corners\_los\_mestenios\_final\_permit080817" AR § 9 Doc No 8 (**2017 Final Permit**)

<sup>&</sup>lt;sup>28</sup> "williams\_four\_corners-los-mestenios-renewal-app-09112014" AR § 9 Doc No 10 (2017 TV Permit Appl).

<sup>&</sup>lt;sup>29</sup> The 2017 TV permit application submitted by the Permittee indicated a change in the emission unit identification (EUI) number for the condensate tank. In the 2009 TV Permit the condensate tank was identified as TK-1, in the 2017 TV Permit, the condensate tank is identified as T-1.

Table 2: Potential to Emit in Tons per Year (tpy) for Williams Four Corners LLC, Los <u>Mestenios</u> Compressor

Unit ID.	NOx	voc	SO2	PM10	со	Lead	НАР
1, Solar Saturn 1200 Turbine, NGF	19.3	0.4	0.2	0.3	11.4	Negl.	0.4
2, Caterpillar G-399-TA, NGF Engine	110.2	2.9	Negl.	0.6.	18.3	Negl.	0.3
3, T-1, Fixed roof storage tank	N/A	84.2	Negl.	Negl.	N/A	N/A	7.9
4, T-2, Fixed roof storage tank	N/A	2.0	N/A	N/A	N/A	N/A	0.4
5, F-1, FUGVOC	N/A	4.5	N/A	N/A	N/A	N/A	0.1
6, MSS	N/A	14.9	N/A	N/A	N/A	N/A	0.5
TOTALS tox	129.5	108.9	0.2	0.9	29.7	Negl.	9.6

## SEPA United States Environmental Protection Agency

OMB No. 2060-0336, Approval Expires 09/30/2010

Federal Operating Permit Program (40 CFR Part 71)

#### INSIGNIFICANT EMISSIONS (IE)

List each insignificant activity or emission unit. In the "number" column, indicate the number of units in this category. Descriptions should be brief but unique. Indicate which emissions criterion of part 71 is the basis for the exemption.

Number	Description of Activities or Emissions Units	RAP, except HAP	HAP
1	IEU -3 - Fuel Gas Heater (0.3 MMBtu/hr)	×	×
1	IEU-4 - Heater (0.3 MMBtu/hr)	×	×
1	IEU-T2 - Condensate Storage Tank (300 bbl)		×
1	IEU-T3 - Produced Water Storage Tank (70 bbl)	x	х
1	IEU-T4 - Lube Oil Storage Tank (500 gal)	x	×
1	IEU-T5 - Used Oil Storage Tank (300 gal)	×	×
1	IEU-T6 - Ambitrol Storage Tank (350 gal)	x	×
1	IEU-T7 - Methanol Storage Tank (500 gal)	x	x

Williams Four Corners LLC

Los Mestenios Compressor Station

September 2014

#### Compressors and Associated Piping (SSM)

Emissions associated with startups, shutdowns and routine maintenance (SSM) from the turbine and engine driving the compressors, and from the associated piping, are vented to the atmosphere.

The VOC, HAP, and greenhouse gas emissions from blowdown of the compressors and piping associated with the facility are calculated from the quantity of gas vented during each event, the composition of the gas, and the number of events. The quantity of gas vented during each event is estimated by Williams. The composition of the gas is based on a recent gas analysis from the facility. The estimated annual number of blowdown events includes an added safety factor because emissions from each blowdown event are dependent on the composition of the gas in the pipeline and the number of blowdowns in a year may vary. Experience indicates the composition of the gas will vary.

The SSM emissions identified in this application are routine or predictable startup/shutdown and scheduled maintenance and do not include malfunctions or upsets.

#### Storage Tanks

Emissions from the condensate storage tank T-1 are calculated using TANKS 4.0.9d for working/breathing losses and using VMGSim for flash emissions. Emissions are calculated using the condensate (post-flash) throughput of 21,000 barrels per year. These emissions have been updated with the new tank capacity as discussed in Section 1 using the VMGSim model, rather than the HYSYS model used in the past (due to expired license). A 10% safety factor has been added to the new results, for a new total that is less than the previously permitted total.

Tank T-2 has been added to the facility to operate as an overflow tank for T-1, and will only have working and breathing losses. Its emissions are conservatively based on the assumption that it will have the same condensate throughput as tank T-1, though the site throughput and truck loadout of 21,000 bbl/yr is unchanged.

Where required, VOC and HAP emissions (working/breathing losses) from the remaining storage tanks are calculated using TANKS 4.0.9d. These tanks are insignificant emission sources as their emissions are less than 2 tpy VOC, each. The following assumptions are made for the emissions calculations:

- The natural gasoline liquid composition identified in HAPCalc 3.0 was used to estimate
  hydrocarbon emissions from the produced water tank (IEU T-3). The tanks are estimated to
  contain 99 percent water and one percent hydrocarbons, with a throughput of approximately 7000
  barrels per year (297,432 gallons) per year, each.
- Residual oil #6 is used to estimate lubrication oil and used lubrication oil emissions from the lube oil storage tank IEU T-4 and the used oil tank IEU T-5.

At the Permittee's request, per the above application summary, the emission unit number TK-1, was changed to emission unit number T-1. See, 2017 TV Permit Appl and 2009 TV Permit Appl. As mentioned above, the application summary indicates the floor of T-1 was replaced which reduced the capacity of T-1 from 500 bbl to 490 bbl, reducing flash emissions, a 300 bbl condensate tank<sup>30</sup> was removed, and a new tank T-2 was added to be used as an overflow tank for tank T-1. See, 2017 TV Permit Appl. As indicated above with T-1 and T-2 operating in series an impact on the emission calculations for the tanks was provided and considered.<sup>31</sup> The summary also states that in the 2017 renewal Part 71 permit action, Williams added *existing* startup, shutdown and maintenance[*sic*]

<sup>&</sup>lt;sup>30</sup> Of note, Williams listed the removed 300 bbl condensate tank as insignificant emission activities in the 2009 Part 71 renewal application. **See, 2009 Final Permit Appl**.

<sup>&</sup>lt;sup>31</sup> See, "AP 42 ch07s01 Organic Liquid Storage Tanks", AR § 14 Doc No. 13: U.S. Environmental Protection Agency. (2020, June). Compilation of air pollutant emission factors, Volume I: Stationary point and area sources (AP-42), Fifth Edition, Section 7.1 (Organic liquid storage tanks) and "ONG\_MethodEstimatingAirEmissions\_Ch.10EmissionInv" AR § 14 Doc No 14; EPA Website: Emission Inventory Improvement Program (Sept 1999) https://www.epa.gov/sites/default/files/2015-08/documents/ii10.pdf

emissions.<sup>32</sup> These SSM or MSS emissions are presented in the Facility's PTE table. **See, 2017 Final Permit.** 

Following the addition of three emission units since the issuance of the 1996 NSR construction permit, the Facility PTE was adjusted to reflect new information submitted as part of the operating permit renewal applications. However, no corresponding MRR requirements were added the Facility's Tittle V permit to assure and demonstrate compliance with the emission limit (PTE) was added for these emission units. **See, 1996 NSR Permit and 2017 Final Permit.** The 2017 Part 71 renewal permit that was issued did not include MRR requirements necessary for compliance assurance for the condensate storage tank, T-1, overflow storage tank, T-2, Fugitive Equipment Leaks, F-1 nor SSM. **See, 2017 Final Permit.** 

The Permittee indicated in the 2017 Part 71 renewal application that the prior EPA accepted thermodynamic model used to calculate flash emissions for the 2009 Part 71 renewal Permit was replaced for the 2017 Part 71 renewal permit, i.e., HYSIS was replaced by VMGSym. There is no MRR requirement that requires the Permittee to select a thermodynamic model or its most recent version, that is approved by the permitting authority. Also, there are no MRR requirements for the Permittee to select a thermodynamic model that is process-specific to assure the accuracy of emissions calculations.<sup>33</sup> See, 2017 TV Permit Appl.

#### E. The 2022 Draft Part 71 Renewal Permit Background

In November 2018 the Facility experienced a change in ownership from Williams to Harvest Four Corners, LLC (Harvest) during the 5-year term of the 2017 Part 71 Permit. 34 On January 21 and on February 14, 2022, the Permittee submitted a Change of Status (COS) and a Tribal Minor NSR Registration for an Existing Source. In the COS submittal, Harvest stated that due to changes in Facility PTE, the Facility was no longer a Part 71 source. Harvest stated that emissions at the Facility had dropped below the Part 71 major source thresholds for several reasons. Harvest communicated these reasons to be, "emission reductions due to an engine replacement that emitted less NOx, and also flash emissions reductions due to both a change in the condensate composition from the two condensate tanks and improvements to the VMGSym model inputs". 35

On January 28, 2022, EPA alerted the Permittee that the status of the Facility was currently a Part 71 source and the deadline for a Part 71 application was February 8, 2022. <sup>36</sup> EPA communicated that submitting a request for COS from a Part 71 source in and of itself does not relieve the source of its

<sup>&</sup>lt;sup>32</sup> SSM means startup, shutdown and routine or planned maintenance emissions. Also, these types of emissions are referred to as maintenance, startup, shutdown (MSS) emission. Both acronyms are used in 2017 Permit action and 2022 Permit action. For the purposes of this RTC, the acronyms are used interchangeably, and are the same type of emissions.

<sup>&</sup>lt;sup>33</sup> See, "TCEQ\_Flash\_Guide" AR 14 Doc No 12: Air Permit Division, TCEQ Rev May 2012 "Calculating Volatile Organic Compounds (VOC) Flash Emissions from Crude Oil and Condensate Tanks at Oil and Gas Production Sites"

<sup>&</sup>lt;sup>34</sup> See, "LosMesOwnerchg2018" AR § 14 Doc. No. 5 (2018 Ownership Change)

<sup>&</sup>lt;sup>35</sup> See the entitled documents "January 21 2022 Los Mestenios (Change Status Letter)", January 21 2022 Los Mestenios (Existing Source Regis)", February 14 2022 Harvest email **REVISED** Change of Status", and "February 14 2022 Los Mestenios **REVISED** Change of Status Letter" AR § 7 Doc Nos 10 through 13 (**2022 Harvest Request COS**).

<sup>&</sup>lt;sup>36</sup> See, AR§ 7 Doc No 15 entitled "January 28 2022 EPA email to Harvest (Los Mestenios is an existing TV Status until it is not" (2022 EPA's Response to Harvest COS).

obligations under the Clean Air Act. EPA, as the permitting authority, is responsible for reviewing all data and information submitted by Harvest and determining the Facility's status based on the information provided by the applicant and in consideration of the historical information available for the Facility (i.e., evidence for a COS). Harvest did not submit adequate information that would support a COS for this Facility. **See, 2022 Harvest Request COS.** 

EPA concluded that Harvest would have had to analyze data before making the COS request and thus the information should have been readily available. Since the evidence requested was also key information necessary for a permit renewal application, EPA believed it was reasonable to expect that Harvest could submit supporting data in a timely manner. For these reasons, EPA requested additional information from Harvest to confirm PTE calculations and sampling and operating data to review and substantiate the proposed change of emissions. See, 2022 EPA's Response to Harvest COS.

On February 4, 2022, Harvest submitted the 2022 Part 71 renewal application. <sup>37</sup> This renewal application failed to provide the operation and sample data of the condensate that had been collected and analyzed that could be used to indicate a trend of flash emission reductions. In addition, EPA identified other key information that was missing relating to critical emissions calculations making it unclear how Harvest was calculating the Facility PTE. EPA determined that the requisite condensate sample analysis results were missing in the application. See, 2022 Original TV Application. The concentration of constituents (i.e., VOC contents) from this analysis is a direct and necessary input for the validation of the VMGSym thermodynamic model that Harvest has indicated it used to calculate flash emissions. Also, it can be seen in the PTE table below, not only are VOC emissions the predominate emissions from this Facility, but the condensate tanks are still a predominant contributor to the Facility's VOC emissions in the 2022 Part 71 renewal application; Harvest cites guidance and technical documents for tank emission calculations that outlines the inputs that are required for these thermodynamic models to be used in calculating emissions. 38 EPA subsequently determined that the submitted Part 71 renewal application was incomplete and provided an Incomplete Determination letter to Harvest on April 5, 2022, which requested a "...complete up-to-date process and operational flow diagram, text description of current operations that delineate any and all changes in equipment or operations since the last permit issued." 39 The process flow diagram and process description text were not up to date. In addition, EPA re-requested information for collected operations and emissions data to substantiate PTE changes that Harvest asserted that had occurred due to concentration changes in the condensate and input improvements to VMGSym. See, 2022 EPA's Response to Harvest COS, 2022 Original TV Application and Harvest Los Mestenios Incompleteness Determination Letter.

<sup>&</sup>lt;sup>37</sup> See "Los Mestenios TV Application\_2.4.22 Original" AR § 9 Doc No 5 (2022 Original TV Application)

<sup>&</sup>lt;sup>38</sup> See, " *TCEQ\_Flash\_Guide*" AR § 14 Doc No 12 (TCEQ\_Flash\_Guide). Although this document is located on TCEQ website, it is a compilation of technical information. The federal, state and local permitting authorities were cited within the document and Harvest cited as resources for the emission calculations in renewal application.

<sup>&</sup>lt;sup>39</sup> See "Harvest Los Mestenios Incompleteness Determination Letter" see AR § 7 Doc No 2 (**2022 Incomplete Determination**),

United States Environmental Protection Agency

OMB No. 2060-0336, Expires 11/30/2022

Federal Operating Permit Program (40 CFR Part 71)
POTENTIAL TO EMIT (PTE)

For each emissions unit at the facility, list the unit ID and the PTE of each air pollutant listed below and sum the values to determine the total PTE for the facility. It may be helpful to complete form EMISS before completing this form. Report each pollutant at each unit to the nearest tenth (0.1) of a ton; values may be reported with greater precision (i.e., more decimal places) if desired. Report facility total PTE for each listed pollutant on this form and in section J of form GIS. The HAP column is for the PTE of all HAPs for each unit. You may use an attachment to show any pollutants that may be present in major amounts that are not already listed on the form (this is not common).

	Regulated Air Pollutants and Pollutants for which Source is Major (PTE in tons/yr)						
Emissions Unit ID	NOx	voc	SO2	PM10	со	Lead	НАР
1	19.3	0.4	0.2	0.3	11.4	0.0	0.5
2	19.2	12.8	0.0	0.4	33.9	0.0	2.3
3	0.8	0.1	0.0	0.1	0.2	0.0	0.0
T1		52.8					3.7
T2		2.8					0.2
F1		4.8					0.1
SSM		16.1					0.5
		_					
FACILITY TOTALS:	39.6	91.12	0.2	0.8	45.7	0.0	7.3

EPA Form 5900-85

#### I. Emission Unit Identification

Assign an emissions unit ID and describe each emissions unit at the facility. Control equipment and/or alternative operating scenarios associated with emissions units should by listed on a separate line. Applicants may exclude from this list any insignificant emissions units or activities.

Emissions Unit ID	Description of Unit					
1	Solar Saturn 1200 Turbine					
2	Waukesha L7042GL Engine					
3	Scania DS11 Diesel Engine					
T1	490 bbl Condensate Storage Tank					
T2	400 bbl Condensate Storage Tank					
F1	Piping Component Fugitive Emissions					
SSM	Startup, Shutdown & Maintenance					

EPA Form 5900-79

The summary below is provided to clarify the changes from the initial application that occurred to demonstrate the variability in Harvest's responses to EPA's request for clarity during the permit application processing for the current permit action.

On April 14, 2022, Harvest responded to EPA's 2022 Incomplete Determination letter. 40 This response did not provide EPA with the information and data EPA had requested. Harvest failed to provide an upto-date process flow diagram and process description. The process flow diagram included in the response still included an out-of-service engine. Also, the process flow diagram indicated a pig launcher and pig catcher that was not included in the process description as an emission unit. Since there was also no mention of this unit in past permit actions, the emission unit appeared to be an undocumented emission unit. Ultimately, Harvest's response did not provide sufficient information to support their claim that condensate concentration changes were consistently resulting in flash emission reductions over the preceding term of the current 2017 Part 71 permit. Harvest stated in this response that propane (C3) and butane (C4) make up most of the flash emissions from the condensate tanks, and since C3 and C4 was decreased over the two samples collected, flash emissions were decreasing, resulting in an overall decrease in the Facility PTE emissions. Harvest did not provide a technical basis to support this claim. Harvest provided only two samples collected and analyzed in 2017 and 2021 and said that these two samples were indicative of a decrease in propane and butane composition in the condensate. However, two sample analyses are not sufficient to substantiate a trend over the five-year permit term, and without a rationale for why the condensate makeup would change. Also, the Harvest response failed to provide the specific inputs improvements to VMGSym that Harvest credits as flash emission reduction. 41 See, 2022 TV Original Application and 2022 Harvest Response to Incomplete Determination Letter.

On July 27, 2022, EPA met with Harvest, EPA re-requested a complete and up-to-date process and operational flow diagram with labeling all input and outputs to Facility and an up-to-date process description to include all current equipment authorized to operate under the final permit. EPA again requested condensate analysis results because the two sample results provided previously were insufficient to support the claims made. **See, 2022 Harvest Response to EPA Incompleteness Letter**. EPA again requested that equipment and pipeline on the diagram indicate operating parameters, i.e., temperatures and pressures. EPA requested that Harvest confirm all equipment present at the site by providing pictures with visible nameplate with serial numbers. EPA asked Harvest to confirm that the equipment count for equipment leaks was an actual recent inventory of valves, flanges, seals, etc. This equipment count is used to calculate fugitive emission (F1).<sup>42</sup> EPA asked Harvest to confirm if a pig launcher and pig catcher exists at the Facility and to update the process flow diagram, process

<sup>&</sup>lt;sup>40</sup> See, "April 14 2022 Harvest to EPA attachment (Response to incompleteness letter)" see AR § 6 Doc No 20 (**2022 Harvest Response to Incomplete Determination Letter**)

<sup>&</sup>lt;sup>41</sup> EPA did not receive a fully responsive answer from Harvest until Harvest submitted the 2nd revision to **2022 Original TV Application** on December 1, 2022,

See "Los Mestenios TV Application 12.1.22 Rev 2" AR § 5 Doc No 1 (2022 Part 71 Appl Rev 2). In the Dec 1, 2022, renewal application, Harvest provides a response that addresses this question by stating "Harvest was referring to conducting the modeling internally (rather than using an outside consultant) and also using actual data from their operation of the facility rather than data Williams may have been using." A copy of the application page is on page 53 of 88 of this RTC. Harvest acknowledges that using actual operating data in the model improves emission calculations, however this not requirement of their current permit. Note, the MRR requirements in the draft permit and final permit action accomplishes the same by now requiring that Harvest to demonstrate compliance with emission limits employing the calculation methodology provided by Harvest using actual operating data as the inputs. See, Harvest Los Mestenios Final Permit

<sup>&</sup>lt;sup>42</sup> See, "Aug 17 2022 Clarification Questions from July 27 Meeting" AR § 6 Doc No 29 (**EPA Clarification Questions from July 27**) and See, AR § 6 Doc Nos 1 through 30, Doc. No. 32 and Doc Nos 33 through 37. (**Harvest Response to Facility Questions**) for all individual documents in the Harvest response from the July 27, 2022, meeting.

description and emission unit list and emissions calculations accordingly. Harvest's revelation of this undocumented equipment led to additional questions that EPA communicated on August 5, 2022. <sup>43</sup>

On August 17, 2022, Harvest communicated they would be re-submitting a revised application on September 1, 2022. <sup>44</sup> The revised renewal application<sup>45</sup> would contain several significant changes that impacted previously calculated emission calculations. **See, 2022 Part 71 Appl Rev 1.** The changes are highlighted below:

- Harvest said that the April 2021 condensate analysis results used in the model to
  calculate flash emissions in the original renewal application was *incorrect*. See, 2022
   Original TV Application. The analysis indicated a percentage of components missing and
  the modeler assumed the missing percentages were water, when actually the
  components were heavier constituents.
- Harvest removed the request to replace the existing Caterpillar engine with a Waukesha Reciprocating Internal Combustion Engine (RICE). The previously calculated emissions for this engine would no longer be present.
- Harvest added pig launching and pig receiving as an emission unit and provided calculated emissions.
- Condensate Storage Tank (T1) working and breathing emissions and Truck Loading (L1) emissions would change. Harvest initially indicated T1 had a capacity of 490 barrels. The nameplate of the tank shows that the capacity is actually 400 barrels. The TANKS 4.0 model for T1 was re-run which affects both T1 and L1 emissions.
- Tank Heater (Unit 5) emissions will decrease. Harvest initially indicated that this unit was rated at 0.3 MMBtu/hr. The nameplate shows that this unit is actually rated at 12,000 Btu/hr or 0.012 MMBtu/hr.

