**Statement of Basis - Narrative**
**PSD Permit**

**Type of Permit Action:** PSD-Major Modification

**Facility:** **HF Sinclair Navajo Refining LLC ("Artesia Refinery")**
**Company:** HollyFrontier Navajo Refining LLC
**Permit No(s).**: PSD-195-M40 and P051-R3 through R3M2
**Tempo/IDEA ID No.:** 198 - PRN20210005
**Permit Writer:** James E. Nellessen

**Fee Tracking**

| | |
|---|---|
| **Tracking** | **NSR tracking entries completed:** [x] Yes [] No |
| | **NSR tracking page attached to front cover of permit folder:** [x] Yes [] No |
| | **Paid Invoice Attached:** [] Yes [x] No |
| | **Balance Due Invoice Attached:** [] Yes [x] No |
| | **Invoice Comments:** balance paid in full |

| | | |
|---|---|---|
| **Permit Review** | **Date to Enforcement:** N/A* | **Date of Enforcement Reply:** N/A |
| | **Date to Applicant:** 3/13/2023 | **Date of Applicant Reply:** 3/17/2023 |
| | **Date to EPA:** 3/21/2023 | **Date of EPA Reply:** TBD |
| | **Date to Supervisor:** NA | |

*Enforcement is not reviewing permits at this time.

## 1.0 Plant Process Description:

HF Sinclair Navajo Refining LLC's Artesia Refinery is located along Highway 82, inside the city limits of Artesia, in Eddy County, New Mexico. The Artesia Refinery can process approximately 110,000 barrel per day including intermediate products received from the Lovington refinery. Crude oil is processed through various process units including atmospheric fractionation towers, fluid catalytic cracking, alkylation, isomerization, saturates gas plants, amine units, sulfur recovery units (SRU), and various hydrodesulphurization units (HDS).

The emissions from the refining processes include nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO), particulate matter (PM10, PM2.5), hydrogen sulfide (H2S), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs). At the refinery, these emissions are from point combustion sources, storage tanks, and fugitive components from various refinery process units, wastewater treatment system, cooling towers, hydrogen plant, flares, fluid catalytic cracking unit, sulfur recovery plant and loading racks.

The Artesia Refinery operates one crude oil distillation unit and various downstream process units to produce various petroleum products. The Artesia Refinery processes crude oil, as well as intermediates received from outside sources such as Navajo's Lovington, NM refinery and other third-party sources. The crude oil and other intermediates enter the Artesia refinery via pipeline, truck, or rail. The Artesia refinery produces butane, propane, liquefied petroleum gas (LPG), kerosene, diesel fuel, various grades of gasoline, carbon black oil (CBO), gas oils, fuel oils, asphalt, pitch, and molten sulfur. The Artesia

refinery produces these materials both for its own use and for use by neighboring (but separate) stationary sources.

**2.0 Description of this Modification:**

NSR PSD 195-M40: This Significant Permit Revision application consists of the following:

1. Revise fuel composition for three process heaters.
2. Revise heat inputs and emission limits for several combustion units.
3. Revise emission limits for the flares.
4. Revise emission calculations for the SRU tail gas incinerators, the fluidized catalytic cracking regenerator, and the cooling towers.
5. Revise emissions calculations for truck and rail car loading.
6. Revise emission limits and representations for true vapor pressure for storage tanks and loading racks.
7. Retrofit tank T-0418 with an internal floating roof consistent with 40 CFR 63.660.
8. Reduce fugitive emissions limits from equipment leaks by more than 400 tpy that resulted from more accurate component counts.
9. Revise emission limits for wastewater treatment operations.
10. Remove from the permit emissions units that have been dismantled and emissions units associated with the renewable diesel unit (RDU), which is a separate stationary source permitted under NSR No. 9213.
11. Revise some of the SSM emission figures.

The above listed revisions were updates and corrections to existing processes and not projects subject major modification evaluation per 20.2.74.7.AQ and AE NMAC.

The four projects that were evaluated as potential major modifications were as follows:

1. Storage tanks and loading racks.
2. Flares.
3. Hydrogen reformer furnaces.
4. Dissolved air flotation units.

The above four projects will be summarized and evaluated in the PSD section of this statement of basis.

**3.0 Source Determination:**

1. The emission sources evaluated include all of the sources located at the refinery listed in Table 2-A of the application.