In the August 17 response, Harvest re-submitted another process flow diagram. This process flow diagram failed to address EPA's requests from the April 5 incomplete determination letter, the July 27 meeting discussions and EPA's follow-up communication on August 5. See, Harvest Los Mestenios Incompleteness Determination Letter and August 5, 2022 EPA Key points. The process flow diagram had not been updated and still indicated out of service equipment. See, Aug 17 2022 Harvest Email Summary of New Changes. In the August 17 response, Harvest also failed to provide sufficient evidence to support the assertion that the Facility was no longer a major Part 71 source due to flash emission reductions resulting from both changes to the constituent concentrations in the condensate and input improvements to the VMGSym thermodynamic model used to calculate flash emissions. Harvest failed to provide supporting evidence that the reduction of C3 and C4 constituents attributed to lower flash emissions for this Facility. EPA had requested this information from Harvest in multiple communications from January 21, 2022, through August 5, 2022. See, 2022 Harvest Request COS, 2022

<sup>&</sup>lt;sup>43</sup> On August 5, 2022, EPA sent a confirmation email with the action items that were discussed during the meeting. In addition, EPA set up a FTP to facilitate the transfer of requested information. See, "August 5 2022 EPA email Key points July 27 2022 meeting" See AR § 7 Doc No 5. (August 5, 2022 EPA Key points) and "July 27 2022 EPA creates a FTP for Harvest Los Mestenios" AR § 7 Doc No 18. (July 27 2022 EPA FTP Created)

<sup>&</sup>lt;sup>44</sup> See "August 17 2022 Harvest email Summary of New Changes to Los Mestenios Applic" AR § 6 Doc No. 30 (Aug 17 2022 Harvest Email Summary of New Changes).

<sup>&</sup>lt;sup>45</sup> See "Los Mestenios TV Application 9.1.22" AR § 9 Doc No 6 (2022 Part 71 Appl Rev 1)

EPA's Response to Harvest COS, 2022 TV Original Application, 2022 Harvest Response to Incomplete Determination Letter, 2022 EPA Key points, and EPA Clarification Questions from July 27.

In the August 17 response, Harvest only provided four sample analysis results for 2017, 2018, 2019 and 2021.46 The results from these sample analyses were not indicative of a downward trend to support Harvest's claims of flash emission reductions. Also, Harvest's response failed to provide sufficient information regarding component count for Fugitive (F1) equipment leak detection. This is a contributor to the Facility's VOC PTE. Harvest did not use a recent actual count at the Facility, but relied on an estimate based on another facility that it owns<sup>47</sup>. The Harvest response also failed to provide sufficient information regarding the emissions that are calculated for the pigging operation at the Facility. See, 2022 Original TV Application, EPA Clarification Questions from July 27. The pigging activities for this Facility were not documented in the original Part 71 renewal application submitted February 4, 2022, nor documented in prior Facility permit actions. See, 2022 Original TV Application, 1996 NSR Permit, 2003 TV Permit, 2009 TV Permit, 2017 TV Permit. Therefore, EPA requested, and Harvest provided a revised process description that included the operation of the pigging operation for the current permit renewal. See, EPA Clarification Questions from July 27 and 2022 Part 71 Appl Rev 1. However, Harvest still failed to provide sufficient information on the calculation methodology employed to calculate emissions from the pigging operation since they categorized the emissions from the pigging operations as insignificant emission activities per 40 CFR §71.5(11). <sup>48</sup> Lastly, Harvest provided insufficient responses to EPA's requests to provide detailed explanation on how the emissions are calculated for the emission units that are a part of the Facility's PTE. EPA relies on the emission calculations and operation data provided by the applicant to draft a permit. Harvest failed to provide information regarding what operating parameters are used as inputs for the calculation methodology as well as providing the actual calculation methodology in the permit application.

<sup>&</sup>lt;sup>46</sup> See, "Los Mestenios Compressor Station Condensate Compositions 2017-2021" AR § 6 Doc No 6 (Condensate Composition 2017-2021).

<sup>&</sup>lt;sup>47</sup> For an existing facility's permit renewal application, site-specific data should be available without relying upon another facility as a surrogate. An accurate emission level must be calculated to determine MMR for compliance demonstration for this emission unit. According to 40 CFR § 71.5, the Part 71 application for a source should identify and include emission units and emission rates located at the source.

<sup>&</sup>lt;sup>48</sup>Historically, pigging operation have emitted large amount of VOC emissions from similar source category natural gas processes that employ pigging operations. For this reason, EPA must evaluate the calculation methodology Harvest employs emission from pigging activities. See, "NG\_PiggingAirEmissions\_NOGC\_Dec12\_09) AR § 16 Doc No 14"; EPA Presentation for NOGC December 12, 2019 "Air Emissions from Natural Gas Pipeline Pigging Operations"

See, NG\_Enforcement\_Violation\_\_Pigging\_0919" AR §14 Doc No 17; Enforcement Alert, Publication No. EPA 325-F-19-001, Sept 12019, See EPA webpage: Pipeline Pigging launching and receiving: <a href="https://www.epa.gov/natural-gas-star-program/pipeline-pig-launching-and-">https://www.epa.gov/natural-gas-star-program/pipeline-pig-launching-and-</a>

<sup>&</sup>lt;u>receiving#:~:text=During%20pigging%20operations%2C%20the%20pig,is%20trapped%20in%20a%20receiver</u> and <a href="https://www.epa.gov/sites/default/files/2019-09/documents/naturalgasgatheringoperationinviolationcaa-enforcementalert0919.pdf">https://www.epa.gov/sites/default/files/2019-09/documents/naturalgasgatheringoperationinviolationcaa-enforcementalert0919.pdf</a>

See, "VaporRec\_Pipeline Pigging\_July-23-2008" AR 14 § Doc No 15; Vapor Recovery and Gathering Pipeline Pigging, Lessons Learned from Natural Gas Star, Producers and Processors Technology Workshop Midland Texas July 23, 2008, <a href="https://19january2021snapshot.epa.gov/sites/static/files/2017-07/documents/midland3\_2008.pdf">https://19january2021snapshot.epa.gov/sites/static/files/2017-07/documents/midland3\_2008.pdf</a>
See, "ONG\_MethodEstimatingAirEmissions\_Ch.10EmissionInv" AR § 14 Doc No 14; EPA Website: Emission Inventory Improvement Program (Sept 1999): <a href="https://www.epa.gov/sites/default/files/2015-08/documents/ii10.pdf">https://www.epa.gov/sites/default/files/2015-08/documents/ii10.pdf</a> See, EPA Website: <a href="https://www.epa.gov/natural-gas-star-program/methane-mitigation-technologies-platform">https://www.epa.gov/natural-gas-star-program/methane-mitigation-technologies-platform</a> , Methane Mitigation Technologies Platform

Based on Harvest's insufficient responses, EPA determined the reason for Harvest's inability to provide substantiation for their proposed changes was due to a lack of monitoring, recordkeeping and reporting. EPA was unable to verify basic facts regarding the Facility's emissions, that is necessary to fulfil EPA's statutory obligations to ensure that each title V permit contains "enforceable emission limitations and standards" supported by "monitoring...requirements to assure compliance with the permit terms and conditions." See, 42 U.S.C. § 7661c(a) and (c). EPA determined that for future renewal applications, Harvest should be required to use the "worst-case" scenario sample analysis results with the highest VOC content, within the 5-year term of the permit, in order to ensure the highest flash emission calculations would be used to calculate the Facility's PTE. This approach provides a more conservative basis for the Facility's PTE based upon the infrequent sampling of condensate (i.e., not always even annual samples were collected). The 2022 Original Part 71 application used the sample analysis results from the most recent sample collected, as opposed to using the sample analysis from the 5-year term of the permit that would result in the highest VOC content for flash emission calculations. <sup>49</sup> See, 2022 Original TV Application. The original application did not include a copy of a condensate analysis; it only included an inlet gas analysis which is not the analysis results Harvest indicated were used to calculate emissions from the condensate storage tanks. EPA relies on the permit application and the supplemental information provided by the applicant to be representative of facility operations, but if insufficient samples are collected EPA cannot ascertain the representativeness of the sampling data. EPA's must ascertain that verifiable and reliable data is utilized as inputs to the calculation methodology for determining emissions limits in a manner that assures compliance with requirements of the CAA.

On September 8, 2022, EPA communicated to Harvest a list of these outstanding questions in a letter. EPA communicated that given the expiration of the current permit, if Harvest wanted to still pursue a Part 71 Permit, they would need to submit a new initial Part 71 Permit application. EPA stated in the letter that Harvest submitted a renewal application on February 4, 2022. See, 2022 Original TV Application. The submitted application was to renew the current 2017 Part 71 permit which expired on August 8, 2022. See, 2017 Final Permit. EPA found the renewal application to be incomplete and an incompleteness determination letter was emailed to Harvest on April 5, 2022. See, 2022 Incomplete Determination. The September 8 letter communicated the new initial application should incorporate answers to all outstanding questions, all the corrected information from the original 2022 Part 71 renewal application and the subsequent supplemental information provided by Harvest, including changes Harvest submitted to the project scope and facility equipment on August 17, 2022, and the revised renewal application Rev 1 submitted September 1, 2022. See, Aug 17 2022 Harvest Email Summary of New Changes and 2022 Part 71 Appl Rev 1.

<sup>&</sup>lt;sup>49</sup> Some factors EPA considered for this determination: Harvest's inability to provide sufficient sample data to indicate a trend supporting changes to the condensate concentrations. Second, Harvest indicating that the condensate sample results are used as inputs to the thermodynamic model and not including a copy of sample results in the original renewal application. See, **2022 Original TV Application.** Third, Harvest reported the April 2021 condensate analysis results used in the VMGSym model to calculate flash emissions in the original renewal application was incorrect. Lastly, the Facility's PTE calculation should be based on inputs that will provide results with the highest potential VOC content.

<sup>&</sup>lt;sup>50</sup> See, "Sept 8 2022 EPA New Initial Part 71 Letter" AR § 7 Doc No. 26 (Sept 8 2022 EPA New Initial Part 71 letter) and "Sept 8 2022 Enclosure Letter Renewal Status" AR § 7 Doc No 24 (Sept 8 2022 Enclosure)

On September 13, 2022, EPA met with Harvest to discuss the September 8 letter. See, Sept 8 2022 EPA New Initial Part 71 letter and Sept 8 2022 Enclosure. In addition, on September 13, Harvest sent a letter in response to EPA's position communicated in the agency's September 8 letter. <sup>51</sup> Harvest requested EPA to withdraw the September 8 letter and continue working with Harvest to process the renewal permit as is. Harvest states that as long as a facility submits a "timely and complete" renewal application, EPA regulations provide a source with an application shield that extends the expiration date of the existing permit while the application is being processed. Harvest states the application shield is intended to allow sources to engage with EPA in an iterative process to ensure until EPA has the information for a defensible Part 71 permit.

On September 29, 2022, EPA responded to Harvest's September 13 letter. <sup>52</sup> The letter communicated EPA's position was the same as stated in EPA's September 8 letter. **See, Sept 8 2022 EPA New Initial Part 71 letter.** EPA stated:

"...Harvest failed to submit a *timely and complete* renewal application consistent with 40 CFR §§ 71.7(b). if Harvest wishes to proceed with obtaining a Part 71 permit, we emphasize again that a new initial permit application will need to be submitted. EPA will work with Harvest to expedite the processing of this new initial Part 71 permit application for the Facility as soon as it is received. The information previously submitted by Harvest (including all changes made to the original renewal application) can be concisely resubmitted as part of a new initial permit application for EPA to develop a title V permit for public comment. The supporting information that EPA requested was information necessary to substantiate the emissions assertions made in only general terms within the application, and should have been already available since Harvest would have needed to analyze such emissions in detail prior to submitting the renewal application, specifically:

- A detailed process description identifying all components of the Facility, including the pigging activities.
- A complete process flow diagram that follows the above description with labeled inputs and outputs. Remove any representation of out of service equipment.
- Operating pressure of the equipment and the pipeline.
- Historical condensate analysis indicating and supporting the assertions of composition changes.
   How can condensate composition changes be evaluated if there is no comparison and supporting data?
- Explanation of how tank emissions are calculated and derived, i.e., emission calculation methodology, emission factors, assumptions, changes from past modeling methods and rationale for the specific use of different modeling protocols being used, i.e., VMGSym and Tank4.09d. How can PTE calculations and the decreases in emissions asserted be evaluated without understanding the Facility's current process operations and overall material balance resulting from changed throughput?
- Confirmation of a complete and current equipment leak component count. Harvest provided an
  equipment leak component count using Sim Mesa Compressor Station, another compressor
  station that Harvest owns and operate, instead of equipment leak component count for the

<sup>&</sup>lt;sup>51</sup> See, "Sept 13 2022 Harvest Letter Resp to EPA" AR § 7 Doc No 27 (Sept 13 2022 Harvest Resp to EPA).

<sup>&</sup>lt;sup>52</sup> See, "Sept 29 2022 EPA 2nd letter Renewal Status" AR § 7 Doc No 30 (Sept 29 2022 EPA 2<sup>nd</sup> Letter)

Facility that this permit is authorizing to operate. The equipment component count is used to calculate fugitive (F-1) VOC PTE for equipment leaks. See, **2022 Original Part 71 Application** and **2022 Part 71 Appl Rev 1.** 

 Methodology used for estimating worst-case emissions from pigging activities (i.e., specific calculational method with example equations specific to the Facility).

On October 13, 2022, Harvest filed a petition for review with EAB.<sup>53</sup> EPA and Harvest met again on October 24, 2022, to discuss the EAB petition and the outstanding questions that still required Harvest's response for a draft permit to be processed. The meeting resulted in EPA rescinding EPA's September 8, 2022, letter and Harvest filing a dismissal of the EAB petition.<sup>54</sup> See, Sept 8 2022 EPA New Initial Part 71 letter. However, Harvest's management committed to cooperate with EPA in submitting all outstanding information as documented in EPA's September 8 letter. Harvest submitted the 2<sup>nd</sup> revision to 2022 Original Part 71 Application on December 1, 2022.<sup>55</sup>

Table 4: Facility PTE for Each Regulated Emission Unit

	NOx	VOC	SO2	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	HAP
Unit ID No.	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
1, Solar Saturn 1200							
Turbine natural gas-fired	19.30	0.40	0.16	0.31	0.31	11.40	0.45
3, Scania DS11 Diesel fuel							
fired Emergency Generator							
Engine	0.76	0.06	0.05	0.05	0.05	0.16	Negl
T1, Condensate Storage							
Tank		115.61					12.53
T2, Condensate Storage							
Tank		4.97					0.71
F1, Fugitive Emissions		3.85					0.11
L1, Condensate Truck							
loading		2.49					0.36
SSM, Startup, Shutdown,							
Maintenance		11.88					0.34
Facility PTE	20.06	139.26	0.21	0.36	0.36	11.56	14.5

The revised renewal application Rev 2 submitted by Harvest included the above information emission limitations for the emission units that comprise the Facility's PTE. **See, 2022 Part 71 Appl Rev 2.** The Facility's PTE was calculated using the condensate sample analysis that would yield the higher flash emissions. In addition, the Condensate Truck loading (L1) had been added to emission units with PTE above insignificant threshold limits.

On May 10, 2023, EPA re-requested that Harvest provide a revised process flow diagram since the one provided in the revised renewal application Rev 2 was insufficient. EPA again requested a diagram for the Facility that identifies the emission units with EUI numbers consistent with the equipment list that was provided in revised renewal application Rev 2. See, 2022 Part 71 Appl Rev 2. EPA also requested that Harvest provide a revised process description that utilize the same EUI numbers. The nomenclature and EUI for the equipment should be consistent throughout the document. The EUI numbers in the equipment list, process flow diagram and process description should coincide and agree to facilitate understanding and connectivity of the information provided. In the email request to

<sup>&</sup>lt;sup>53</sup> See, "Oct 13, 2022 Petition for Review" AR § 7 Doc No 20 (Oct 2022 Harvest EAB Petition)

<sup>&</sup>lt;sup>54</sup> See, "Nov 2 2022 Joint Motion for Dismissal" AR § 14 Doc No 18 (EABDismissal\_Nov2\_2022)

<sup>&</sup>lt;sup>55</sup> See, "Los Mestenios TV Application 12.1.22 Rev 2" AR § 5 Doc No 1 (2022 Part 71 Appl Rev 2)

assist Harvest, EPA provided a copy of the inconsistent information. On May 11, 2023, Harvest provided this revised information.<sup>56</sup>

On May 12, 2023, EPA requested confirmation of the new serial number provided for the Solar Saturn Turbine (1) and Condensate Storage Tank (T1) by Harvest since the serial number provided did not match the serial number for this equipment in the current permit. **See, 2017 Final Permit.** Harvest provided clarification and confirmation on May 12 that the serial numbers for these units were accurate. For the Solar Turbine, the serial number in the current permit was the skid serial number and the serial number for the actual unit was provided in the revised renewal application Rev 2. <sup>57</sup> See, **2022 Part 71 Appl Rev 2.** This clarification provided by Harvest was documented in the draft permit by including two serial numbers associated with the Solar Turbine.

On June 14, 2023, EPA requested clarification on the operational design limits for the Solar Turbine and the maximum throughput for the Facility. In the revised renewal application Rev 2, the listed maximum fuel use is 105.51 MMscf and supplemental documentation provided by Harvest states that the Facility has an operational design limit of 20 MMSCFD. See, 2022 Part 71 Appl Rev 2. Also, the revised renewal application Rev 2 shows that Harvest used 22,141 barrels per year (bbl/yr) as input to the thermodynamic model for maximum condensate throughput to calculate emissions from the condensate storage tanks for the calculation of Facility PTE. See, 2022 Part 71 Appl Rev 2. Harvest responded on June 14, 2023, that the 20 MMSCFD is the maximum amount of gas that the turbine can compress. It is a modeled parameter but not used to calculate emissions. 58 They also indicated that the maximum fuel used, 105.51 MMscf, determined the emissions from the Solar Turbine since this is the amount of gas being combusted. The maximum condensate throughput depends on the composition of the material and Harvest also stated that the Facility does not have control of the composition of the condensate material. Harvest stated that 22,141 bbl/yr was used as the maximum condensate throughput to calculate PTE in previous Facility permit actions. This information was confirmed by EPA. See, 2017 TV Permit Appl. Harvest indicated in this response their decision to continue with using 22,141 bbl/yr as the maximum condensate throughput to calculate PTE since Harvest said it is "conservative considering the 22,141 bbl/yr is more than 13,000 barrels/yr of the rolling 12 month average the Facility has seen since 2017".59

<sup>&</sup>lt;sup>56</sup> See,"May 10 2023 Updated Los Mestenios Process Flow diagram", "May 10 2023 Updated Routine Operations Description On May 12, 2023", and "May 11 2023 Updated Process Flow and Operation Description", see AR § 6 Doc No 19 through 21 (2023 Revised Process Flow and Descrip)

<sup>&</sup>lt;sup>57</sup> See, "Los Mestenios Solar Saturn Turbine Serial Number Confirm" AR § 6 Doc No 10 (Confirm Solar Turbine and T1 Serial Number).

<sup>&</sup>lt;sup>58</sup> see "Los Mestenios Maximum Facility Throughput" AR § 6 Doc No 7 (Max Turbine Compress)

<sup>&</sup>lt;sup>59</sup> See, "June 14 2023 Los Mestenios Operational Design Throughput Question" AR § 6 Doc No 33 (Confirm Facility Operational Design)

 From:
 Oakley Hayes

 To:
 LeDoux, Erica

Subject: RE: [EXTERNAL] Los Mestenios Operational Design Question

Date: Wednesday, June 14, 2023 2:39:25 PM

ttachments: image001.png

image002.pr

Hi Erica.

That 20 MMscd you reference is just the maximum amount of gas that the turbine can compress. This is a modeled parameter but is not used for any emission calculations. What you have highlighted below is the maximum fuel use, which is what is used to determine the emissions for the unit since this is the amount of gas that is actually being combusted.

The maximum condensate throughput would be dependent on the composition of the material that is sent to the facility. Harvest elected to leave this number the same as what was used and approved in the previous Title V renewal permit application (22,141 barrels) in an effort to simplify the permitting process. This is a very conservative figure, as it is over 13,000 barrels more than the highest 12-month rolling total that the facility has had since 2017 and is over 4,000 barrels more than what would be calculated using the maximum average daily throughput for the same time period. Because there is no NSR permit in place for this facility, and because Harvest has no control of the composition of the material that is sent to the facility, there is no true limit on the condensate throughput.

From: LeDoux, Erica <LeDoux.Erica@epa.gov>
Sent: Wednesday, June 14, 2023 4:42 AM
To: Oakley Hayes <Oakley.Hayes@harvestmidstream.com>
Subject: [EXTERNAL] Los Mestenios Operational Design Question

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Hi Oakley,

Clarification Question

I couldn't find in the renewal application the 20 MMSCFD operational design limit that was mentioned in Harvest response to EPA. How and where is this calculated? Is not the maximum condensate throughout 22.141 barrels/year? — Thanks Erica

### APPLICATION REVIEW COMMENTS {permit name/no ref}

Page 7 of 8

year to year. Again, Harvest has no contracts that specify the amounts or constituents of material that can be sent to the facility. It has an operational design limit of approximately 20 MMsef/day based on its current configuration. There are no plans on changing anything at the site that would result in an increase in throughputs. Any such changes that would result in an emissions increase or that would result in an increase above the model inputs in the application would be required to be approved by EPA through the NSR program prior to construction.

- Harvest stated that it is common for the concentrations of the condensate transferred from a well to change over time. Provide information on other Harvest facilities or same type facilities that can be used to support the assertions that have been made for this project if site-specific data is not available (e.g., contracts with upstream facilities providing the material processed at Los Mestenios facility)
  - Please see the Los Mestenios Compressor Station Condensate Compositions
     2017-2021 for site-specific data related to condensate composition over the last
     five years. This document shows how the condensate has changed at the facility
     since 2017.
- Harvest has stated that sampling only occurs "as needed" and no more frequently than once per year. Is this condensate sample retrieved at the same time of year? Are there seasonal changes in material coming into the site? Would the constituents in the sample that is collected in Nov/Dec be different than a sample collected in June/July? Would the sample profile be different? Is there a seasonal effect on flash emissions from the condensate tanks? Is there more flashing in the condensate tanks in the summertime?
  - There is some variability with the amount of material that comes into the site during the different seasons. The sample constituents are the same regardless of the time of year. A condensate sample profile has the potential to change from month to month and year to year, but with sampling occurring on an annual basis, we get a good picture of what material is being collected at the facility. Harvest typically has condensate samples taken during the winter months when liquid flows are higher. With the higher flows, Harvest feels that these samples give us the most conservative estimate for emission modeling, as they also contain the highest amount of C3 and C4 constituents.
  - There are higher flash emissions from the tanks during the summer months with the higher temperatures and lower flash emissions from the tanks during the winter months with the lower temperatures. This is accounted for in the emission model by using average annual temperatures for the local geographic area.

EPA notes in Harvest's response above that the Facility *does not have control of the composition of the condensate*. Harvest also responded to previous questions similarly concerning the variability and inconsistency of the condensate composition and throughput. See, 2022 Response to Incompleteness Letter, EPA Clarification Questions from July 27 and Confirm Facility Operational Design. The variability and inconsistency of this material underscores the need for MRR requirements consisting of actual operating parameters which are used as inputs to the calculation methodology for demonstration of compliance with emission limits. See, 2022 Part 71 Appl Rev 2.

On July 26, 2023, to verify throughput information, EPA requested that Harvest confirm the sources of condensate throughput by identifying the well sites upstream of the Facility that are owned and operated by Harvest within a ¼ radius of the Facility. A single source determination discussion is included in the *Statement of Basis* for the draft permit that was available for public comment. <sup>60</sup> Harvest provided this information in the previous renewal permit action for the existing 2017 Part 71 Permit, and EPA requested an update to verify the status of Facility and that surrounding well sites remained unchanged with no share interrelatedness. <sup>61</sup> Harvest responded on August 23, 2023. <sup>62</sup>

As stated previously, EPA relies on the permit applications, emission calculations, and supplemental data and information provided by the applicant, in order to ensure that the permit conditions are representative of facility operations. During the drafting of the current Part 71 draft permit, EPA requested and re-requested information from Harvest between January 28, 2022, and through July 26, 2023. As presented earlier, EPA concluded that Harvest's inability to address questions concerning the proposed decreases to the PTE for the Facility and the rationale for the employed thermodynamic model protocols was due to the lack of collected operations and emissions data because there are no MRR requirements in the current 2017 Part 71 Permit. See, 2017 TV Permit, Harvest Los Mestenios Draft Permit and Harvest Los Mestenios Final Permit. Therefore, EPA added appropriate MRR requirements to the draft Part 71 renewal permit to ensure practically enforceable permit provisions, based upon current Facility operations for emission units existing at the Facility and represented by the Permittee in their renewal permit application. The AR of this draft Part 71 permit and its *Statement of Basis* supports this statement and the RTC contains citations to these relevant documents that substantiate this conclusion. See, 2023 Statement of Basis.

On Wednesday, August 30, 2023, EPA provided a courtesy copy of the draft Part 71 renewal permit for Harvest to review for accuracy and to provide feedback with a deadline for comments by Wednesday, September 6. 2023, with a target date of Wednesday, September 13, 2023, for the public notice. <sup>63</sup> See, **Harvest Los Mestenios Draft Permit.** On August 30, Harvest acknowledged receipt of draft Part 71 renewal permit. However, on September 5, 2022, Harvest responded they had quite a few comments and would prefer to address on record and would respond at public notice. On September 6, 2023, Harvest sent another email that indicated a change of thought that they would like to go ahead and

<sup>&</sup>lt;sup>60</sup> See, "Harvest Los Mestenios Part 71 draft Statement of Basis" AR § 2 Doc No 1 (2023 Statement of Basis)

<sup>&</sup>lt;sup>61</sup> See, "Williams Response to EPA for Aggregation\_020217" AR § 6 Doc No 26 (2017 Williams Source Determination)

<sup>&</sup>lt;sup>62</sup> See "Aug 23, 2023 Los Mestenios Source DeterminationQuestion" AR § 6 Doc No 31 (**2023 Harvest Source Determination**).

<sup>&</sup>lt;sup>63</sup> See, "August 30 2023 Harvest Review of Draft Los Mestenios Permit" AR § 8 Doc No 1 (EPA Email Courtesy Copy of Draft)

Page 43 of 87

submit comments; however, Harvest respectfully requested an extension for review.<sup>64</sup> Harvest's email also included an attached letter which a copy has been provided below. Harvest indicated in this attachment that EPA appeared to have exceeded the scope of authority under title V and 40 CFR Part 71.<sup>65</sup>

On September 7, 2023, EPA responded that we would take another look at the draft Part 71 renewal permit, in particular the Sections that Harvest indicated in the attachment above and would let them know of another target date for public notice. EPA revised the draft Part 71 renewal permit based on the above comments from Harvest. <sup>66</sup> EPA only revised the language in the above Sections identified by Harvest, in the draft Part 71 renewal permit, to clarify that the added MRR requirements in these Sections are to demonstrate compliance with the Facility's PTE. The Facility's PTE in the draft Part 71 renewal permit is not a *new* emission limitation, it is the same Facility PTE that the Permittee calculated and submitted in the renewal application Rev 2. This Facility PTE has also been established as being the Facility's emission limit from previous discussions. **See, 2022 Part 71 Appl Rev 2, Harvest Los Mestenios Draft Permit, 1996 NSR Permit and 2003 Final Permit.** 

<sup>&</sup>lt;sup>64</sup> See, "Sept 6 2023 Harvest Email Response Draft permit Review" AR § 8 Doc No 2 (Harvest Email Response to Copy of Draft)

 <sup>65</sup> See, "Sept 6 2023 Harvest Letter Request for Additional time Review" AR § 8 Doc No 3 (Harvest Ltr Req Time For Review).
 66 See, "Sept 29 2023 EPA to Harvest 2nd Review draft Permit.pdf" AR § 8 Doc No. 29 (EPA 2<sup>nd</sup> Email to Harvest Review draft Permit"

To: LeDoux, Erica <<u>LeDoux Erica@epa.gov</u>>
Subject: RE: [EXTERNAL] Harvest Four Corners, LLC - Los Mestenios Compressor Station Draft Permit
Prior to Public Notice

Hi Erica

From: Oakley Hayes

Sent: Tuesday, September 5, 2023 2:59 PM

I started reviewing the document but had quite a few comments. These are probably things that will need to be addressed on the record, so Harvest will provide its comments during the public

From: Oakley Hayes <u>< Oakley Hayes@harvestmidstream.com</u>>
Sent: Wednesday, August 30, 2023 3:42 PM
To: LeDoux, Erica <u>LeDoux.Erica@epa.gov</u>>
Subject: RE: [EXTERNAL] Harvest Four Corners, LLC - Los Mestenios Compressor Station Draft Permit
Prior to Public Notice

From: LeDoux, Erica < LeDoux Erica@epa.gov>
Sent: Wednesday, August 30, 2023 3:03 PM
To: Oakley Hayes < Oakley. Hayes@harvestmidstream.com>
Subject: [EXTERNAL] Harvest Four Corners, LLC - Los Mestenios Compressor Station Draft Permit
Prior to Public Notice

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Thanks Erica! I will review and make sure to get you any comments before the deadline

Mr. Hayes,

Attached for your review, please find a copy of the draft Part 71 permit for the Harvest Four Corners, LLC - Los Mestenios Compressor Station. We are providing you an opportunity to review for accuracy prior to public notice.

Please provide your feedback by Wednesday, September 6, 2023. EPA's target date for public notice is Wednesday, September 13, 2023.

Respectfully,

Dear Erica.

Thank you for providing Harvest Four Corners, LLC ("Harvest") with a review draft of the Title V permit for the Los Mestenios plant prior to issuance for public comment. Based on an initial review, Harvest is concerned that the draft permit imposes new, substantive obligations—including emissions limitations—that appear to exceed the scope of EPA's authority under Title V and 40 C.F.R. Part 71. See Ohio Pub. Interest Research Group, Inc. v. Whitman, 386 F.3d 792, 794 (6th Cir. 2004) (citing 42 U.S.C. §§ 7661c(a), (c); 40 C.F.R. §§ 70.6(a)(3), (c)(1)). This includes imposition of new emissions limitations on the condensate storage tanks (6.3.1), truck loading (6.4.1), planned startup, shutdown, and maintenance (6.5.1), and equipment leaks (6.6.1) that are not subject to any applicable requirements. In light of significant changes to the current Title V permit and the one-week window for review that was further limited by vacation schedules, Harvest will not have sufficient time to review and provide feedback to EPA.

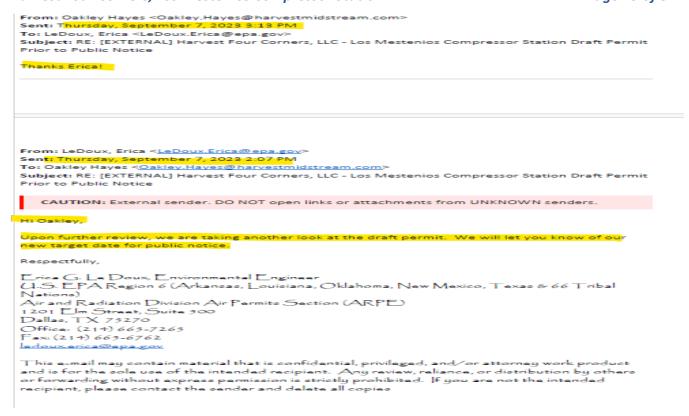
Given the significant legal issues noted above, Harvest maintains that a reasonable extension of time for review is appropriate. We are therefore respectfully requesting an additional two weeks to review and provide feedback before the draft permit is noticed for public comment.

Should you have any questions or wish to discuss further, I am available at 505-632-4421 or Oakley.Hayes@harvestmidstream.com.

Sincerely,

Oakley Hayes

Galley Hayen



On Friday, September 29, 2023, EPA again provided a courtesy copy of the draft Part 71 renewal permit for Harvest to review for accuracy and to provide feedback with a deadline for comments by Wednesday, October 4. 2023. See, Harvest Los Mestenios Draft Permit and EPA 2nd Email to Harvest Review Draft Permit. On October 3,2023, Harvest responded that the changes EPA made didn't address Harvest's concerns and Harvest requested EPA delay public notice and revise draft Part 71 renewal permit. <sup>67</sup> On October 4, 2023, EPA requested that Harvest provide a detailed account of why Harvest believed the conditions identified in Harvest letter of September 6, 2023, exceeded the scope of EPA's authority. <sup>68</sup>

<sup>&</sup>lt;sup>67</sup> See, "Oct 3 2023 Harvest to EPA 2nd Draft permit Review" AR § 8 Doc No 5 (Harvest to EPA 2<sup>nd</sup> Draft Rvw)

<sup>&</sup>lt;sup>68</sup> See "Oct 4 2023 EPA Request Detailed Concerns Draft Permit" AR § 8 Doc No 6 (EPA 3<sup>rd</sup> Request Draft Permit Review)

Sent: Tuesday, October 3, 2023 9:05 PM

To: LeDoux, Erica «LeDoux.Erica@epa.gov»

Subject: RE: [EXTERNAL] Harvest Four Corners, LLC - Los Mestenios Compressor Station Draft Permit

Prior to Public Notice

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

#### Erica.

I appreciate the opportunity to review the revised draft Part 71 permit prior to the public notice. Unfortunately, the recent changes to the draft permit still do not address the legal deficiencies noted by Harvest in its comments submitted on September 6, 2023—specifically that Title V does not authorize EPA to impose new substantive requirements on the facility. For this reason, Harvest respectfully requests that EPA hold off on public notice and revise the draft permit to address these concerns. Should EPA decide to move forward with public notice of the draft permit, Harvest intends to undertake a thorough review of all the permit conditions and provide relevant public comment at the appropriate time. Should you have any questions or wish to discuss further, please let me know.

Sincerely,

Oakley Hayes, CEM

Environmental Specialist Harvest Midstream Company Office: 505-632-4421 Cell: 970-903-3203

HARVEST

From: Oakley Hayes < Oakley. Hayes@harvestmidstream.com>

Sent: Tuesday, October 3, 2023 9:37 AM

To: LeDoux, Erics < LeDoux, Erica@epa.govo

Subject: RE: [EXTERNAL] Harvest Four Corners, LLC - Los Mestenios Compressor Station Draft Permit

Prior to Public Notice

Hi Erica,

I apologize for the delayed response. I was traveling for work last week and was out of the office yesterday. I received your voicemail this morning. I am reviewing with our group internally and will provide feedback.

From: LeDoux, Erica «<u>LeDoux, Erica@epa.gou</u>» Sent: Friday, September 29, 2023 12:14 PM

To: Oakley Hayes < Oakley. Hayes @ harvestmidstream.com

Subject: RE: [EXTERNAL] Harvest Four Corners, LLC - Los Mestenios Compressor Station Draft Permit Prior to Public Notice

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Mr. Hayes,

Attached for your review, please find a copy of the draft Part 71 permit for the Harvest Four Corners, LLC - Los Mestenios Compressor Station. We are providing you an opportunity to review for accuracy prior to public notice.

Please provide your feedback by Wednesday, October 4, 2023, with a target date for public notice possibly Friday, October 6, 2023.

Respectfully,

Erica (3. Le Doux, Environmental Engineer (J.S. EPA Region 6 (Arkanese, Louisiana, Oklahoma, New Mexico, Texas & 66 Tribal Nations) Air and Radiation Division Air Permits Section (ARPE) 1201 Elm Street, Suite 500 Dallas, TX 75270

```
Oakley
Thank you for your email. In order to address your concerns, please provide a detailed
     ount of why Harvest sees the conditions identified in your letter of Sept 6 as exceeding the
scope of EPA's authority. Your letter states:
         "...new, substantive obligations—including emissions limitations—that appear to exceed
         the scope of EPA's authority under Title V and 40 C.F.R. Part 71. See Ohio Pub. Interest
Research Group, Inc. v. Whitman, 386 F.3d 792, 794 (6th Cir. 2004) (citing 42 U.S.C. §§
7661c(a), (c); 40 C.F.R. §§ 70.6(a)(3), (c)(1)). This includes imposition of new emissions
         limitations on the condensate storage tanks (6.3.1), truck loading (6.4.1), planned
         startup, shutdown, and maintenance (6.5.1), and equipment leaks (6.6.1) that are not
         subject to any applicable requirements.
             ride by October 13, 2023.
Respectfully.
Erica G. Le Doux, Environmental Engineer
U.S. EPA Region 6 (Arkansas, Louisiana, Oklahoma, New Mexico, Texas & 66 Tribal
Air and Radiation Division Air Permits Section (ARPE)
1201 Elm Street, Suite 500
Dallas, TX 75270
 Office: (214) 665-7265
Fax: (214) 665-6762
This e-mail may contain material that is confidential, privileged, and/or attorney work pr
and is for the sole use of the intended recipient. Any review, reliance, or distribution by others
or forwarding without express permission is strictly prohibited. If you are not the intended
recipient, please contact the sender and delete all copies
```

On Friday, October 13, 2023, Harvest provided a response to EPA's inquiry for a more detailed account as to why Harvest believed the MRR conditions identified exceeded EPA's authority. <sup>69</sup> In Harvest's October 13 letter, Harvest states that EPA lacks authority under Title V of the CAA to impose the new substantive requirements in sections 6.3, 6.4, 6.5, and 6.6 of the draft Part 71 renewal permit. However, these sections are MRR requirements for the condensate tanks (T1 and T2), truck loading (L1), planned startup, shutdown and maintenance (SSM) and fugitives' equipment leaks (F1), respectively. Therefore, EPA proceeded with public notice of the draft Part 71 renewal permit on October 26, 2023, for a 30-day public comment ending on November 27, 2023. Only one comment letter was received and that was from the Permittee (Harvest). **See, Harvest Comment Letter.** 

In the draft Part 71 renewal permit, EPA used information provided by the Permittee in their renewal application. <sup>70</sup> See, 2023 Statement of Basis. For example, Harvest presented, in the revised renewal application Rev 2, a calculation methodology that uses operating parameters as inputs to calculate the VOC emissions for each emission unit i.e., condensate storage tanks (T1 and T2), fugitive equipment leaks (F1), condensate truck loading (L1), and startup, shutdown and maintenance (SSM). See, 2022 Part 71 Appl Rev 2. The emissions from these identified emission units, which are uncontrolled, are a part of the Facility's emissions limitations, specifically each contributing to the Facility's PTE as documented in past permits. As discussed previously, these uncontrolled emissions are calculated at

<sup>69</sup> See, "Oct 13 2023 Harvest Response Letter re Title V Permit Conditions" AR § 8 Doc No 8 (**2023 Oct Harvest Letter Draft Permit Review**)

<sup>&</sup>lt;sup>70</sup> See Section that discusses the Permit Changes in the Statement of Basis

the maximum capacity of the Facility. Harvest also indicates in the renewal application that to calculate the Facility's emission limit and PTE, the operating parameters that are used as inputs to the calculation methodology are at Facility's design and operation capacity and process sample results that calculate the highest VOC emissions. This is to get results that are a "worst- case" scenario for VOC emissions limits for T1, T2, F1, L1 and SSM. Again, as previously discussed to calculate the emission limits for the condensate tanks (T1 and T2), EPA's draft Part 71 permit requires Harvest at the time of the next renewal of the Part 71 permit, to utilize the worst-case scenario with the condensate analysis results collected over the 5-year term of the Part 71 permit. Harvest will be required to sample and analyze the condensate annually during the 5-year term of Part 71 permit. The worst-case scenario entails using the condensate analysis results that will provide the highest VOC emissions results when used as inputs to the VMGSYM model to calculate flash emissions for the condensate tanks.

Furthermore, using the calculation methodology Harvest indicated in the revised renewal application Rev 2, the flash emissions will be used to calculate the emission limit and PTE for condensate tanks. The other operating parameters used as inputs in Harvest's calculation methodology, include the worst-case scenario for the highest VOC emissions for condensate throughput, liquid receiver pressure and temperature, and planned SSM events. Currently, there is no sampling requirement for the condensate as Harvest stated in the revised renewal application Rev 2. A copy of this statement is highlighted in the application form below. **See, 2022 Part 71 Appl Rev 2.** Similarly, the "worst-case" scenario for the extended gas analysis that will provide the highest VOC emissions results will be used to calculate the Facility's emission limit and PTE for the next renewal of the Part 71 permit for the emission units indicated in the renewal application that utilizes this analysis for the emission calculation, i.e., SSM and F1.

Harvest also indicated in the revised renewal application Rev 2, that the same calculation methodology is employed to calculate actual emissions for the Facility. See, 2022 Part 71 Appl Rev 2. Actual emissions should be used as the basis to assure compliance with the permit emissions limit on a periodic basis. Actual emissions calculated from actual operating parameters at the Facility are ideal for measuring compliance with emission limits. Thus, the permit renewal must include adequate monitoring to assure compliance with the permitted limits and be monitored/calculated on measurable parameters for accurate calculation of emissions. However, there are no MRR requirements in the current 2017 Part 71 permit that requires Harvest to employ actual operating data to calculate emission for the sole purpose of compliance demonstration with emission limits on a periodic basis. See, 2017 Final Permit. The specific MRR requirements that have been added to the draft renewal Part 71 permit employ the calculation methodology specified in the revised renewal application Rev 2 provided by Harvest. The MRR requirements will be based upon actual operating data as inputs to assure compliance of the calculated actual emissions with the emission limits also known as the Facility's PTE. 71 See, Harvest Los Mestenios Draft Permit, 2022 Part 71 Appl Rev 2 and Harvest Los Mestenios Final Permit.

<sup>71</sup> See, "GP\_Crossett\_Order" AR § 14 Doc No 19 (**GP Crossett**); Georgia-Pacific Consumer Operations LLC Crossett Paper Operations Ashley County, Arkansas, Permit No. 0597-AOP-R19, issued by Arkansas of Environmental Quality, Petition Nos.

## 1. Summary Detailing Type of MRR Requirements in Renewal Permit

The MRR requirements that have been added for the condensate storage tanks and found in Section 6.3 of the draft renewal permit follows the calculation methodology provided by Harvest in the revised renewal application Rev 2. See, Harvest Los Mestenios Draft Permit ,2022 Part 71 Appl Rev 2 and Harvest Los Mestenios Final Permit. The MRR requirements in Section 6.3 require data to be collected from actual measured operating parameters to be used as inputs to Harvest's calculation methodology (see the page below copied from the renewal application). The MRR requirement for the T1 and T2 requires Harvest to sample the condensate at least once a year or as requested by the EPA. The MRR requires Harvest to use the most recent condensate sample analysis's composition along with the liquid receiver actual temperature and pressure, and actual condensate throughput (see discussion for Section 6.4) as inputs in the VMGSym thermodynamic model to calculate flash emissions. Also, as it is stated in the Harvest's application using TANKS 4.09d to calculate working/breathing losses from the condensate storage tanks. Using molecular weights, the post-flash condensate composition (excluding water), provided by VMGSym, is converted from mole fractions to weight percentages. The weight percentages, in turn, are used as inputs into the TANKS program, along with the appropriate tank dimensions.