2. Single Source Analysis:

A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes (RDU which is different SIC code is being

removed from this permit)

B. Common Ownership or Control: Are the facilities under common ownership or control? Yes

C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes

3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes? Yes

**4.0 PSD Applicability:**

Once a source is PSD major for any single pollutant, all other pollutants, other than non-attainment pollutants, must be evaluated against Table 20.2.74.502 Significant Emission Rate for applicability regardless if that pollutant is over the 100/250 tpy threshold per 20.2.74.200(d)(1), 74.302.A and 302.B NMAC.

A. The source, as determined in 3.0 above, is an existing PSD Major Source.
B. The project emissions for this modification are not significant for three projects and are significant for one project. See further review and discussion below.
C. Netting was not required for three projects and the permittee chose not to net for the one project subject to PSD analysis (flare project). Best Available Control Technology (BACT) is being implemented. See further review and discussion below.
D. BACT is required for this Major Modification (flare project), see the attached description and review for the BACT determination below.

**Project Specific Emissions Analysis**

As an existing PSD major source, the "project(s)" must be evaluated to determine whether a major modification has occurred or not (20.2.74.200 NMAC).

This facility is one of those listed at 20.2.74.501 NMAC, Table I – PSD Source Categories, paragraph P, petroleum refineries. The "project" emissions for each of the four projects for which HF Sinclair has requested in this permit application are described, summarized, and evaluated below. Each project is reviewed separately because the projects are not substantially related to one another as described by the permittee within Section 3 of the application. The applicant provided data and calculations in Section 6 and Section 12 of the application. The permit writer reviewed and checked the data provided by the permittee and the emissions calculations for these projects.

In this permit application, the permittee has described and requested four projects. Each of these projects involves changes to a distinct set of emissions units: 1) loading racks and fixed-roof and floating-roof storage tanks; 2) flares; 3) hydrogen reformer furnaces; and 4) dissolved air flotation units. Each of these actions represents stand-alone projects, separate and independent from and wholly unrelated to one another. Of the four projects, it is the flares project that has tripped the major modification threshold for VOC emissions, resulting in PSD review. Other changes to permit terms requested in this permit application are not a major modification subject to PSD review because they are reconciliations/corrections involving no physical changes in or changes in method of operation of the stationary source.

For two of the projects (loading racks/tanks and flares) the permittee compared baseline actual emissions (BAE) as defined at 20.2.74.7.G NMAC to projected actual emissions (PAE) as defined at

20.2.74.7.AR NMAC, and as described at 20.2.74.200.D(3) NMAC. For this type of emissions comparison a consecutive 24-month period within the past 10 years is selected for BAE (tons per year averaged over the 2-years). For the other two projects (hydrogen reformer furnaces and air floatation units) the permittee compared existing allowable emissions to newly proposed allowable emissions (potentials to emit, PTE).

**Loading Racks and Storage Tanks**

The project involving fixed-roof and floating-roof storage tanks and loading racks involves only existing emission units; therefore, the emissions increase was calculated as the sum of the difference between the projected actual emissions (PAE) and the baseline actual emissions (BAE), for each affected loading rack and tank according to 20.2.74.200.D(3) NMAC. The only regulated NSR pollutants emitted in appreciable quantities by these existing emissions units are VOC and $H_2S$. The baseline period selected for the VOC and $H_2S$ emissions analysis was calendar years 2018-2019. The emissions increase from this project is summarized in Table 4-1 below.

Table 4-1 Loading Racks and Storage Tanks PSD Review Summary

| Emissions Unit Description | VOC | | | | $H_2S$ | | | |
|---|---|---|---|---|---|---|---|---|
| | BAE (tpy) | PAE (tpy) | Excludable Increase[1] (tpy) | Project Related Increase (tpy) | BAE (tpy) | PAE (tpy) | Excludable Increase (tpy) | Project Related Increase (tpy) |
| Loading Racks | 5.34 | 46.80 | 9.61 | 31.85 | - | 0.04 | - | 0.04 |
| Fixed Roof Tanks* | 208.33 | 182.54 | 1.55 | -27.33 | - | 0.07 | - | 0.07 |
| External Floating Roof Tanks | 50.46 | 65.94 | 0.21 | 15.27 | 0.39 | 0.58 | 0.002 | 0.19 |
| Internal Floating Roof Tanks | 54.52 | 74.10 | 0.80 | 18.78 | 0.11 | 0.15 | 0.0002 | 0.04 |
| **TOTAL** | **318.65** | **369.37** | **12.16** | **38.56** | **0.50** | **0.84** | **0.003** | **0.34** |
| **PSD Table 2 Significant Emission Rates (SER) or Thresholds** | **-** | **-** | **-** | **40** | **-** | **-** | **-** | **10** |
| **Are Project Emissions Significant?** | **-** | **-** | **-** | **NO** | **-** | **-** | **-** | **NO** |

* T-0418 is included with the fixed roof tanks but will be an internal floating roof tank following the retrofit described in this permit application.