VI-2018-3 & VI-2019-12 Order Responding to Petitions Requesting to Petitions Requesting Objection to the Issuance of Title V Operating Permit.

See, "EPA\_Object\_TV\_ITC\_June30\_22" AR § 14 Doc No 20 (EPA TV Object ITC) EPA's Objection on June 30, 2022 to Title V Permit No. O3785 for the Intercontinental Terminals Company LLC, ITC Pasadena Terminal, located in Harris County, Texas See, "EPA\_R5\_Veolia\_1-18-17" AR § 14 Doc No 1; EPA Region 5 Response to Comments on TV Permit to Operate No. V-IL-1716300103-2014-10 for Veolia ES Technical Solutions, LLC, Sauget Illinois, January 18, 2017

See, "EPA\_R5\_Veolia\_June\_2019" AR § AR 14 Doc No 2; EPA Region 5 Response to Comments on TV Permit to Operate No. V-IL-1716300103-2014-10 for Veolia ES Technical Solutions, LLC, Sauget Illinois, June 2019

Page 50 of 87

Condensate Storage Tanks (Units T1 & T2)

The facility is equipped with two condensate storage tanks. Unit T1 receives the condensate when it first enters the facility and all flashing occurs in this tank. Unit T2 is permitted to prevent overflows from T1 during times when haul truck access is limited due to outside factors such as weather and/or road conditions. Flashing does not occur in this tank, only working/breathing losses.

Flash emissions from the condensate storage tank (Unit T1) were calculated using VMGSim. Flashing typically occurs when high pressure liquids are dropped to lower pressures, in this case when high pressure condensate empties into the atmospheric condensate storage tanks. VMGSim is an effective tool for estimating these flash emissions. Using the composition of the condensate and the applicable pressures and temperatures for the facility. VMGSim can predict the amounts of different pollutants that will be emitted from the tanks. The inputs and outputs are identified on Page 3 of each VMGSim output.

Using molecular weights, the VMGSim flash gas output compositions from the condensate storage tanks were converted from mole fractions to weight percent. See the table on Page 2 of each of the Condensate Storage Tank Emissions Data and Calculations spreadsheets. These weight percentages were used to calculate HAP emissions, as percentages of the VOC emissions.

For consistency with the previous application and revision, the PTE flash emission calculations were prepared using a condensate throughput rate of 22,141 bbl/yr. Note that the highest 12-month rolling total condensate throughput occurred in May 2017 and was only 9,109.8 bbl/yr. Four condensate analyses (collected during the last five years, 2017 - 2021) were available for use in the application: December 2017, December 2018, November 2019, and August 2021. Harvest ran VMGSim using each of these analyses and prepared the PTE flash emission calculations in this application using the analysis that predicted the highest VOC emission rate, the December 2018 analysis.

Actual flash emissions were calculated using the condensate throughput from 2021 (3.667.8 bbl/yr) and the condensate analysis from August 2021.

Working/breathing losses from the condensate storage tanks were calculated using TANKS 4.0.9d. Using molecular weights the post-flash condensate composition (excluding water), provided by VMGSim, was converted from mole fractions to weight percentages. See the table on Page 3 of each of the Condensate Storage Tank Emissions Data and Calculations spreadsheets. These weight percentages, in turn, were input into the TANKS program, along with the appropriate tank dimensions and throughputs. The Unit T1 throughput was estimated at 22,141 bbl/yr. Since Unit T2 is a backup tank, its throughput was estimated at 11,070 bbl/yr.

half the throughput seen by Unit T1. The TANKS inputs and outputs can be seen on the TANKS output file, included with the calculations in this section.

The working/breathing losses and flash emissions from the condensate storage tanks were combined. See the table on Page 1 of each of the Condensate Storage Tank Emissions Data and Calculations spreadsheets.

This method of calculating condensate storage tank emissions is a change from what was submitted in the previous two versions of the application.

## Response to EPA request for additional information:

Provide the results EPA request that Harvest use the worst-case condensate sample
analysis results over the 5-year time limit of the Los Mestenios Part 71 permit to
calculate working and breathing losses and the flash emissions for the new TV
application. Include the 2020 condensate analysis results when determining worst-case
analysis and provide EPA a copy of these results. Also, revise all PTE calculations that
utilize the condensate sample analysis to worst case scenario.

See the written description above. Harvest did not sample the condensate in 2020. Note that there is not requirement for annual condensate sampling.

It is important to note the following discrepancy in Harvest's use of actual condensate data. First, although Harvest has stated above in the revised renewal application Rev 2 that the current permit does not require annual sampling of the condensate, Harvest has also made previous statements that is shown above, "with sampling occurring on an annual basis, Harvest gets a good picture of what material is being collected at the Facility". **See, EPA Clarification Questions from July 27.** 

7 (https://www.epa.gov/ttn/chief/ap42/ch07/index.html) can be employed with many current spreadsheet/software programs.

Windows Vista and Windows 7 were not used when running the model. TANKS 4.0.9d has been operating reliably using the Windows 10 operating system. As EPA notes, the software that was used in the development of the model has become outdated. However, the underlying calculation methodology used in the program, which is based on Chapter 7 of AP-42, still follows EPA's recommendation for estimating emissions from storage tanks. Therefore, the TANKS 4.0.9d software remains a valid option for calculating working and breathing losses from storage tanks.

Note that Promax and VMGSim both use the AP-42 Chapter 7 equations/algorithms to calculate working/breathing losses. If VMGSim had been used to calculate the losses, results would have been essentially the same, except that unlike TANKS 4.0.9d, VMGSim does not provide access to the Albuquerque meteorological data.

#### Response to EPA request for additional information:

 Explain the use of emission factors from Colorado, meteorological data from Colorado, etc. instead of New Mexico.

The TANKS 4.0.9d meteorological data from Albuquerque, New Mexico was used in the original application and Revision 1. Working/breathing losses in this application were also calculated using Albuquerque, New Mexico meteorological data.

### Response to EPA request for additional information:

Provided an explanation on the meaning of "refinements" of VMGSym inputs.

Harvest was referring to conducting the modeling internally (rather than using an outside consultant) and using actual data from their operation of the facility rather than data Williams Four Corners, LLC may have been using.

As noted in previous responses to EPA, Harvest cannot compare the current calculations with previous applications. Harvest did not own or operate the facility at that time and does not have access to detailed information showing how past emissions were calculated. Harvest can only state that the emissions calculations in this application represent operations as they exist today.

Also in the January 21, 2022, COS submission, Harvest stated that *input improvements* to the VMGSym model had been implemented. **See, 2022 Harvest Request COS.** In the December 1, 2022, revised renewal application Rev 2 as shown above, Harvest acknowledged that input improvements to the VMGSym thermodynamic model was because actual operating data from Harvest's operation was being used. <sup>72</sup> **See, 2022 Part 71 Appl Rev 2.** 

<sup>&</sup>lt;sup>72</sup> See, Technical Document used as resource: See "AP 42 ch07s01 Organic Liquid Storage Tanks" AR § 14 Doc No 13; U.S. Environmental Protection Agency. (2020, June). Compilation of air pollutant emission factors, Volume I: Stationary point and area sources (AP-42), Fifth Edition, Section 7.1 (Organic liquid storage tanks)

Condensate Truck Loading (L1)

Emissions from condensate truck loading were calculated using the emission factor equation from AP-42, Section 5.2, *Transportation and Marketing of Petroleum Liquids*. The TANKS 4.0.9d predicted pressure, molecular weight, and temperature (from the condensate working/breathing losses output file) were used to calculate the emission factor. The inputs and calculated emission factor are identified on the Condensate Truck Loading Emissions Calculations spreadsheets.

With the change in condensate composition (switching from the 2021 analysis to the 2018 analysis), TANKS adjusted the predicted pressure and molecular weight. These changes increased the emission factor used to calculate the truck loading emissions. As a result, condensate truck loading is now a significant source.

PTE emissions were calculated using an annual condensate throughput rate of 22,141 bbl//yr.

Actual emissions were calculated using the 2021 condensate throughput rate of 3,667.8 bbl/yr.

A second method of loading is submerged loading. Two types are the submerged fill pipe method and the bottom loading method. In the submerged fill pipe method, the fill pipe extends almost to the bottom of the cargo tank. In the bottom loading method, a permanent fill pipe is attached to the cargo tank bottom. During most of submerged loading by both methods, the fill pipe opening is below the liquid surface level. Liquid turbulence is controlled significantly during submerged loading, resulting in much lower vapor generation than encountered during splash loading.

The recent loading history of a cargo carrier is just as important a factor in loading losses as the method of loading. If the carrier has carried a nonvolatile liquid such as fuel oil, or has just been cleaned, it will contain vapor-free air. If it has just carried gasoline and has not been vented, the air in the carrier tank will contain volatile organic vapors, which will be expelled during the loading operation along with newly generated vapors.

Cargo carriers are sometimes designated to transport only one product, and in such cases are practicing "dedicated service". Dedicated gasoline cargo tanks return to a loading terminal containing air fully or partially saturated with vapor from the previous load. Cargo tanks may also be "switch loaded" with various products, so that a nonvolatile product being loaded may expel the vapors remaining from a previous load of a volatile product such as gasoline. These circumstances vary with the type of cargo tank and with the ownership of the carrier, the petroleum liquids being transported, geographic location, and season of the year.

One control measure for vapors displaced during liquid loading is called "vapor balance service", in which the cargo tank retrieves the vapors displaced during product unloading at bulk plants or service stations and transports the vapors back to the loading terminal. Figure 5.2-5 shows a tank truck in vapor balance service filling a service station underground tank and taking on displaced gasoline vapors for return to the terminal. A cargo tank returning to a bulk terminal in vapor balance service normally is saturated with organic vapors, and the presence of these vapors at the start of submerged loading of the tanker truck results in greater loading losses than encountered during nonvapor balance, or "normal", service. Vapor balance service is usually not practiced with marine vessels, although some vessels practice emission control by means of vapor transfer within their own cargo tanks during ballasting operations, discussed below.

Emissions from loading petroleum liquid can be estimated (with a probable error of ±30 percent)<sup>4</sup> using the following expression:

$$L_{L} = 12.46 \frac{SPM}{T} \tag{1}$$

where:

L<sub>L</sub> = loading loss, pounds per 1000 gallons (lb/103 gal) of liquid loaded

S = a saturation factor (see Table 5.2-1)

P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia) (see Figure 7.1-5, Figure 7.1-6, and Table 7.1-2)

M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Table 7.1-2) T = temperature of bulk liquid loaded, °R (°F + 460)

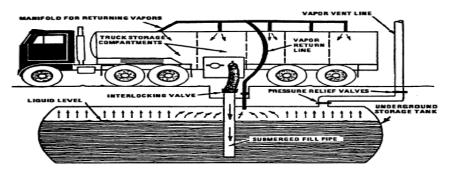


Figure 5.2-5. Tank truck unloading into a service station underground storage tank and practicing

Table 5.2-1. SATURATION (S) FACTORS FOR CALCULATING PETROLEUM LIQUID LOADING LOSSES

Cargo Carrier	Mode Of Operation	S Factor
Tank trucks and rail tank cars	Submerged loading of a clean cargo tank	0.50
	Submerged loading: dedicated normal service	0.60
	Submerged loading: dedicated vapor balance service	1.00
	Splash loading of a clean cargo tank	1.45
	Splash loading: dedicated normal service	1.45
	Splash loading: dedicated vapor balance service	1.00
Marine vessels <sup>a</sup>	Submerged loading: ships	0.2
	Submerged loading: barges	0.5

For products other than gasoline and crude oil. For marine loading of gasoline, use factors from Table 5.2-2. For marine loading of crude oil, use Equations 2 and 3 and Table 5.2-3.

5/08 Petroleum Industry 5.2-5

The MMR requirement that has been added for the truck loading events and found in Section 6.4 of the draft permit follows the calculation methodology provided by Harvest in the revised renewal application Rev 2. See, Harvest Los Mestenios Draft Permit, 2022 Part 71 Appl Rev 2, and Harvest Los Mestenios Final Permit. The MRR in Section 6.4 requires data collection from an actual measurable operating parameter that is used as an input to the calculation methodology that Harvest submitted in the application and is discussed in the above page copied from the application. The MRR requirement for L1 requires Harvest to monitor truck loading to assure compliance with protocols outlined in AP-42 Chapter 5.2, *Transportation and Marketing of Petroleum Liquids* for truck loading for VOC and HAP emissions as indicated above and found in the Harvest application.<sup>73</sup> Harvest will monitor for any defects prior to hookup. Lines that are damaged shall be removed from service and loading should

Also See, "TCEQ Boiler plate language\_loading" AR §14 Doc No 24 also, found at:

https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/bpc\_loading.pdf

<sup>&</sup>lt;sup>73</sup> See, AP-42 Chapter 5.2, Transportation and Marketing of Petroleum Liquids; https://www.epa.gov/sites/default/files/2020-

<sup>09/</sup>documents/5.2 transportation and marketing of petroleum liquids.pdf

Supporting documents found within the Region. See, "LoadUnLoad\_GenProc" AR § 14 Doc No 34 (Loading Generic Protocols)

Technical Documents reviewed: See "ODEQ\_PG\_Estimating\_Loading\_Losses\_from\_Tank\_Trucks" AR § 14 Doc No 21; also found at <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/PG">https://www.deq.ok.gov/wp-content/uploads/air-division/PG</a> Estimating Loading Losses from Tank Trucks.pdf Also See, "TCEQ\_tank-truck-load" AR § 14 Doc No 23, also found at:

https://www.tceq.texas.gov/assets/public/permitting/air/NewSourceReview/oilgas/tank-truck-load.pdf Also See, "TCEQ NSR Loading Operations Feb2021" AR § 14 Doc No. 25 also found at:

https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/loading-guidance.pdf

cease immediately upon detection of any liquid leaking from lines and connections. Harvest shall operate and maintain a piping system designed for submerged loading by either bottom loading or loading through a submerged fill pipe, as represented in the revised renewal permit application Rev 2. The Permittee shall calculate emissions using the emission factor equation from AP-42, Section 5.2, TANKS 4.09d for working and breathing losses, and the most recent condensate VOC analysis. Harvest shall operate, maintain, and exclusively use a piping system designed for submerged loading by either bottom loading or loading through a submerged fill pipe, as represented in the revised renewal permit application Rev 2. The actual operating parameter used to measure condensate throughput will be the truck loading (L1) haul tickets. This calculation is to done monthly for a rolling 12-month average to demonstrate compliance with the Facility's emission limit, which is the Facility's PTE, to assure no exceedances. This actual condensate throughput is another input into the VMGSym model used to calculate flash emissions for the condensate storage tanks.

#### Startup, Shutdown & Maintenance (Unit SSM)

Emissions associated with startups, shutdowns and routine maintenance (SSM) of the turbine (Unit 1) and associated piping are vented to the atmosphere.

The VOC and HAP emissions from blowdowns of the compressor and piping associated with the facility were calculated from the quantity of gas vented during each event, the composition of the gas, and the number of events. The quantity of gas vented during each event was estimated by Harvest. The composition of the gas was based on a recent gas analysis from the facility. The estimated annual number of blowdown events includes an added safety factor because emissions from each blowdown event are dependent on the composition of the gas in the pipeline and the number of blowdowns in a year may vary. Experience indicates the composition of the gas will vary.

Four extended gas analyses (collected during the last five years, 2017 - 2021) were available for use in the application: April 2017, April 2018, October 2019, and May 2021. Harvest calculated SSM emissions using the analysis that predicted the highest VOC emission rate, the May 2021 analysis.

PTE emissions were calculated assuming a maximum of 100 blowdowns per year. There were no turbine startups or shutdowns during 2021. Therefore, actual 2021 emissions were calculated assuming zero blowdowns per year.

The SSM emissions identified in this application are routine or predictable startup/shutdown and scheduled maintenance and do not include malfunctions or upsets.

In this application, there are no changes to the calculations as they were presented in the either of the previous applications.

#### Response to EPA request for additional information:

 An explanation of how VOC emissions are calculated using the well gas analysis for all the emission units that this analysis is used for and a calculation that demonstrates this description.

The gas passing through the facility is a blend of gas from wells throughout the area. See the written description above and the calculation spreadsheets.

The MMR requirements that have been added for the startup, shutdown and planned maintenance (SSM) events and found in Section 6.5 of the draft permit follows the calculation methodology provided by Harvest in the revise renewal application Rev 2. See, Harvest Los Mestenios Draft Permit 2022 Part 71 Appl Rev 2 and Harvest Los Mestenios Final Permit. The MRR in Section 6.5 requires data to be collected from actual measured operating parameters that are used as inputs to Harvest's calculation methodology as indicated in the revised renewal application Rev 2 and as stated in the above description. The MRR requirement for the SSM requires Harvest to calculate the VOC and HAP

emissions from the quantity of gas vented during each event, the composition of the inlet gas, and the number of events. Harvest will monitor the number of planned SSM events and perform a Facility inlet gas analysis every calendar year. These actual operating parameters will be used to calculate VOC and HAP emissions to demonstrate compliance with no exceedance of the emission limit, which is the Facility's PTE.

## Equipment Leaks (F-1)

Fugitive emissions from equipment leaks (valves, flanges, seals, etc.) were calculated using emission factors from the 1995 Protocol for Equipment Leak Emission Estimates published by the Environmental Protection Agency (EPA), component counts provided by Harvest, and the gas composition provided by a recent extended gas analysis. First, total organic compound (TOC) emissions were estimated using the component count and EPA emission factors. Then, the gas composition from the extended gas analysis (converted from mole fraction to weight percent) was used to estimate the percentage of VOC and HAP in the TOC.

Four extended gas analyses (collected during the last five years, 2017 - 2021) were available for use in the application: April 2017, April 2018, October 2019, and May 2021. Harvest calculated equipment leak emissions using the analysis that predicted the highest VOC emission rate, the May 2021 analysis.

PTE and 2021 actual emissions were calculated assuming all the equipment operated 8,760 hours during the year.

In this application, there are no changes to the calculations as they were presented in the either of the previous applications.

## Response to EPA request for additional information:

 An explanation of how VOC emissions are calculated using the well gas analysis for all the emission units that this analysis is used for and a calculation that demonstrates this description.

See the written description above and the calculation spreadsheets provided in this subsection.

The MMR requirements that have been added for the fugitive emissions (F1) from equipment leaks (valves, flanges, seals, etc) and found in Section 6.6 of the draft permit follows the calculation methodology provided by Harvest in the revise renewal application Rev 2. See, Harvest Los Mestenios Final Permit and 2022 Part 71 Appl Rev 2. The MRR in Section 6.6 requires data to be collected from actual measured operating parameters that are used as inputs to Harvest's calculation methodology as stated in the above description and use the emission factors from the 1995 Protocol for Equipment Leak Emission Estimates that is published by the Environmental Protection Agency (EPA). The MRR requires the Permittee at the time of the next Part 71 renewal for this Facility when calculating the VOC PTE for fugitives (F1) to calculate using a recent actual component count from the Facility, and the worst-case gas composition provided by the annual extended gas analysis over the 5-year term of permit predicting the highest VOC emission rate. The total organic compound (TOC) emissions will be estimated using the component count and EPA emission factors. Then, the gas composition from the extended gas analysis (converted from mole fraction to weight percent) will be used to estimate the percentage of VOC and HAP in the TOC, as represented by the application. The MRR requires on a periodic basis, using the result of the annual extended analysis and the equipment count to demonstrate compliance with the fugitive emission

limit. Also, if the equipment count should change at any time at the Facility from the information submitted in the revise renewal application Rev 2, Harvest shall re-calculate the fugitive VOC PTE emissions. This is for Harvest to demonstrate the VOC PTE in Table 4 of the draft permit is not exceeded. MRR in Harvest Los Mestenios proposed permit requires Harvest to conduct the following surveillance of equipment leaks every calendar year for the following equipment. This is to reduce the potential for VOC emissions to the environment and the potential for exceedance of fugitives (F1) emission limit. This surveillance will cover the following equipment:

- An extended gas analysis for VOC content of all equipment in the unit.
- A count of all equipment in the unit.
- an inspection of equipment in VOC service to detect leaks.
- If a leak is detected, Harvest shall place a visible tag on the leaking component until the component has been repaired.
- If any leaks are detected, the equipment shall be re-monitored no later than 30 days after discovery of the leak to demonstrate that it has been repaired.
- If the leak cannot be repaired within 30 days without a process unit shutdown, it may be designated "Repair delayed," and shall be repaired before the end of the next process unit shutdown.
- An inspection of equipment in VOC service shall also be conducted within 15 days of any maintenance or repair that affects the equipment.

For the full extent of the MMR requirements in Sections 6.3, 6.4. 6.5, 6.5, please see the AR and the draft Part 71 renewal permit. See, Harvest Los Mestenios Draft Permit, Harvest Los Mestenios Final Permit.

EPA has described five factors permitting authorities may consider as a starting point in determining appropriate monitoring for a particular facility:

(1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring, process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities.<sup>74</sup>

EPA reviewed the MMR requirements for several oil and gas facilities owned and operated by Harvest and permitted by NMED in New Mexico. During this review, focus was place on facilities with similar attributes as this Facility i.e., a date of construction, condensate tanks, initial permitting by a

<sup>&</sup>lt;sup>74</sup> See, "citgo\_corpuschristi\_west\_response2007" AR § 14 Doc No 26 In the Matter of CJTGO Refining and Chemicals Company, L.P., Order on Petition No. VI-2007-01 at 7-8 (May 28, 2009) (CITGO Order).

Also, See, "Final\_TV\_Petition\_US\_Steel\_Clairton\_Coke" AR § 14 Doc No 3; In the Matter of United States Steel Corporation, Clairton Coke Works Permit No. 0052-0P22 Issued by the Allegheny County Health Department

Page 57 of 87

construction permit. <sup>75</sup> **See, 1996 NSR Permit.** EPA's evaluation was to determine types of MRR used in the area to implement the equivalent for this Facility. EPA's goal is for the MRR requirements added to the permit be adequate and sufficient, not burdensome or excessive, for Harvest to demonstrate compliance. Please see Appendix for some these examples. Lastly, it has been presented in this RTC, that this Facility's emission units and emissions rates have varied and fluctuated throughout its permitting history. Also, Harvest has made statements to this effect. Harvest has also stated that the Facility does not have control over the condensate concentration, nor does it have control over the amount of material. The documents that support these facts are in the AR and extracts are copied and pasted into the RTC for ease of reference. All these factors went into EPA's consideration in determining the requisite additional monitoring recordkeeping and reporting requirements that are necessary for EPA to issue the final permit.

<sup>&</sup>lt;sup>75</sup> See, "H.KutzCanyonP097R3" AR § 14 Doc No. 27; "Harvest Kutz Canyon Processing Plant P097-R3" AR§14 Doc No28; See, "Harvest Rincon Compressor Station TV Permit (P274R1)" AR 14 Doc No 29; See, Harvest Crow Mesa TV P271R1 AR §14 Doc No 30

Also See, Ohio Department of Environmental Quality General Permit Template, "Permit\_TermsPigOper" AR § 14 Doc No 31, See "PermitTermFlashE" AR § 14 Doc No 32, "PermitTermTrkLoad", AR § 14 Doc No 33 See, "LoadUnLoad\_GenProc" AR § 14 Doc No. 34 (Loading Generic Protocols)

## III. Comments Received During Public Comment Period

The next portion of this RTC specifically discusses the added monitoring, recordkeeping and reporting (MRR) in sections 6.3, 6.4, 6.5, and 6.6 that Harvest challenges in the comment letter. These added sections were in the draft renewal permit that was public noticed and remain unchanged in substance in the final permit issuance. <sup>76</sup> See, Harvest Los Mestenios Draft Permit, Harvest Los Mestenios Final Permit. As stated in the Statement of Basis (SOB) for the draft renewal permit. "The current 2017 Part 71 permit does not have monitoring, recordkeeping and reporting (MRR) for the following emission units identified in Table 6: Condensate Storage Tanks (T1 and T2), Truck Loading (L1), Equipment Leaks (F1), and Startup, Shutdown and Maintenance (SSM). Therefore, EPA has added MMR requirements to the title V renewal permit in Sections 6.3 through 6.6. These MMRs are to assure and verify compliance with the emission limits (PTE) presented in Table 6, pursuant to 40 CFR 71.6(c)(1). This applies similarly to situations where a source is subject to a work practice standard. The permit would need to contain some means of assuring compliance with the work practice requirement". See, 2023 Statement of Basis.

Section 504 of the CAA makes it clear that each title V permit must include "conditions as are necessary to assure compliance with applicable requirements of CAA, "inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." Harvest's current 2017 Part 71 permit does not have MRR requirements for these emission units that have been added since the 1996 NSR construction permit issuance. **See, 1996 NSR Permit and 2017 Final TV Permit.** 

Specifically, Harvest provided a comment letter that identified the following key comments with the EPA Draft Permit that was public noticed. **See, Harvest Comment Letter**:

- 1. EPA lacks authority to unilaterally impose new restrictions on the Facility's emissions.
- 2. The Draft Permit includes requirements that do not apply to the Facility.
- 3. The proposed reporting requirements are excessive and unnecessary.
- 4. The Draft Permit includes typographical and other technical errors.

In their comment letter, Harvest provided more elaborate explanations for each of the above assertions, but many times the explanation or examples provided in the letter overlooks key relevant material provided by EPA's Statement of Basis (SOB) for the draft Part 71 renewal permit, and also ignores key documents provided in the AR for the permit action (e.g., the 1996 minor NSR and the 2003 initial Part 71 Final permit). **See, 2023 Statement of Basis.** 

<sup>&</sup>lt;sup>76</sup> For clarification: The same PTE table presented in the statement of basis and labeled as Table 6, is labeled and found in the final permit action as Table 4

## **EPA Response to Comments**

**Comment 1.** EPA lacks authority to unilaterally impose new restrictions on the Facility's emissions.

Detailed Comment 1 Parts A and B: titleV is Procedural and Does Not Authorize EPA to Impose New Substantive Requirements. EPA exceeded its authority under the CAA title V Program by imposing new substantive emissions requirements (and associated monitoring, recordkeeping, and reporting (MRR) requirements) in the title V permit that have no underlying applicable requirements and have not been requested by Harvest.

Response to Comment 1 Parts A and B: When this Facility was initially permitted in 1996 with a minor NSR construction permit at the request of the Permittee, federally enforceable limits were established. The Permittee submitted a 1996 NSR construction permit application that indicated no pollution control devices present on any of the emission units. See, 1996 NSR Permit Appl. The Permittee's submitted emission calculations for each unit were based on uncontrolled emissions at maximum capacity. The 1996 NSR construction permit was issued, with emission rates at the maximum capacity. See, 1996 NSR Permit. The applicable condition in that permit states "this permit covers only those sources of emissions listed in the attached table entitled "Table 1- Maximum Allowable Emission Rates", and those sources are limited to the emission limits and other conditions specified in the table." In other words, the emission limits for each emission unit found in the permit table "Maximum Allowable Emission Rates" was based on the PTE. See, 1996 NSR Permit. When a permit contains no limits on capacity utilization or hours of operation, the potential to emit calculation should assume operation at maximum design or achievable capacity (whichever is higher) and continuous operation (8760 hours per year). 77 Several things happened when the 2003 initial Part 71 Final Permit was issued: the 2003 initial Part 71 Final Permit issued to the Facility incorporated by reference the emission units and emission limits from the 1996 NSR construction permit and identified the emission units and emission limits as applicable requirements. See, 2003 Final Permit. Hence, EPA disagrees with Harvest's comments that there were no underlying applicable requirements. See, 1996 NSR Permit.

The Facility has an underlying NSR permit that was incorporated into the initial Part 71 permit for the Facility that identified the emission units and emission limits at that time as applicable requirements. Regardless of this fact, EPA has also stated in a 1989 guidance letter for limiting PTE in NSR permitting, "... the gap-filling provision, requires each permit to contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, if the underlying applicable requirements do not otherwise specify such monitoring. Therefore, if the underlying applicable requirements, such as construction permit conditions or SIP requirements, do not contain adequate monitoring, record keeping, and reporting provisions sufficient to provide

<sup>&</sup>lt;sup>77</sup>See, "Guidance on Limiting PTE in NSR permitting\_june13\_89" AR § 14 Doc No 9; "Limiting Potential to Emit in NSR Permitting", June 13,1989; Air Enforcement Division Office of Enforcement and Compliance Monitoring, Terrell Hunt; Stationary Source Compliance Division OAQPS, John Seitz

such reliable data, the State must add such provisions in the Title V permit, and these provisions must be located in the federally enforceable section of the permit."<sup>78</sup>

The EPA agrees that monitoring, recordkeeping, and reporting adequacy are part of the title V permitting process and will therefore continue to review whether a title V permit contains adequate monitoring, recordkeeping, and reporting provisions sufficient to assure compliance with the terms and conditions established in the preconstruction permit.

The Clean Air Act states that Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. **42 U.S.C. § 7661c(c).** On August 19,2008, the D.C. Circuit Court of Appeals vacated an EPA rule that would have prohibited Maryland Department of Environment (MDE) and other state authorities from adding monitoring provisions to Title V permits if needed to "assure compliance." See Sierra Club v: EPA, 536 F.3d 673 (D.C. Cir. 2008). The Court emphasized the statutory duty to include adequate monitoring in Title V permits, noting that:

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that "[ each permit ... shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards. <sup>79</sup>

The statutory obligations to ensure that each title V permit contains "enforceable emission limitations and standards" supported by "monitoring . . . requirements to assure compliance with the permit terms and conditions," **42 U.S.C. § 7661c(a), (c),** apply independently from and in addition to the underlying regulations and permit actions that give rise to the emission limits and standards that are included in a title V permit." <sup>80</sup> Therefore, regardless of the monitoring, recordkeeping, and reporting

<sup>&</sup>lt;sup>78</sup> See, "R5\_Letter\_RE\_TV\_Permitting\_Issues Feb3\_97" AR § 14 Doc No 39 Region 5 Letter to Ohio Environmental Protection Agency, Robert Hodanbosi, Chief Division of Air Pollution Control; RE: TV permitting and other permitting issues, also found at https://www.epa.gov/sites/default/files/2015-08/documents/3005314c.pdf

Also See, "QA TV Requirements July7 93" AR § 14 Doc No 38 (QA TV Requirements)

<sup>&</sup>lt;sup>79</sup> See, "wheelabrator\_petition2009" AR § 14 Doc No 40 In the Matter of Wheelabrator Baltimore, L.P., Order on Petition, Permit No. 24- 510-01886 (April 14, 2010)

<sup>&</sup>lt;sup>80</sup>See, "yuhuang\_ii\_order\_3-19-18 " AR §14 Doc No 44; See South Louisiana Methanol Order at 10; Yuhuang II Order at 7-8; PacifiCorp-Hunter Order at 16, 17, 18, 18 n.33, 19; Big River Steel Order at 17, 17 n.30, 19 n.32, 20. The EPA, in both the PacifiCorp-Hunter and Big River Steel Orders, expressly indicated that even where it is not appropriate to reevaluate NSR determinations in the title V context, title V permits must still include adequate monitoring, recordkeeping, and reporting to assure compliance with the applicable NSR requirements. PacifiCorpHunter Order at 17 ("In the case of a preconstruction permit, the EPA's oversight role under title V is to ensure that the terms and conditions of the preconstruction permit are properly included as 'applicable requirements,' and that the permit contains monitoring, recordkeeping, and reporting sufficient to assure compliance with those permit terms and conditions."); id. at 16, 18, 18 n.33, 19; Big River Steel Order at

initially associated with a minor NSR permit, EPA has a statutory obligation independent of the process of issuing those permits to evaluate monitoring, recordkeeping, and reporting in the title V permitting process to ensure that these terms are sufficient to assure compliance with all applicable requirements and title V permit terms.<sup>81</sup>

EPA Regions have objected to permits issued by permitting authorities because the periodic monitoring provisions were lacking or inadequate. EPA's part 71 monitoring rules (40 C.F.R. §§ 71.6(a)(3)(i)(A) and (B) and 71.6(c)(1)) are designed to satisfy the statutory requirement that "[e]ach permit issued under [title V] shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions." CAA § 504(c). As a general matter, permitting authorities must take three steps to satisfy the monitoring requirements in EPA's part 71 regulations. First, under 40 C.F.R. § 71.6(a)(3)(i)(A), permitting authorities must ensure that monitoring requirements contained in applicable requirements are properly incorporated into the title V permit. Second, if the applicable requirement contains no periodic monitoring, permitting authorities must add "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 40 C.F.R. § 71.6(a)(3)(i)(B). Third, if there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance. 40 C.F.R. § 71.6(c)(1).<sup>82</sup>

Both the statute and EPA's regulations expressly identify monitoring (and related information-gathering requirements) as a mechanism "to assure compliance" with underlying requirements. 42 U.S.C. § 7661c(c); 40 C.F.R. § 71.6(a)(3)(i)(A), (c)(3). Monitoring and related information-gathering requirements may provide the source with data on critical operating parameters, allowing the source to adjust its operations to ensure that it complies with permit limits. Or, in situations where monitoring and related information-gathering requirements reveal noncompliance, this should prompt a source to take corrective action, thereby avoiding similar noncompliance in the future. Finally, evidence obtained by monitoring and related information-gathering requirements may form the basis of enforcement

<sup>17</sup> n.30 ("The EPA's review of the title V permit will still consider whether the permit has adequate monitoring, recordkeeping, and reporting to assure compliance with all applicable requirements, including the preconstruction permit requirements."); id. at 17, 19 n.32, 20.

<sup>&</sup>lt;sup>81</sup> See, "Sierra Club v EPA-2008" AR § Doc No 45; Sierra Club v. EPA, 536 F.3d 673 (D.C. Cir. 2008); On August 19,2008, the D.C. Circuit Court of Appeals vacated an EPA rule that would have prohibited Maryland Department of Environment (MDE) and other state authorities from adding monitoring provisions to Title V permits if needed to "assure compliance." See *Sierra Club* v: *EPA*, 536 F.3d 673 (D.C. Cir. 2008). Also, See, pp 25,26,27,28Motiva Order "Motiva\_Order\_2008" AR § 14 Doc No 46

<sup>&</sup>lt;sup>82</sup> See, "premcor\_portarthur\_response2007" AR § 14 Doc No 43; EPA's response to petitioner's request to object to the CAA title V permit issued by TCEQ on January 8, 2007, to Premcor Refining Group, Inc in Port Arthur, Jefferson County, Texas Environmental Appeals Boards denies petition for review for a CAA title V permit issued by Region 5 to Veolia ES Technical Solutions

actions that focus on bringing a source back into compliance and avoiding or preventing future noncompliance.<sup>83</sup>

All title V permits must contain sufficient monitoring, including periodic monitoring, to assure continuous compliance with the applicable requirements in the permit. Section 504 of the Clean Air Act (Act) makes it clear that each title V permit must include "conditions as are necessary to assure compliance with applicable requirements of [the Act], including the requirements of the applicable implementation plan" and "inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." Section 71.6(a)(3) requires that each part 71 source have testing, MRR requirements sufficient to assure compliance with the terms and conditions of its permit.

Comment 1 Part C: EPA Imposed Restrictions on the Facility's PTE in the Draft Permit. EPA cannot impose PTE limitations in Harvest Part 71 Permit because Harvest did not wish to obtain a synthetic minor source permit.

Response to Comment 1, Part C: EPA relies on the permit applications, emission calculations, and supplemental data and information provided by the Permittee in order to ensure that the permit conditions are representative of current facility operations when drafting a permit. During this permit action, EPA engaged with Harvest to build not only a defensible permit, but a permit that is an accurate reflection of the information provided by the Permittee. The communications between EPA and Harvest during the process of drafting of this Facility's Part 71 renewal permit is well documented in the AR and this RTC. The information contained in this RTC shows that this final permit action is not "imposing new substantive emission requirements and associated MRR requirements", as the commenter has asserted. This final permit action is only implementing MRR for emission units that were added, at the request of the applicant, since the issuance of the 1996 construction permit. When the 1996 NSR construction permit was issued, the Permittee informed EPA of a Solar Saturn Turbine and a Caterpillar Internal Combustion (IC) engine (Unit 1 and Unit 2). The construction permit was issued with monitoring, recordkeeping and reporting requirements (MRR) for these emission units. However, subsequent additions of emission units and changes to the Facility's PTE have occurred without the corresponding additions of MRR for these added emission units and emission rates to assure compliance. This RTC only addresses the MRR inadequacy for the emission units that have been added since the 1996 NSR construction permit was issued. EPA has not imposed at any time restrictions on the Facility' PTE or PTE limitations not requested by the Permittee. The AR supports this statement. The AR for this final permit action includes past and present permit documents that indicate information provided by the Permittee via permit applications, emission calculations and supplemental information, and have been utilized by EPA to formulate the Facility's permits. See, 1996 NSR Permit Appl and 1996 NSR Permit, 2003 TV Permit Appl, 2003 Permittee Comments, 2003 Final Permit, 2009 TV Permit Appl, 2009 Final Permit, 2017 TV Permit Appl, 2017 Final Permit. This RTC includes relevant copies of pages taken from these documents to show that the calculated Facility's

<sup>&</sup>lt;sup>83</sup> See," Suncor\_TV\_Petition" AR § 14 Doc No 4 EPA's response to petitioner's request to object to the CAA title V permit issued by Colorado Department of Public Health and Environment to Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East)

PTE provided by the Permittee is what has been placed in the issued Part 71 Permits with no alterations, no restrictions or controls. The development of the final permit renewal action has been handled in the same manner. See, 2022 Original TV Application, 2022 Part 71 Appl Rev 1, 2022 Part 71 Appl Rev 2, Harvest Los Mestenios Draft Permit, Harvest Los Mestenios Final Permit. Although there have been several iterations of the renewal application per the Permittee, this final Part 71 permit renewal was developed from the information provided by the Permittee. The Facility's PTE provided by the Permittee in the renewal application is what is in the final permit action in Table 4 with no alterations, restrictions or controls. To reiterate EPA's above response to Comment 1A and 1B, when the 1996 NSR permit was issued, the emission rates for the Facility emission units were calculated at maximum capacity with no restrictions at maximum operating utilization. These emission rates were established as the Facility's emission limits. These emission units and emission limits calculated at maximum capacity were incorporated into the 2003 Final Part 71 Permit as applicable requirements. The calculated emission limits remain at maximum capacity, with no restrictions and at maximum operating utilization also known as PTE. This Facility's PTE is its emission limit. This is not to be confused with limiting PTE or PTE limitations which is the purpose of a synthetic minor permit.

The Facility was permitted as a Part 71 source based on the Facility's PTE being higher than the major source threshold of 100 tpy. <sup>84</sup> Historically, large numbers of new or modified sources that otherwise would be subject to PSD and NSR permitting requirements have limited their PTE in order to obtain "synthetic minor" status and thereby avoid major source requirements. Also, many sources that otherwise would be subject to the CAA operating program under title V and the MACT program under section 112 also have obtained limited PTE to avoid coverage under a title V permit, the source would then need to have a federally enforceable allowable limit with restrictions in the permit. <sup>85</sup> Under the Tribal Part 49 rule per 40 CFR § 49.158:

Also See. "PTE\_Specific\_Source\_April14\_98", AR § Doc No 49, Memorandum: Potential to Emit (PTE) Guidance for Specific Source Categories, John S. Seitz, Director /s/ Office of Air Quality Planning and Standards, OAR; Eric Schaeffer, Director /s/Office of Regulatory Enforcement, OECA

<sup>&</sup>lt;sup>84</sup> A major source under section 112 of the Act, which is defined as:

<sup>(</sup>i) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tpy or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

<sup>(</sup>ii) For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

<sup>(2)</sup> A major stationary source of air pollutants, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant subject to regulation (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to one of the following categories of stationary source:

<sup>&</sup>lt;sup>85</sup> See "PTE\_Interim\_Jan22\_96", AR § 14 Doc No 48. Memorandum "Release of interim Policy and Federal Enforceability of Limitations on Potential to Emit", John S. Seitz, Director, Office of Air Quality Planning and Standards Office of Air and Radiation; Robert I Van Heuvelen, Director Office of Regulatory Enforcement, Office of Enforcement and Compliance Assurance

"...a source may obtain a synthetic minor source permit under this program to establish a synthetic minor source for purposes of the applicable PSD, nonattainment major NSR or Clean Air Act title V program and/or a synthetic minor HAP source for purposes of part 63 of the Act or the applicable Clean Air Act title V program. Any source that becomes a synthetic minor source for NSR and title V purposes but has other applicable requirements or becomes a synthetic minor for NSR but is major for title V purposes, remains subject to the applicable title V program."

This was not the case for this Facility. This Facility is classified as a major TV source and as such was issued an initial Part 71 permit in 2003. If the Facility had taken a voluntary limit, it would have been issued a synthetic minor permit at that time. Since the issuance of the initial Part 71 permit in 2003, EPA has continued to issue Part 71 renewal permits at the Permittee's request. As was discussed and shown in the above information presented, all Part 71 renewal applications submitted by the Permittee have indicated "no limitation to the PTE" and as such, EPA has issued the Permittee Part 71 renewal permits with emissions that are uncontrolled, unrestricted, absent of pollution controls, and thus at the Facility's calculated maximum capacity. In previously cited documents, Harvest made statements to EPA "that the capacity of the Facility cannot be increased without construction that would need to be approved through the Tribal NSR permit program, see citation, and copy of response in above narrative. EPA concludes from Harvest's statement that the Facility's current rates are at maximum design capacity and a Facility modification would be necessary to increase rates. See, Aug 17 2022 Clarification Questions and Confirm Facility Operational Design.