1 – Excludable increases involve any non-compliant emissions above an emission threshold (20.2.74.7.G(2) NMAC) and/or that portion of a unit's emissions following the project that it could have accommodated during the 24-month period (20.2.74.7.AR(3) NMAC).

In summary, all project related emissions increases for the loading racks and storage tanks project are below the PSD significant emission rate thresholds and a PSD Step 2 analysis is not required.

**Flares**

The project involving the flares involves only existing emission units; therefore, the emissions increase is calculated as the sum of the difference between the projected actual emissions (PAE) and the baseline actual emissions (BAE), for each affected flare according to 20.2.74.200.D(3) NMAC. The baseline period selected for all pollutants October 2016 through September 2018. For all pollutants other than CO, pursuant to 20.2.74.7.AR(4) NMAC, the permittee has elected to use potential to emit (PTE) in lieu of making a projection of PAE. Hence, the PAE figures shown below will be representative of newly implemented PTEs for the flares, with revised allowable limits in the permit. As summarized in Table 4-2 below, the flares project is a major modification for VOC.

Table 4-2 Flares PSD Review Summary

| Pollutant | BAE (tpy) | PAE (tpy) | Project Related Increase (tpy) | PSD Table 2 Significant Emission Rates (SER) or Thresholds | Are Project Emissions Significant? |
|---|---|---|---|---|---|
| NOx | 24.66 | 63.83 | 39.17 | 40 | **NO** |
| CO | 94.94 | 188.43 | 93.49 | 100 | **NO** |
| VOC | 27.35 | 235.05 | 207.70 | 40 | **YES** |
| SO2 | 32.56 | 52.18 | 19.62 | 40 | **NO** |
| GHG | 102,601 | 72,824 | -29,777 | 75,000[1] | **NO** |

[1]This figure (75,000) is per 20.2.74.7.AZ NMAC.

In summary, all project related emissions increases for the flares project are below the PSD significant emission rate thresholds except for VOC. Hence, Step 1 PSD review has determined that a major modification will occur via this project. Any pollutants with an emissions change (increase) that exceeds the respective significant emissions rate (SER) must move to a PSD Step 2 review which allows for netting analysis to stay below major modification thresholds. The permittee has chosen not to perform a netting analysis. Hence, this flares project is being processed as a major modification. BACT review and determination has been performed and BACT will be implemented. Flare BACT is summarized further below and a BACT review analysis (five steps in BACT assessment) is a separate attachment to this Statement of Basis.

**Hydrogen Reformer Furnaces (H-8801/8802 and H-9851)**

The proposed changes to the hydrogen reformer furnaces (H-8801/8802 and H-9851) is to accommodate combustion of amine-treated refinery fuel gas (RFG). This change will result in an increase in emissions in one regulated NSR pollutant, sulfur dioxide ($SO_2$). The $SO_2$ increase will be less than the PSD significance threshold. The $SO_2$ increase was calculated as the difference between (i) the sum of the current allowable emissions from these furnaces in Permit No. PSD-NM-0195-M39R1 (3.00 tpy) and (ii) the sum of the requested allowable emissions from these units (15.96 tpy). Summarized in Table 4-3 below.

Table 4-3 Hydrogen Reformer Furnaces PSD Review Summary

| Pollutant | PTE (tpy) before project | PTE (tpy) after project | Project Related Increase (tpy) | PSD Table 2 Significant Emission Rates (SER) or Thresholds | Are Project Emissions Significant? |
|---|---|---|---|---|---|
| SO2 | 3.00 | 15.96 | 12.96 | 40 | **NO** |

In summary, all project related emissions increases for the hydrogen reformer furnaces project are below the PSD significant emission rate thresholds and a PSD Step 2 analysis is not required.