Lastly, this permit action addresses the inadequacies of MRR in the current 2017 Part 71 permit. This is also not to be confused with limiting PTE or PTE limitations. Please refer Section II Summary of the RTC on page 4 for an explanation of the differences between PTE and MRR. Also, as stated previously, EPA has the authority to implement MRR. See, 42 U.S.C. § 7661c(c); 40 C.F.R. § 71.6(a)(3)(i)(A), (c)(3). Since the 1996 NSR construction permit was issued there has been subsequent additions of emission units and changes to the Facility's PTE without the corresponding additions of MRR for these added emission units and emission rates to assure compliance. The Permittee submitted a calculation methodology in the permit application that uses operating parameters of the emission units as inputs to this methodology to calculate the emissions from the emission units. The requisite MRR in this permit action utilizes this calculation methodology with inputs collected from actual operating parameters from the Facility. Since the current 2017 Part 71 permit does not assure compliance with the emission limits in the permit (due to the absence of MRRs), this permit renewal addresses these MRR deficiencies by adding the following MRR sections for the identified emission units currently operating at the Facility: the Condensate Storage Tanks (T1 and T2) in Section 6.3, truck loading (L1) in Section 6.4, planned startup, shutdown, and maintenance (SSM) activities in Section 6.5 and piping, valve and flanges equipment leaks (F1) in Section 6.6. The emissions from these emission units are a part of the Facility's PTE emissions limit, specifically the Facility's PTE at maximum design and operating conditions with no restrictions or controls.

**Comment 2**: The Draft Permit includes requirements that do not apply to the Facility.

The Draft Permit should be revised because it contains requirements that do not apply to the Facility in Sections 4.95 (Acid Rain Requirements), 5.1.1 (Stratospheric Oxone Protection Program), and 5.5 (PSD Requirements)

**Response to Comment 2**: These are General Requirements that EPA acknowledged in the draft permit that the Facility was not subject to at this time, but merely included for thoroughness. However, EPA will remove the Sections 4.95, 5.1.1 and 5.5 in the final issuance of the renewal permit.

**Comment 3:** Harvest says the following Sections are excessive and unnecessary: 4.2.3 through 4.2.5, 4.2.11, 4.5.1, 4.5.1.5, 4.9.2 through 4.9.4, and 5.2.8.

**Response to Comment 3:** EPA disagrees that these Sections are excessive and unnecessary but has evaluated the specific *requests* made by Harvest that were provided in support of this comment. EPA considers these requests to be non-substantive options that Harvest would like EPA to consider, and those specific requests are addressed further below.

A. In sections 4.2.3 and 4.2.4, Harvest request to retain flexibility to submit payments.

EPA's Consideration of Request 3 Part A: According to requirements at 40 CFR § 71.9, owner or operators of Part 71 sources shall pay annual fees, or the equivalent that are sufficient to cover program costs. EPA understands that Harvest would prefer different options to choose from for payment submittals. However, EPA Region 6 is implementing protocols that align with the deadlines that are in place for Executive Departments and Federal Agencies to require mandatory electronic submissions and transactions. The goals and deadlines are outlined in a Memorandum from the Office of Management and Budget. 86 There are many reasons why moving to a paperless environment is necessary and critical to government agency operation with benefits to the public. For EPA, it specifically aligns with our mission. Electronic transactions reduce transaction cost by freeing up government resources and allows paper reduction in accordance with current EPA protocols. Electronic transaction delivers more efficient service and enables a strong record management system. Specifically electronic payment for the Part 71 emission fees is beneficial because payments will be easy to track, can be verified and available, prevents theft, loss, and fraud - paper mail can be altered. Please refer to EPA's website for the instructions on how to submit payment online: https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits, as referenced in our SOB and the permit itself. No change to the permit will be made regarding this request.

B. In Section 4.2.5, Harvest requests EPA to revise this section to require submission of payment confirmation and copies of forms only go to Region 6's Enforcement and Compliance. Also, the requirement to submit to staff should be removed.

<sup>&</sup>lt;sup>86</sup> See, "Transition\_ERecords\_June28\_19", AR § 14 Doc No 50, June 28, 2019, Memorandum M-19-21 addressed to Heads of Executive Department and Agencies from Office of Management and Budget (OMB), and more recently followed with "Update\_ERecords\_Dec23\_22" AR § 14 Doc No 51, Memorandum M-23-07 entitled: Update to Transition to Electronic Records, December 23, 2022, found at <a href="https://www.archives.gov/records-mgmt/memos/ac-12-2023">https://www.archives.gov/records-mgmt/memos/ac-12-2023</a>.

**EPA's Consideration of Request 3 Part B:** This request is contrary to current Region 6 protocols, like the request addressed above. The Air Permit Section under the Office of Air and Radiation Division is responsible for the writing and issuing of Part 71 permits and the tracking of emission fees remitted by these sources. If there has been a failure to remit fees, a renewal permit is not drafted or issued until all fees, interest and penalties are paid. It is not feasible or practical to send this information elsewhere. However, EPA will remove the requirement to submit forms to a specified Air Permits staff but will retain submission to the general mailbox address at <a href="R6AirPermitsTribal@epa.gov">R6AirPermitsTribal@epa.gov</a>. However, EPA believes that this general mailbox may not ensure that any urgent notifications will be received by appropriate staff in a time critical situation requiring EPA action.

C. In Section 4.2.11, Harvest requests this section include the requirement of EPA to send an invoice to Harvest in addition to a notification.

**EPA's Consideration of Request 3 Part C:** No change to the permit will be made regarding this request.

D. In Section 4.5.1, Harvest request that the EPA revise this section to retain the annual 45-day reporting requirements for the compliance certification.

**EPA's Consideration of Request 3 Part D:** No change to the permit will be made regarding this request. The basis for this requirement is for record retention schedule per regulatory requirements at 40 CFR § 71.4(n)

E. In Sections 4.5.1.5, 4.9.2, 4.9.3, and 4.9.4, Harvest request revisions to these sections citing excessive reporting requirements that have Harvest submitting to CEDRI and other groups.

**EPA's Consideration of Request 3 Part E:** No change to the permit will be made. (**See, Comment 3A and 3B**). The exception to this is changes have been made at Section 4.9.4. EPA will remove the requirement to submit forms to specified Air Permits staff but will retain submission to the general mailbox at <a href="R6AirPermitsTribal@epa.gov">R6AirPermitsTribal@epa.gov</a> for the forms that are specified in the permit. However, EPA believes that this general mailbox may not ensure that any urgent notifications will be received by appropriate staff in a time critical situation requiring EPA action.

F. In Sections 5.2.8, Harvest request this section to be removed in the final permit as excessive reporting requirements. This Section requires the Permittee to keep records of the serial numbers for each emission unit listed in .... Table 3" and report a "change in serial number . . . in the report required by Condition 4.9 in Submission section." EPA cites 40 C.F.R. § 71.6(a)(3)(ii) in support of this provision. While Section 71.6(a)(3)(ii) requires a variety of recordkeeping requirements (e.g., the details and evidence regarding sampling and analyses) and requires retention of records of these materials, the regulation does not require keeping records of or reporting changes to serial numbers of insignificant emission units.

**EPA's Consideration of Request 3 Part F:** No change to permit will be made. This Section is to demonstrate compliance with 40 CFR §71.5(11)

G. In Sections 5.4.3.2.4, Harvest requests the removal of the requirement to notify EPA by phone of any deviation.

**EPA's Consideration of Request 3 Part G:** For Section 5.4.3.2.4, EPA has removed the requirement to notify deviation by telephone. The requirement to report deviations through CEDRI will remain unchanged for this Section.

**Comment 4**: Harvest requests multiple typographical changes to the permit (for accuracy).

**Response to Comment 4:** EPA evaluated each numbered request of Harvest's request for changes in two parts (A, and B) below based upon changes made to the proposed permit in the final permit issuance and changes not made to the final permit, respectively.

# Response to Comment 4, Part A. Items where EPA made changes for accuracy, or to correct formatting of citations listed, as identified by the Permittee:

- 1) Revise the cover page to correct the Facility name to "Los Mestenios Compressor Station" rather than "Los Mestenios." *EPA agrees and will make the change.*
- **2)** Revise the Facility Contact section on page one of the permit to correct Harvest's phone number to "505-632-4421." **EPA agrees and will make the change.**
- **3)** Revise the first sentence of the Process Description and Emission Unit Identification section on page three of the permit to correct Harvest's name to "Harvest Four Corners, LLC" rather than ""Harvest Four Corner, LLC." **EPA agrees and will make the change.**
- 4) Fix the typographical error in footnote ii. for "Notes for Table 4" on Page 6 of the Draft Permit to state "500 hours/yr" rather than "500 tons/yr." *EPA agrees and will make the change.*
- 5) Fix typographical error on page 28 in the Draft Permit to "6.2.6" rather than "6.26." **EPA agrees** and will make the change.
- 6) Fix the citation in the last row and column of Table 5 by replacing the words "as defined by" with "subject to". EPA agrees and will make the change. EPA will also remove the citation 40 CFR § 63.6625(j), and make formatting edits to the citations in Table 5 of the permit before final issuance of the permit, by adding the missing "§" to citations 40 CFR § 63.6640(a) and 40 CFR § 6640(f).

## Response Comment 4, Part B. Items where EPA did <u>not</u> make changes, as requested by the Permittee:

- 1) Remove the footnote on page four of the Draft Permit because the history of Harvest's correspondence with EPA on the T2 nameplate is neither relevant nor required. EPA disagrees with the Permittee's characterization of this request and no change to the permit will be made.
- 2) Remove the unnecessary language in Table 3, Column "Exemptions to Federal Requirements" on page five of the Draft Permit. EPA disagrees with the Permittee's characterization of this request and no change to the permit will be made.
- 3) Remove Section 5.2.10.8 because this provision repeats the requirements previously listed under Section 5.2.9. *EPA disagrees with the Permittee's characterization of this request and no change to the permit will be made.*
- 4) Fix the grammatical error on page seven of the permit in column "Comment," row three of Table 5 to change to "regarding" rather than "as it regards to." This is a non-substantive preference; no change to the permit is necessary.

Change the citation in the last row and column of Table 5 that defines the emergency generator engine to 40 C.F.R. § 63.6675 and remove the list of the unnecessary citations, including "40 Part 63 Subpart ZZZZ, 40 CFR § 63.6603 (a) and Table 2d, , 40 CFR §63.6605(b), 40 CFR §63.6625(f), 40 CFR §63.6625(h), 40 CFR §63.6625(i), and 40 CFR §63.6625(j), 40 CFR 6640(a), 40 CFR 6640(f), and Table 6." EPA disagrees with the Permittee's characterization of this request and no changes to the permit will be made, other than the corrections to certain citations and formatting, as already specified under the above response to Comment 4, Part A, Item 6.

## **APPENDICES**

# ENVIRONMENTAL PROTECTION AGENCY RESPONSE TO COMMENTS

## **DRAFT CAA PART 71 RENEWAL PERMIT**

## **HARVEST FOUR CORNERS - LOS MESTENIOS COMPRESSOR STATION**

## Appendix A: EPA-R06-OAR-2023-0250 AR Listing

Section	Doc No	Descriptive Title	File Location <sup>2</sup>	Date	No. Pages
1		Draft Part 71 Permit and Related Documents			
	1	Harvest Los Mestenios Part 71 draft permit	Docket	5/24/2023	42
2		Statement of Basis Document for Part 71 Draft Permit			
	1	Harvest Los Mestenios Part 71 draft Statement of Basis	Docket	5/24/2023	29
3		Environmental Justice Analysis			
	1	Los Mestenios_ejscreen_report 5 km radius	Docket	5/9/2023	4
	2	Los Mestenios ejscreen community report 5 km radius	Docket	5/9/2023	4
		Public Notice of Draft Permit			
	1	PN for Draft Permit of Harvest Los Mestenios CS TV Renewal	Docket	10/24/2023	4
	2	Updated for Public Hearing Cancellation on 11/13/23	Docket	11/13/2023	4
5		Los Mestenios Application, Completeness Determination and Email Notifications			
	1	Los Mestenios TV Application 12.1.22 Rev 2	Docket	12/1/2022	335
	2	Dec 1 2022 EPA email Rev 2 Los Mestenios Part 71 Appl	Docket	12/1/2022	2
	3	Dec 14 2022 EPA Acknowledge Receipt of Los Mestenios Applic Rev 2	Docket	12/14/2022	7
6		Application Supplemental Support Documents			
	1	Los Mestenios Emissions Flash Model 2021 PTE	Docket	8/17/2022	6
	2	Los Mestenios Fuel Gas Heater	Docket	8/17/2022	1
	3	Los Mestenios Generator Nameplate	Docket	8/17/2022	1
	4	Los Mestenios Generator Spec	Docket	8/17/2022	2
	5	Los Mestenios HAP PTE	Docket	8/17/2022	4
	6	Los Mestenios Historic Condensate Throughputs 2017- 2022	Docket	8/17/2022	2
	7	Los Mestenios Maximum Facility Throughput	Docket	8/17/2022	1
	8	Los Mestenios Pig Launching Emissions	Docket	8/17/2022	1
	9	Los Mestenios Pig Receiving Emissions	Docket	8/17/2022	1
	10	Los Mestenios Solar Saturn Turbine Serial Number Confirm	Docket	8/17/2022	3
	11	Los Mestenios T1	Docket	8/17/2022	1
	12	Los Mestenios T2	Docket	8/17/2022	1

				•	
Section	Doc	Descriptive Title	File	Date	No.
	No		Location <sup>2</sup>		Pages
	13	Los Mestenios T3	Docket	8/17/2022	1
	14	Los Mestenios Tank Hatch 2	Docket	8/17/2022	1
	15	Los Mestenios Tank Hatch	Docket	8/17/2022	1
	16	Los Mestenios Tank Heater	Docket	8/17/2022	1
	17	Los Mestenios Turbine	Docket	8/17/2022	1
	18	Los Mestenios Updated Process Flow Diagram	Docket	8/17/2022	1
	19	May 10 2023 Updated Los Mestenios Process Flow diagram	Docket	5/10/2023	1
	20	May 10 2023 Updated Routine Operations Description	Docket	5/10/2023	2
	21	May 11 2023 Updated Process Flow and Operation Description	Docket	5/11/2023	4
	22	Solar Saturn Specs 2	Docket	8/17/2022	4
	23	Solar Saturn Specs	Docket	8/17/2022	1
	24	Tank Heater Spec 1	Docket	8/17/2022	1
	25	Tank Heater Spec 2	Docket	8/17/2022	1
	26	Williams Response to EPA for Aggregation_020217	Docket	8/17/2022	4
	27	2017-2021 Los Mestenios Liquid Analyses	Docket	8/17/2022	15
	28	April 14 2022 Harvest to EPA attachment (Response to incompleteness letter)		8/17/2022	6
	29	Aug 17 2022 Clarification Questions from July 27 Meeting	Docket	8/17/2022	8
	30	Aug 17 2022 Harvest email Summary of New Changes to Los Mestenios Applic	Docket	8/17/2022	3
	31	Aug 23, 2023 Los Mestenios Source DeterminationQuestion	Docket	8/17/2022	3
	32	December 16 2021 Harvest email to EPA for Los Mestenios (TV Fee Payments for 2018-2020)	Docket	8/17/2022	73
	33	June 14 2023 Los Mestenios Operational Design Throughput Question	Docket	8/17/2022	3
	34	Los Mestenios Caterpillar Engine (disconnected)	Docket	8/17/2022	1
	35	Los Mestenios Caterpillar Engine (disconnected)2	Docket	8/17/2022	1
	36	Los Mestenios Compressor Station Condensate Compositions 2017-2021	Docket	8/17/2022	1
	37	Los Mestenios Criteria Pollutants PTE	Docket	8/17/2022	1
7		Miscellaneous Letters and Email Correspondences			
	1	April 5 2022 EPA email to Harvest (Incompleteness Determination of TV Renewal Application)	Docket	4/5/2022	1
	2	Harvest Los Mestenios Incompleteness Determination Letter	Docket	4/5/2022	
	3	April 11 and April 14 2022 Harvest to EPA email (Responses to incompleteness letter	Docket	4/11/2022 and 4/14/2022	2
	4	August 3, 2022 EPA email Notification FTP site for both E&H and Los Mestenios	Docket	8/3/2022	2
	5	August 5 2022 EPA email Key points July 27 2022 meeting	Docket	8/5/2022	4
	6	August 17 2022 Harvest Response from July 27 meeting	Docket	8/17/2022	3

		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	File Dete No			
Section	Doc	Descriptive Title	File Location <sup>2</sup>	Date	No.	
	No		Location		Pages	
	7	August 31 2022 Harvest email Revised Process Flow and Pics	Docket	8/31/2022	3	
	8	February 4 2022 EPA Email Receipt of Original Appl	Docket	2/4/2022	2	
	9	February 4 2022 Harvest email to EPA th Original TV appl	Docket	2/4/2022	1	
	10	February 14 2022 Harvest email REVISED Change of Status	Docket	2/14/2022	1	
	11 February 14 2022 Los Mestenios REVISED Change of Status Letter		Docket	2/14/2022	65	
	12	January 21 2022 Los Mestenios (Change Status Letter)	Docket	1/21/2022	45	
	13 January 21 2022 Los Mestenios (Existing Source Regis)		Docket	1/21/2022	96	
	January 21 2022 Los Mestenios email to EPA (Change in TV Status & Registration)		Docket	1/21/2022	1	
			Docket	1/28/2022	2	
	16	January 28 2022 Los Mestenios email to EPA (Request to meet)	Docket	1/28/2022	3	
	17	July 1 2022 EPA to Harvest (Meeting request to discuss Los Mestenios)	Docket	7/1/2022	2	
	18	July 27 2022 EPA creates a FTP for Harvest Los Mestenios	Docket	7/27/2022		
	19	May 19 and May 27 2022 Harvest emails and EPA responses	Docket	5/19/2022 and 5/27/2022	3	
	20	Oct 13, 2022 Petition for Review	Docket	10/13/2022	41	
	21	Oct 20 2022Harvest Order re response signed	Docket	10/20/2022	5	
	22	Oct 31 2022 EPA Email Recission Letter	Docket	10/31/2022	1	
	23	Oct 31 2022 EPA Rescission Letter	Docket	10/31/2022	2	
	24	Sept 8 2022 Enclosure Letter Renewal Status	Docket	9/8/2022	5 Docs, 21 pages	
	25	Sept 8 2022 EPA email Letter Renewal Status	Docket	9/8/2022	1	
	26	Sept 8 2022 EPA New Initial Part 71 Letter	Docket	9/8/2022	2	
	27	Sept 13 2022 Harvest Letter Resp to EPA	Docket	9/13/2022	4	
	28	Sept 14 2022 EPA Email Ack Letter Rcvd	Docket	9/14/2022	2	
	29	Sept 29 2022 EPA 2nd Email Renewal Status	Docket	9/29/2022	1	
	30	Sept 29 2022 EPA 2nd letter Renewal Status	Docket	9/29/2022	3	
8		Los Mestenios Draft Permit_Permittee Review Comments				
	1	August 30 2023 Harvest Review of Draft Los Mestenios Permit	Docket	8/31/2023	1	
	2	Sept 6 2023 Harvest Email Response Draft permit Review	Docket	9/6/2023	2	
	3	Sept 6 2023 Harvest Letter Request for Additional time to Review	Docket	9/6/2023	1	
	4	Sept 29 2023 EPA to Harvest 2nd Review draft Permit.pdf"	Docket	9/29/2023	4	
	5	Oct 3 2023 Harvest to EPA 2nd Draft permit Review	Docket	10/3/2023	5	
	6	Oct 4 2023 EPA Request Detailed Concerns Draft Permit	Docket	10/4/2023	6	
	7	Oct 13 2023 Harvest Email re draft permit cond	Docket	10/13/2023	8	

Section	Doc	Descriptive Title	File	Date	No.
Section	No	Descriptive Title	Location <sup>2</sup>	Dute	Pages
	8	Oct 13 2023 Harvest Response Letter re Title V Permit	Docket	10/13/2023	5
		Conditions			
9		Los Mestenios Previously Submitted and Archived Applications and Permits			
	1	Los Mestenios Final Permit reissued mod 2010	Docket	4/1/2010	35
	2	Los Mestenios Final Statement of Basis 2003	Docket	11/17/2003	18
	3	Los Mestenios Statement of Basis 9-29-09	Docket	9/29/2009	31
	4	Los Mestenios Statement of Basis 2010 modification	Docket	4/1/2010	19
	5	Los Mestenios TV Application_2.4.22 Original	Docket	2/4/2022	157
	6	Los Mestenios TV Appplication_9.1.22 Rev 1	Docket	9/1/2022	132
	7	NSR orig applic to NM	Docket	3/9/1995	18
	8	williams_four_corners_los_mestenios_final_permit080817	Docket	8/8/2017	33
	9	williams_four_corners_los_mestenios_final_sob	Docket	8/8/2017	19
	10	williams_four_corners-los-mestenios-renewal-app- 09112014	Docket	9/11/2014	116
	11	February 14 2022 Los Mestenios REVISED Registration Existing Sources	Docket	2/14/2022	113
	12	Initial TV application 2003	Docket	3/17/1995	4
	13	January 21 2022 Los Mestenios (Change Status Letter)	Docket	1/21/2022	45
	14	January 21 2022 Los Mestenios (Existing Source Regis.)	Docket	1/21/2022	96
	15	Los Mestenios EPA NSR permit	Docket	9/24/1996	13
	16	Los Mestenios Final Permit 2009		9/30/2009	35
	17	Los Mestenios Final permit 2003	Docket	11/17/2003	38
	18	Permittee Initial TV comments	Docket	7/9/2003	9
10		4 Tribal Consultation Letters with Enclosures and 4 Emails (cc'd Region 8 and Region 9 Tribal Advisors)			
	1	HFC Los Mestenios Jicarilla Apache Nation Tribal Consultation- June 29 2023	Docket	6/29/2023	20
	2	HFC Los Mestenios Navajo Nation Tribal Consultation - June 29 2023	Docket	6/29/2023	20
	3	HFC Los Mestenios Pueblo of Jemez Tribal Consultation - June 29 2023	Docket	6/29/2023	20
	4	HFC Los Mestenios Southern Ute Tribal Consultation - June 29 2023	Docket	6/29/2023	20
	5	June 29 2023 Email Jicarilla Apache Nation Consultation Invite	Docket	6/29/2023	2
	6	June 29 2023 Email Southern Ute Consultation Invite	Docket	6/29/2023	2
	7	June 29 2023 Navajo Nation Email Consultation Invite	Docket	6/29/2023	2
	8	June 30 2023 Email Pueblo of Jemez Consultation Invite	Docket	6/29/2023	2
11		Transmittal Letter to Applicant			
	1	Transmittal Ltr for Draft TV Permit for HFC Los Mestenios	Docket	10/23/2023	2
12		7 Agency Notification Letters			
	1	NMED Letter Draft TV Permit HFC Los Mestenios	Docket	10/23/2023	2
	1	1	1	1	ĺ

Section Doc		Descriptive Title	File	Date	No.	
	No		Location <sup>2</sup>		Pages	
	3	Southern Ute Letter Draft TV Permit HFC Los Mestenios	Docket	10/23/2023	2	
	4	CABQ Letter Draft TV Permit HFC Los Mestenios	Docket	10/23/2023	2	
	5	CDPHE Letter Draft TV Permit HFC Los Mestenios	Docket	10/23/2023	2	
	6	Jicarilla Apache Nation Ltr Draft TV Permit Los Mestenios	Docket	10/23/2023	2	
	7 Navajo Nation Letter Draft TV Permit HFC Los Mestenios		Docket	10/23/2023	2	
13		Docket Admin Index				
	1	Los Mestenios Docket Record Index	Docket	5/4/2022	1	
	2	Updated For No Public Hearing Los Mestenios Docket Record Index – 11/13/23	Docket	11/13/2023	1	
14		Additional Documents Since Draft Permit				
	1	EPA_R5_Veolia_1-18-17	Docket	4/22/2024	193	
	2	EPA_R5_Veolia_June_2019	Docket	4/22/2024	91	
	3	Final_TV_Petition_US_Steel_Clairton_Coke	Docket	4/22/2024	39	
	4	40_CFR_Operating_Program_32247-32312	Docket	4/22/2024	66	
	5	40_CFR_FedOp_99-3659	Docket	4/22/2024	17	
	6	40_CFR_FedOp_Updat_96-16257	Docket	4/22/2024	48	
	7	NMED issued NSR permit	Docket	4/22/2024	12	
	8	March-1995_Permit_ Status	Docket	4/22/2024	2	
	9 Guidance on Limiting PTE in NSR permitting_june13_89		Docket	4/22/2024	27	
	10 PN_2003_TV_Permit		Docket	4/22/2024	1	
	11	Williams_LosMest_TV_RenewAppl _2008	Docket	4/22/2024	113	
	12	TCEQ_Flash_Guide	Docket	4/22/2024	23	
	13	AP 42 ch07s01 Organic Liquid Storage Tanks	Docket	4/22/2024	203	
	14	ONG_MethodEstimatingAirEmissions_Ch.10EmissionInv	Docket	4/22/2024	127	
	15	VaporRec_Pipeline Pigging_July-23-2008	Docket	4/22/2024	37	
	16	NG_PiggingAirEmissions_NOGC Dec 12 2009	Docket	4/22/2024	16	
	17	NG_Enforcement_ViolationPigging_0919	Docket	4/22/2024	7	
	18	EABDismissal_Nov2_2022	Docket	4/22/2024	5	
	19	GP_Crossett_Order	Docket	4/22/2024	29	
	20	EPA_Object_TV_ITC_June30_22	Docket	4/22/2024	7	
	21	ODEQ_PG_Estimating_Loading_Losses_from_Tank_Trucks	Docket	4/22/2024	10	
	22	producedwaterstoragetank	Docket	4/22/2024	15	
	23	TCEQ_tank-truck-load	Docket	4/22/2024	6	
	24	TCEQ Boiler plate language_loading	Docket	4/22/2024	2	
	25	TCEQ_NSR_Loading_Operations_Feb2021	Docket	4/22/2024	18	
	26	citgo_corpuschristi_west_response2007	Docket	4/22/2024	14	
	27	H.KutzCanyonP097R3	Docket	4/22/2024	32	
	28	Harvest_Kutz_Canyon_TV P097R2M2	Docket	4/22/2024	51	
	29	Harvest_Rincon_CS_TVP274R1	Docket	4/22/2024	40	
	30	Harvest_Crow_Mesa_TVP271R1	Docket	4/22/2024	41	
	31	Permit_TermsPigOper	Docket	4/22/2024	7	
	32	PermitTermFlashE	Docket	4/22/2024	9	

C 11	_	D : T'II	=-1		- N-
Section	Doc No	Descriptive Title	File Location <sup>2</sup>	Date	No. Pages
		Downsit Town Told and		4/22/2024	
	33	PermitTermTrkLoad	Docket	4/22/2024	8
	34	LoadUnLoad_GenProc	Docket	4/22/2024	1
	35	periodmonitorguide_Sept15_98	Docket	4/22/2024	22
	36	final_white_ppr_1	Docket Docket	4/22/2024	35
	37			4/22/2024	53
	38	QA_TV_Requirements_July7_93	Docket	4/22/2024	55
	39	R5_Letter_RE_TV_Permitting_Issues_Feb3_97	Docket	4/22/2024	2
	40	wheelabrator_petition2009	Docket	4/22/2024	50
	41	itc-pasadena-order_02-07-2024	Docket	4/22/2024	27
	42	Premcor and ExxonMobil Order_ 5-01-23	Docket	4/22/2024	21
	43	premcor_portarthur_response2007	Docket	4/22/2024	30
	44	yuhuang_ii_order_3-19-18	Docket	4/22/2024	24
	45	Sierra Club v EPA-2008	Docket	4/22/2024	8
	46	motiva_Order_2008	Docket	4/22/2024	68
	47	Suncor_TV_Petition	Docket	4/22/2024	99
	48	PTE_Interim_Jan22_96	Docket	4/22/2024	11
	49	PTE_Specific_Source_April14_98	Docket	4/22/2024	29
	50	Transition_Erecords_June28_19	Docket	4/22/2024	4
	51	Update_ERecords_Dec23_22	Docket	4/22/2024	3
	52 Notif_change_ownersh_1995		Docket	4/22/2024	1
	53	LosMesOwnerchg2018	Docket	4/22/2024	1
15		Final Permit Action Documents			
	1	Harvest Los Mestenios Part 71 Final Permit	Docket	June 28,2024	2
	2	BasisofDecisionTVFinalPermitLosMest	Docket	June 28,2024	2
	3	PNFinalTVPermitLosMest	Docket	June 28,2024	73
	4	RTC for R6FOP-NM-04-R3-2023	Docket	June 28,2024	13
	5	HarvestLosMest-TVPermitRenewalCommentLetter	Docket	June 28,2024	2
	6	TransmittalLetterLosMestFinalTVPermit	Docket	June 28,2024	2
	7	CABQLetterFinalTVPermitLosMest	Docket	June 28,2024	2
	8	CDPHELetterFinalTVPermitLosMest	Docket	June 28,2024	2
	9	NMEDLetterFinalTVPermitLosMest	Docket	June 28,2024	2
	10	JANLetterFinalTVPermitLosMest	Docket	June 28,2024	2
	11	NavajoNationLetterFinalTVPermitLosMest	Docket	June 28,2024	2
	12	PuebloofJemezLetterFinalTVPermitLosMest	Docket	June 28,2024	2
	13	SouthernUteLetterFinalTVPermitLosMest	Docket	June 28,2024	2
	14	EmailNMEDPNFinalPermit	Docket	June 28,2024	1
	15	EmailCABQPNFinalPermit	Docket	June 28,2024	1
	16	EmailCDPHEPNFinalPermit	Docket	June 28,2024	1
	17	EmailHarvestPNFinalPermit	Docket	June 28,2024	1
	18	EmailJANPNFinalPermit	Docket	June 28,2024	1

# APPENDICES - EPA RTC, CAA Part 71 Renewal Permit Harvest Four Corners, Los Mestenios Compressor Station

Page 75 of 87

Section	Doc No	Descriptive Title	File Location <sup>2</sup>	Date	No. Pages
	19	EmailNavajoNationPNFinalPermit	Docket	June 28,2024	1
	20 EmailSouthernUtePNFinalPermit		Docket	June 28,2024	1
	21	EmailPuebloofJemezPNFinalPermit	Docket	June 28,2024	1
	22	EmailInterestedCitizenPNFinalPermit	Docket	June 28,2024	1
	23	EmailNMEDPNDraftPermit	Docket	4/22/2024	1
	24	EmailCABQPNDraftPermit	Docket	4/22/2024	1
	25	EmailCDPHEPNDraftPermit	Docket	4/22/2024	1
	26 EmailHarvestPNDraftPermit		Docket	4/22/2024	1
	27 EmailJANPNDraftPermit		Docket	4/22/2024	1
	28	EmailNavajoNationPNDraftPermit	Docket	4/22/2024	1
	29	EmailSouthernUtePNDraftPermit	Docket	4/22/2024	1
	30	EmailPuebloofJemezPNDraftPermit	Docket	4/22/2024	1
	31	EmailInterestedCitizenPNDraftPermit	Docket	4/22/2024	1
	32	Harvest Los Mestenios and E&H contact update	Docket	6/28/2024	1
		2ndEmailNMEDPNFinalPermit	Docket	6/28/2024	1
		2nd Email Navajo Nation PNF in al Permit		6/28/2024	1
	33	Final Amended Los Mestenios Docket Index	Docket	6/28/2024	1
	34				
<sup>(1)</sup> The adm docket nur		ve record for this project can be found at the referenced			

<sup>(2)</sup> Documents incompatible with the electronic docket system (e.g., modeling files) may be found at the project URL:

# Appendix B: MRR Examples from Harvest Facilities Permitted by NMED

# Example 1 - Harvest Kutz Canyon Gas Processing Plant TV Permit Mod P097R2M2 Issued 2/19/2016

TV Permit No: P097-R2M2 Page: A8 of A27

Table 104.A: Regulated Sources List

	A: Regulated 50		Serial No.1	Capacity	
Unit No.	Source Description	Make Model	Engine / Combustor	Nameplate (ISO)	Manufacture Date <sup>3</sup>
			Skid / Package	Site-rated	
	Engine	7042GL	TBD	1351 hp	
38	Truck Loading	NA	NA	NA	NA
39	Cooling Tower	Not Reported	Not Reported	Not Reported	Not Reported
40	Cooling Tower	Not Reported	Not Reported	Not Reported	Not Reported
41	Cooling Tower	Not Reported	Not Reported	Not Reported	Not Reported
75	Amine Contactor	NA	NA	350 gal/min	1975
76	Backup Generator	Kohler 8.5RES	3032048	13.4 hp 12.7 hp	05/2012
T-3	Flare Separator Liquid Storage Tank	Western Tank Mfg.	Not Reported	474 BBL, 19,900 gal	1996
T-109	Flare Separator Liquid Storage Tank	Western Tank Mfg.	Not Reported	210 BBL, 8,820 gal	1996
T-31	Flare Separator Liquid Storage Tank	Western Tank Mfg.	Not Reported	100 BBL, 4200 gal	1997
T-6438	Blanco-Hare Condensate Storage Tank	American Tank and Steel Corporation	Not Reported	500 BBL, 21,000 gal	05/1959
T-6528	Kutz-Dakota Condensate Storage Tank	PESCO	Not Reported	500 BBL, 21,000 gal	1999
T-6529	Kutz-Dakota Condensate Storage Tank	San Juan River Inc.	Not Reported	500 BBL, 21,000 gal	02/26/2004
F-1	Site-wide Fugitives	NA	NA	NA	NA

## TV Permit No: P097-R2M2

Page: A11 of A27

The "<" symbol indicates the application represented uncontrolled emissions are less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions, except for flares and pollutants with

controls.

The "." symbol indicates a value that was not reported or not expected from this emission source.

For Title V facilities, the Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.

Units 19, 20, and 29, nitrogen dioxide emissions shall not exceed 150 ppmv at 15 percent oxygen and on a dry basis, and the fuel burned shall not contain total sulfur in excess 0.8 percent by weight (8000 ppmw). (40 CFR 60, Subpart GG)

# A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM) and Malfunction $\overline{\text{Emissions}}$

The maximum allowable SSM and Malfunction emission limits for this facility are listed in Table 107.A and were relied upon by the Department to determine compliance with applicable regulations.

Table 107.A: Allowable SSM and Malfunction Units, Activities, and Emission Limits

Unit No.	Description	VOC (tpy)
SSM	Compressor & Associated Piping Blowdowns during Routine and	
	Predictable Startup, Shutdown, and/or Maintenance (SSM)	28.6
M1	Venting <sup>1</sup> of Gas due to Malfunctions.	10.0

1 This authorization does not include VOC combustion emissions.

The authorization of emission limits for startup, shutdown, maintenance, and malfunction does not supersede the requirements to minimize emissions according to Conditions B101.C and B107.A.

# SSM VOC Emissions for venting of gas

Requirement: The permittee shall perform a facility inlet gas analysis once every calendar year and complete the following recordkeeping to demonstrate compliance with routine and predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A. (NSR 0301M9, Condition A107.C)

Monitoring: The permittee shall monitor the permitted routine and predictable startups and shutdowns and scheduled maintenance events.

Recordkeeping: To demonstrate compliance, records shall be kept of the monthly sum of total VOC emissions due to SSM events during the first 12 months and, thereafter of the monthly rolling 12 month total of VOC emissions due to SSM events.

Records shall also be kept of the inlet gas analysis, the percent VOC of the gas based on the most recent gas analysis, and of the volume of total gas vented in MMscf used to calculate the VOC emissions due to SSM events.

The permittee shall record the calculated emissions and parameters used in calculations in accordance with Condition B109, except the requirement in B109.C(2) to record the start and

Page: A19 of A27

TV Permit No: P097-R2M2

A. Tank Operations (Unit T-6438) [with flash emissions]
Requirement: (NSR 0301M9, Condition A203.A)

- 1) Compliance with the allowable emission limits for Unit T-6438 in Table 106.A shall be demonstrated by monthly monitoring of the actual total condensate throughput and
- pressure and by calculating emission rates as required.

  2) For Unit T-6438, the permittee shall calculate the monthly rolling 12-month total, tpy VOC emission rates using actual measured condensate throughput, actual measured average separator pressure, and the most recent condensate VOC analysis.

### Monitoring:

- 1) For Unit T-6438, the permittee shall monitor the monthly total condensate throughput, and
- at least once per month, the upstream separator pressure.

  2) Annually the permittee shall complete a liquids analysis of the tank condensate to determine

## Recordkeeping:

- 1) For Unit T-6438, the permittee shall record the monthly total condensate throughput of liquids and the monthly average separator pressure. Each month the permittee shall use these values to calculate and record a monthly rolling 12-month total condensate throughput and a monthly rolling 12-month average separator pressure.
- For Unit T-6438, the permittee shall calculate the monthly rolling 12-month total VOC tpy emission rates using HYSYS or other previously approved thermodynamic model, such as VMGSim, etc and Tanks 4.09d; the number of hours that the EVRU control system is nonoperational as defined in Condition A203.D; the actual measured condensate throughput; the actual measured average separator pressure; and the most recent condensate VOC analysis.
- 3) The permittee shall keep records of the parameters, calculations, and VOC emission rates summarized in a table or spreadsheet and shall meet the recordkeeping requirements in Section B109.

Reporting: The permittee shall report in accordance with Section B110.

All excess emissions and Title V deviations of allowable emission limits shall be reported according to  $20.2.7\,\mathrm{NMAC}$  and  $20.2.70.302.E(2)\,\mathrm{NMAC}$ .

# 3. Tank Operations (Units T-6528, T-6529) [with flash emissions] Requirement: (NSR 0301M9, Condition A203.B and revised)

- Compliance with the allowable emission limits for Units T-6528, and T-6529 in Table 106.A shall be demonstrated by monthly monitoring of the actual total condensate throughputs and separator pressures and by calculating emission rates as required.

  For Units T-6528 & T-6529, the values used to establish VOC emission limits in Table 106.A are 13,321 barrels of condensate throughput per year and 131.9 pounds per square inch
- absolute. If either the monthly rolling 12-month total condensate throughput or the monthly rolling 12-month of either the monthly rolling 12-month of either the monthly rolling 12-month total VOC emissions in tpy using the actual measured

TV Permit No: P097-R2M2

Page: A27 of A27

(f) to determine compliance with the standards as specified by 40 CFR 60.632

Recordkeeping: The permittee shall comply with the recordkeeping requirements specified in 40 CFR 60.635 and 60.486.

Reporting: The permittee shall comply with the reporting requirements specified in 40 CFR 60.636 and 60.487.

## Leak Detection and Repair Program for equipment in VOC service

Requirement: The permittee shall repair component leaks (>10,000 ppm) within 30 days of discovery on all equipment in contact with gas that has a weight percent of VOC greater than 10% (VOC service). (NSR 0301M9, Condition A209.B)

Monitoring: The permittee shall conduct an annual chemical analysis of the pipe contents; and an annual inspection of components in VOC service (VOC weight >10%). An inspection of components in VOC service shall also be performed within 15 days of any maintenance or repair that affects components. The permittee shall place a visible tag on all components that have a liquid leak or a vapor leak greater than 10,000 ppm VOCs until those components are repaired.

Recordkeeping: The permittee shall maintain the following records:

- Component identification or description and location;
- (2) Date a leak is detected;
- (3) Dates of attempts to repair; (4) Designation of "Repair delayed" and reason for delay if the leak is not repaired within 30 days of leak discovery; and
- (5) Date of successful leak repair.

Reporting: The permittee shall report the following in accordance with Section B110: 1) The number of leaking components discovered, 2) The number of leaking components not repaired within 30 days, and 3) The duration of the leaks that exceeded 30 days.

# Example 2 - Harvest Rincon Compressor Station TV Renewal P274R1 Issued Jan 10 2024

TV Permit No: P274-R1 Page: A5 of A16

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 63, Subpart A, General Provisions	X	Units 1-4
40 CFR 63, Subpart ZZZZ	X	Units 1-4

### A104 Facility: Regulated Sources

Table 104.A lists the emission units authorized for this facility. Emission units identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and/or equipment not regulated pursuant to the Act are not included.

Table 104.A: Regulated Sources List

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity /Permitted Capacity
1	4SLB RICE	Waukesha	7042GL	C-12248/4 (pkg. X00066)	3/19/1997	3/19/1997	1480 hp / 1344 hp
2	4SLB RICE	Waukesha	7042GL	76858 (pkg. 363966)	6/8/1981	6/8/1981	1480 hp / 1344 hp
3	4SLB RICE	Waukesha	7042GL	C-11887/1 (pkg. X00113)	12/13/1995	12/13/1995	1480 hp / 1344 hp
4	4SLB RICE	Waukesha	7042GL	C-11541/1 (pkg. 76829)	04/17/1995	04/17/1995	1480 hp / 1344 hp
SSM	Compressors & Associated Piping	N/A	N/A	N/A	N/A	N/A	N/A
T1	Hydrocarbon Liquid Storage Tank	TBD	N/A	N/A	1/19/1983	1/19/1983	400 bbl
T12	Stabilized Condensate Overflow Storage Tank	TBD	TBD	TBD	TBD	TBD	400 ьы
F1	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A
M1	Malfunctions	N/A	N/A	N/A	N/A	N/A	N/A

1. All TBD (to be determined) units and like-kind engine replacements must be evaluated for applicability to NSPS

TV Permit No: P274-R1

Page: A7 of A16

Table 107.A: Allowable SSM and Malfunction Units, Activities, and Emission Limits Unit No. Description (tpy) <sup>1</sup>Compressor & Associated Piping Blowdowns during SSM from Routine and Predictable Startup, Shutdown, and/or 47.5 Units 1-4

- This authorization does not include VOC combustion emissions.

  To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see To report excess e condition B110.E.
- The authorization of emission limits for startup, shutdown, maintenance, and malfunction does not supersede the requirements to minimize emissions according to Conditions B101.C and B107.A.
- SSM VOC Emissions for venting of gas

Requirement: The permittee shall comply with this condition to determine compliance with the allowable emission limit in Table 107.A. The allowable emission limit in Table 107.A was based upon the applicant's worst-case scenario and was calculated using the maximum volume of gas that can be vented from each permitted compressor model (Maximum Volume of Gas). The permittee shall calculate the emissions from each compressor blowdown event using the calculation provided below. calculation provided below

- (1) Calculation Methodology for Determining Compliance
  - (a) The permittee shall perform an extended gas analysis at the facility inlet at least once per year.
  - (b) The permittee shall monitor and record each compressor blowdown event and the cause of the event and shall record the specific information as required below.
  - using the following calculations for each compressor model type.
  - (d) Each calendar month, the permittee shall calculate the total monthly emissions from all compressor blowdown events for each compressor model type.
  - (e) For each compressor blowdown event, the permittee shall calculate the emissions resulting from the event. The calculation shall be based on the Maximum Volume of Gas released during the compressor blowdown event multiplied by the maximum VOC content of the vented gas, and shall be performed using the example calculations below:

Compressor Blowdowns (compressors for engine units 1, 2, 3, and 4): [(9,223 scf/event) x (Natural Gas VOC lb/scf)] / [2,000 lb/ton] = VOC ton(s)/event.

(2) Emissions included in the Permit Limit and/or Reported as Excess Emissions

TV Permit No: P274-R1 Page: A9 of A16

(6) The permittee shall monitor in accordance with Condition B108 of this permit.

### Recordkeeping:

- (1) Recording for Compliance Determination
  - (a) For each compressor blowdown event, the permittee shall keep records of:
    - (i) the extended gas analysis documenting the percentage of VOC, or lb/scf, lb/Mscf, or lb/MMscf VOC
    - (ii) the volumetric total gas vented in scf (or Mscf, MMscf) corresponding to each compressor,
    - (iii) the emission calculation, which shall be based on the calculation methodology required above.
  - (b) For each compressor blowdown event, the permittee shall identify the compressor and shall identify the cause of the event that is the source of emissions.
  - (c) The permittee shall record each compressor blowdown event and the total number of events each year for each compressor.
  - (d) Each month, the permittee shall record the cumulative total VOC emissions from compressor blowdown events during the first 12 months and, thereafter of the monthly rolling 12-month total VOC emissions from blowdown events. The permittee shall record the calculations performed to determine the VOC emissions. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC, shall be excluded from this total.
- (2) Emissions included Under Permit Limit or Reported as Excess Emissions

The permittee shall record whether emissions are included under the 47.3 tpy permit limit for compressor blowdown events or if the event is included in a final excess emissions report per 20.2.7.110.A(2) NMAC.

(3) Condition B109 Records

The permittee shall keep records in accordance with Condition B109 of this permit.

Reporting: The permittee shall report in accordance with Section B110.

TV Permit No: P274-R1 Page: A14 of A16

A202 Glycol Dehydrators - Not Required

A203 Tanks

Tank Throughput and Separator Pressure (Units T1 & T12)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the monthly rolling 12-month total condensate throughput to units T1 and T6 combined to 314,874 gallons per year (7,497 barrels/year) and limiting the monthly rolling 12-month average separator pressure to less than 211.9 psia. (NSR 5691M1, Condition

Monitoring: The permittee shall monitor the monthly total throughput and the upstream separator pressure once per month.

Recordkeeping: The permittee shall record:

- 1) the monthly total throughput of liquids and,
  2) the monthly separator pressure.
  3) Each month the permittee shall use these values to calculate and record:
  4) during the first 12 months of monitoring, the cumulative total liquid throughput and after the first 12 months of monitoring, the monthly rolling 12-month total liquid throughput and.
- 5) during the first 12 months of monitoring, the average separator pressure, and after the first 12 months of monitoring, the monthly rolling 12-month average separator pressure.

Tank breathing and working emissions were calculated using the USEPA Tanks program Version 4.0.9.d and tank flashing emissions using VMGSim (or other previously approved thermodynamic model, such as HYSYS or ProMax). Emission rates computed using the same parameters, but with a different Department approved algorithm that exceed these values will not be deemed non-compliance with this permit.

Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

### 20.2.50 NMAC Storage Vessels (Units T1 & T12)

Requirement: The units are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.123.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.123.B.

**Monitoring:** The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.123.C, and in accordance with section B108 of this permit.

**Recordkeeping:** The permittee shall comply with the recordkeeping requirements 20.2.50.112.C, of 20.2.50.123.D, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.123.E, and in accordance with section B110 of this permit.

# Example 3 - Harvest Crow Mesa Compressor Station TV Renewal P271-R1 Issued 10/10/23

Page: A5 of A17 TV Permit No: P271R1

20.2.77 NMAC New Source Performance Standards	x	Potentially T1, T6, and compressor for 3
	37	
20.2.80 NMAC Stack Height	X	1a or 1b, 2, & 3
20.2.82 NMAC MACT Standards for Source Categories of HAPS	x	Unit 2, & Potentially Units 1a, 1b, 3
40 CFR 60, Subpart A, General Provisions	×	Potentially Units 1a,
40 CTR 00, Subpart 11, Ceneral Trovisions		1b, 3, C1a, C1b, C3
40 CFR 60, Subpart JJJJ	X	Potentially Units 1a,
40 CFR 60, Subpart OOOOa	X	Potentially C1a, C1b,
40 CFR 63, Subpart A, General Provisions	X	Unit 2, & Potentially
		Units 1a, 1b, 3s
40 CFR 63, Subpart ZZZZ	X	Unit 2, & Potentially
		Units 1a, 1b, 3

# A104 Facility: Regulated Sources

Table 104.A lists the emission units authorized for this facility. Emission units identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and/or equipment not regulated pursuant to the Act are not included.

Table	104.A	: Regula	ted Sources

Unit No.	Source Description	Make Model	Serial No.	Maximum Capacity/ Permitted Capacity	Manufacture Date
1a <sup>1</sup>	4SLB RICE	Waukesha 7042 GL	TBD	1,480 hp / 1338 hp	TBD
1b1	4SLB RICE	Waukesha 3521 GL	TBD	738 hp / 667 hp	TBD
2	4SLB RICE	Waukesha 7042 GL	338574 (pkg. 76459)	1,480 hp / 1338 hp	01/22/1980
3	4SLB RICE	Waukesha 7042 GL	TBD	1,480 hp / 1338 hp	TBD
SSM	Startup, Shutdown, & Maintenance	N/A	N/A	N/A	N/A
C1a, C1b, C2, C3	Reciprocating Compressors	Not reported	Not reported	N/A	N/A
	Hydrocarbon				Combined
T1	Liquid Storage Tank	Not reported	Not reported		throughput (T1 & T6)
	Hydrocarbon	Not reported	Not reported	378, 084 gal/yır	Combined
T6	Liquid Storage Tank		Totaleported		throughput (T1 & T6)
MAL	Malfunction	N/A	N/A	N/A	N/A
PR1	Pig Receiver	N/A	N/A	N/A	N/A
PR2	Pig Receiver	N/A	N/A	N/A	N/A

TV Permit No: P271R1 Page: A14 of A17

20.2.50.112.D, of 20.2.50.113.E, and in accordance with section B110 of this permit.

20.2.50 NMAC Compressor Seals (Compressor for Units C1a, C1b, C2, C3)

Requirement: The units are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.114.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.114.B.

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.114.C, and in accordance with section B108 of this permit

**Recordkeeping:** The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.114.D, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.114.E, and in accordance with section B110 of this permit.

### A202 Glycol Dehydrators - Not Required

#### A203 Tanks

Tank Throughput and Separator Pressure (Units T1 & T6)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the monthly rolling 12-month total condensate throughput to units T1 and T6 combined to 378,084 gallons per year (9002 barrels/year) and limiting the monthly rolling 12-month average separator pressure to less than 211.9 psia. (NSR 5695M2, Condition A203.A)

Monitoring: The permittee shall monitor the monthly total throughput and the upstream separator pressure once per month.

Recordkeeping: The permittee shall record:

- 1) the monthly total throughput of liquids and,
  2) the monthly separator pressure.
  3) Each month the permittee shall use these values to calculate and record:
  4) during the first 12 months of monitoring, the cumulative total liquid throughput and after the first 12 months of monitoring, the monthly rolling 12-month total liquid throughput and,
- 5) during the first 12 months of monitoring, the average separator pressure, and after the first 12 months of monitoring, the monthly rolling 12-month average separator pressure.

Tank breathing and working emissions were calculated using the USEPA Tanks program Version 4.0.9.d and tank flashing emissions using VMGSim (or other previously approved thermodynamic model, such as HYSYS or ProMax). Emission rates computed using the same parameters, but with a different Department approved algorithm that exceed these values will not be deemed non-compliance with this permit.

Page: A20 of A32

# Example 4 - Harvest Kutz Canyon Gas Processing Plant TV Permit Mod P097R3 Issued 8/3/2018

TV Permit No: P097-R3 Page: A8 of A32

Table 104.A: Regulated Sources List

	A. Regulated 50		Serial No.1	Capacity	
Unit No.	Source Description	Make Model	Engine / Combustor	Nameplate (ISO)	Manufacture Date <sup>3</sup>
1			Skid / Package	Site-rated	
1	Engine	L5794LT	77572	1416 hp	
37b	Reciprocating	Waukesha	TBD	1478 hp	TBD
370	Engine	7042GL	TBD	1351 hp	
38	Truck Loading	NA	NA	NA	NA
39	Cooling Tower	Not Reported	Not Reported	Not Reported	Not Reported
40	Cooling Tower	Not Reported	Not Reported	Not Reported	Not Reported
41	Cooling Tower	Not Reported	Not Reported	Not Reported	Not Reported
75	Amine Contactor	NA	NA	350 gal/min	1975
76	Backup	Kohler 8.5RES	3032048	13.4 hp	05/2012
	Generator			12.7 hp	
Т-3	Flare Separator Liquid Storage Tank	Western Tank Mfg.	Not Reported	474 BBL, 19,900 gal	1996
T-109	Flare Separator Liquid Storage Tank	Western Tank Mfg.	Not Reported	210 BBL, 8,820 gal	1996
T-31	Flare Separator Liquid Storage Tank	Western Tank Mfg.	Not Reported	100 BBL, 4200 gal	1997
T-6438	Blanco-Hare Condensate Storage Tank	American Tank and Steel Corporation	Not Reported	5 <mark>00 BBL, 21,</mark> 000 gal	05/1959
T-6528	Kutz-Dakota Condensate Storage Tank	PESCO	Not Reported	500 BBL, 21,000 gal	1999
T-6529	Kutz-Dakota Condensate Storage Tank	San Juan River Inc.	Not Reported	500 BBL, 21,000 gal	02/26/2004
F-1	Site-wide Fugitives	NA	NA	NA	NA

I. If two serial numbers are present, the first represents the combustion source (e.g. engine or combustor), while the latter is that of the skid or package.

TV Permit No: P097-R3 specified in the Monitoring section below.

Compliance with the testing requirements in this condition demonstrates compliance with the opacity limits required in 20.2.61 NMAC.

Monitoring: As required by 40 CFR §63.772, and the requirements at 40 CFR 63, Subpart A §§63.7 (performance tests) and 63.11 (general control device requirements), the permittee shall conduct a visible emissions observation in accordance with the requirements at 40 CFR 60, Appendix B, Reference Method (RM) 22. The observation period is 2 hours.

Recordkeeping: The permittee shall maintain records of the flare(s) performance test results in accordance with the requirements at 40 CFR §63.774 and Section B109.

Reporting: The permittee shall report in accordance with the requirements at 40 CFR §63.775 and Sections B110 and B111.

# 40 CFR 63, Subpart HH (Ancillary equipment)

Requirement: The plant ancillary equipment between the dehydrator and the flare as defined in 40 CFR 63.761 shall comply with all applicable requirements, including the general standards of 40 CFR 63.764. The ancillary equipment between the still vent and flare are exempt, as this stream is less than 10% VHAP.

Monitoring: The plant ancillary equipment between the dehydrator and the flare as defined in 40 CFR 63.761 shall comply with the monitoring requirements of 40 CFR 63.769.

Recordkeeping: The plant ancillary equipment as defined in 40 CFR 63.761 shall comply with the recordkeeping requirements of 40 CFR 63.774 and in accordance with Section B109 of this

Reporting: The plant ancillary equipment as defined in 40 CFR 63.761 shall comply with the reporting requirements of 40 CFR 63.775 and in accordance with Section B110 of this permit.

# Tank Operations (Unit T-6438) [with flash emissions] Requirement: (NSR 0301M9, Condition A203.A)

- 1) Compliance with the allowable emission limits for Unit T-6438 in Table 106.A shall be demonstrated by monthly monitoring of the actual total condensate throughput and separa pressure and by calculating emission rates as required.
- For Unit T-6438, the permittee shall calculate the monthly rolling 12-month total, tpy VOC emission rates using actual measured condensate throughput, actual measured average separator pressure, and the most recent condensate VOC analysis.
   Monitoring:

- 1) For Unit T-6438, the permittee shall monitor the monthly total condensate throughput, and
- at least once per month, the upstream separator pressure.

  2) Annually the permittee shall complete a liquids analysis of the tank condensate to determine the VOC content.

TV Permit No: P097-R3 Page: A21 of A32

#### Recordkeeping:

For Unit T-6438, the permittee shall record the monthly total condensate throughput of liquids and the monthly average separator pressure. Each month the permittee shall use these values to calculate and record a monthly rolling 12-month total condensate throughput and a monthly rolling 12-month average separator pressure.

For Unit T-6438, the permittee shall calculate the monthly rolling 12-month total VOC tpy emission rates using HYSYS or other previously approved thermodynamic model, such as VMGSim, etc and Tanks 4.09d; the number of hours that the EVRU control system is nonoperational as defined in Condition A203 D; the actual measured condensate throughput; the actual measured average separator pressure; and the most recent condensate VOC analysis. The permittee shall keep records of the parameters, calculations, and VOC emission rates

summarized in a table or spreadsheet and shall meet the recordkeeping requirements in

Reporting: The permittee shall report in accordance with Section B110.

All excess emissions and Title V deviations of allowable emission limits shall be reported according to 20.2.7 NMAC and 20.2.70.302.E(2) NMAC.

B. Tank Operations (Units T-6528, T-6529) [with flash emissions]

Requirement: (NSR 0301M9, Condition A203.B and revised)

- Compliance with the allowable emission limits for Units T-6528, and T-6529 in Table 106.A shall be demonstrated by monthly monitoring of the actual total condensate throughputs and eparator pressures and by calculating emission rates as required.
- For Units T-6528 & T-6529, the values used to establish VOC emission limits in Table 106.A are 13,321 barrels of condensate throughput per year and 131.9 pounds per square inch absolute. If either the monthly rolling 12-month total condensate unoughput of monthly rolling 12-month average separator pressure value is ever exceeded, the permittee shall calculate the monthly rolling 12-month total VOC emissions in topy using the actual measured calculate the monthly rolling 12-month total VOC emissions in topy using the actual measured average separator pressure, and the most recent condensate VOC analysis.

- 1) For Units T-6528 and T-6529, the permittee shall monitor the monthly total condensate
- throughput, and at least once per month, the upstream separator pressure.

  Annually the permittee shall complete a liquids analysis of the tank condensate to determine the VOC content.

### ecordkeeping:

- 1) For Units T-6528 and T-6529, the permittee shall record the monthly total condensate throughput of liquids and the monthly average separator pressure. Each month the permittee shall use these values to calculate and record the monthly rolling 12-month total condensate throughput and the monthly rolling 12-month average separator pressure.
- For Units T-6528 and T-6529, if either the rolling 12-month total condensate throughput or the monthly rolling 12-month average separator pressure values listed in the condition requirements are exceeded, within the 20.2.7 NMAC Excess Emissions initial notification

TV Permit No: P097-R3 Page: A22 of A32

deadline, the permittee shall calculate the monthly rolling 12-month total VOC tpy emissions totals using HYSYS and Tanks 4.09d; the actual measured condensate throughput; the actual measured average separator pressure; and the most recent condensate VOC analysis. Monthly calculations of actual emission totals shall continue for Units T-6528 and T-6529 until the condensate throughput and average separator pressure values in condition requirements are no longer exceeded and until the calculations demonstrate that the allowable emission limits are not exceeded.

3) The permittee shall keep records of the parameters, calculations, and VOC emission totals summarized in a table or spreadsheet and shall meet the recordkeeping requirements in Section B109.

Reporting: The permittee shall report in accordance with Section B110.

All excess emissions and Title V deviations of allowable emission limits shall be reported according to 20.2.7 NMAC and 20.2.70.302.E(2) NMAC.

TV Permit No: P097-R3 Page: A30 of A32

measurement of the amine recirculation rate. (NSR 0301M9, Condition A208.A and revised)

Monitoring: The permittee shall semiannually measure and record the amine recirculation rate in gallons per minute (gpm).

Recordkeeping: The permittee shall keep records of the amine recirculation rate in gallons per minute (gpm) in accordance with Section B110.

Reporting: The permittee shall report in accordance with Section B110.

## A209 Fugitives

40 CFR 60, Subpart KKK for Units 35a & Propane Refrig. Loop

Requirement: Equipment and compressors in VOC or in wet gas service (as defined in 40 CFR §60.631) within process unit(s) 35a & Propane Refrig. Loop are subject to Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, 40 CFR 60, Subpart KKK. The permittee shall comply with all applicable requirements in Subparts A and KKK

Monitoring: The permittee shall implement a leak detection and repair program and shall comply with the standards as specified at 40 CFR §60.632 except as provided in §60.633.

Recordkeeping: The permittee shall comply with the recordkeeping requirements specified at 40 CFR §60.486 except as provided in §§60.633 and 60.635.

Reporting: The permittee shall comply with the reporting requirements specified at 40 CFR §60.487 except as provided in §§60.633 and 60.636.

# Detection and Repair Program for equipment in VOC service not subject to a Federal MACT leak detection regulation (Unit F-1) (NSR 0301M9, Condition A209.B and evised)

Requirement: The permittee shall demonstrate compliance with the allowable VOC emission

- (1) The permittee shall conduct an annual chemical analysis for VOC content of all equipment in the unit, and
- equipment in the unit, and shall conduct an annual count of all equipment in the unit; If the results of the chemical analysis or the equipment count have changed from the information submitted in the permit application, the permittee shall re-calculate the ton per year VOC emissions using the appropriate emissions factors to ensure the allowable
- per year VOC emissions using the appropriate emissions factors to ensure the anomalor emission limits are met.

  The permittee shall conduct yearly inspections of equipment in VOC service by using EPA Reference Method 21 (40 CFR 60, Appendix B) to determine the presence of leaking sources. Alternatively, the permittee may determine the presence of leaking sources by using optical gas imaging with infrared cameras.

  - (a) For leaks determined using EPA Reference Method 21 (RM 21):

    i. The instrument shall be calibrated before each day of its use by the procedures specified in RM 21.

TV Permit No: P097-R3 Page: A31 of A32 The instrument shall be calibrated with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane If an instrument reading of 10,000 ppm or greater methane or n-hexane is measured, a leak is detected (b) For leaks determined using optical gas imaging with infrared cameras:
 i. The instrument shall comply with the specifications, the daily instrument checks and the leak survey requirements at 40 CFR §60.18(i)(1) - (3). If any emissions are imaged by the optical gas instrument, a leak is detected.
 Any leaks detected shall be repaired within 30 days of discovery. For the purpose of this condition equipment means each pump, pressure relief device, openended valve or line, valve, and flange or other connector.

For the purpose of this condition in VOC service means equipment in contact with a gas or a liquid that has a VOC content greater than 10% by weight. Monitoring: Once per calendar year the permittee shall complete the following monitoring: A chemical analysis for VOC content of all equipment in the unit. A count of all equipment in the unit.

an inspection of equipment in VOC service to detect leaks. If a leak is detected, the permittee shall place a visible tag on the leaking component until the component has been repaired. (b) If any leaks are detected, the equipment shall be re-monitored no later than 30 days after discovery of the leak to demonstrate that it has been repaired. (c) If the leak cannot be repaired within 30 days without a process unit shutdown, it may be designated "Repair delayed," and shall be repaired before the end of the next process unit shutdown. An inspection of equipment in VOC service shall also be conducted within 15 days of (4) any maintenance or repair that affects the equipment Recordkeeping: The permittee shall maintain the following records: equipment identification or description and location weight percent VOC for each piece of equipment. emission factor for each piece of equipment.
total VOC emissions for each unit, tons per year
For any leaks detected the permittee shall record the: (<del>4</del>) (a) date a leak is detected; (b) dates of attempts to repair; designation of "Repair delayed"; i. reason for delay if the leak is not repaired within 30 days of leak discovery, and ii. signature of authorized representative whose decision it was that repair could not be affected without a process shutdown; and (d) The date of successful leak repair shall also be recorded.

TV Permit No: P097-R3 Page: A32 of A32

For leaks determined using optical gas imaging with infrared cameras, the permittee shall

keep the records of the specifications, the daily instrument checks and the leak survey

requirements specified at 40 CFR §60.18(i)(1) - (3).

Reporting: The permittee shall report the following in accordance with Section B110:

- The number of leaking components discovered,
- The number of leaking components not repaired within 30 days,
- (3) The duration of the leaks that exceeded 30 days,
- (4) Dates of process unit shutdowns; and

(6)

(5) VOC emissions for each unit, tons per year.

PART B GENERAL CONDITIONS (Attached)

PART C MISCELLANEOUS: Supporting On-Line Documents; Definitions; Acronyms (Attached)