**Dissolved Air Flotation (DAF) Units**

The permittee's requested revisions to the VOC emission limits for the dissolved air flotation (DAF) units will result in increases in only VOC (VOC is only permitted pollutant for these units). The VOC increase will be below the PSD significance threshold. The VOC increase was calculated as the difference between (i) the sum of the current allowable emissions from T-0806 and T-0896 in Permit No. PSD-NM-0195-M39R1 (1.4 tpy) and (ii) the sum of the requested allowable emissions from these units (7.18 tpy). Summarized in Table 4-4 below.

Table 4-4 Dissolved Air Flotation Units PSD Review Summary

| Pollutant | PTE (tpy) before project | PTE (tpy) after project | Project Related Increase (tpy) | PSD Table 2 Significant Emission Rates (SER) or Thresholds | Are Project Emissions Significant? |
|---|---|---|---|---|---|
| VOC | 1.4 | 7.18 | 5.78 | 40 | **NO** |

In summary, all project related emissions increases for the dissolved air flotation units project are below the PSD significant emission rate thresholds and a PSD Step 2 analysis is not required.

**Best Available Control Technology**

Best available control technology (BACT) is required for emissions of VOC from the refinery's five flares. Each flare is an emissions unit at which a net increase in emissions of VOC will occur as a result of the physical or operational change in the emissions unit performed as part of the major modification described above. BACT for VOC emissions from the flares was evaluated in Section 12.B of the application. BACT is not required for other projects and other emissions units because the changes to those units are stand-alone projects that are not by themselves major modifications and are separate and independent from the major modification involving the flares.

BACT as defined at 20.2.74.7.K NMAC will be required for the flares project. The permittee made a BACT analysis as required for the application and the Bureau has assembled a BACT analysis per the PSD rule and this analysis is included below. The BACT review resulted in setting flare emission limits for VOC as BACT for each individual flare unit (summarized below in this Statement of Basis and more information provided in a separate attachment).

**Flare VOC BACT Summary**

**Best Available Control Technology (BACT) Determination for HF Sinclair Navajo (Artesia) Refinery**

BACT is required for the HF Sinclair Navajo (Artesia) Refinery for this NSR Permit 195-M40 for their flare project under prevention of significant deterioration (PSD) air quality review. Table 4-5 below summarizes flare BACT. The refinery has existing BACT on other regulated pollutants and units from previous permit actions that are not covered in this table. The Air Quality Bureau (AQB) performed a BACT review and determination based on all of the information provided by the applicant, HollyFrontier Navajo Refining and AQB's own research. HollyFrontier provided information that was evaluated by the AQB. Table 4-5 below is an overall summary of the VOC BACT being applied to HF Sinclair Navajo (Artesia) Refinery for the flares. A Flares BACT Table (Excel sheet) provides additional detailed analysis for the flares and VOC pollutant subject to PSD BACT (see attached document).

**Table 4-5 Flare BACT Summary Table: Summary of VOC BACT Limits.**

| Emission Unit(s) | | Pollutant | BACT Limit (numerical figure implemented) | BACT Control Method (implemented BACT) | BACT Floor Source[1] |
|---|---|---|---|---|---|
| Flares | FL-400, FL-401, FL-402, FL-403, FL-404 | VOC | Process VOC:<br>FL-400: 26.01 pph<br>FL-401: 19.72 pph<br>FL-402: 98.18 pph<br>FL-403: 32.54 pph<br>FL-404: 160.50 pph<br>SSM flare cap (all flares):<br>1376.30 pph VOC | GCP[2]; fuel requirements per existing refinery wide BACT is in Conditions A106.D[3] and A110.A; 40 CFR 60 Subpart Ja and Subpart A; 98% DRE[4] for VOC | 40 CFR 60 Subpart Ja requirements and Subpart A |

1. Stated as BACT floor even if not subject to a standard per PTE. See NSPS/NESHAP requirements in permit.
2. GCP = Good Combustion Practices.
3. Existing refinery-wide fuels BACT. See Conditions A106.D and A110.A in the permit.
4. DRE = Destruction rate efficiency.

This summary of BACT is based on the Flares BACT Table (Excel sheet). The applicant provided a BACT analysis in Section 12.B of the application which included information about control efficiency, economics, feasibility, and other environmental considerations in the applicant's BACT analysis. The AQB reviewed the applicant's analysis and made its own review to complete the BACT determination.
Attachments:

1) Good Combustion Practices background information from EPA
2) Flares BACT Analysis Table assembled by AQB.

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | **Existing PSD Major Source with BACT.** |
| *195-M40 | Due 4/25/2023 | PSD Major Modification | To make a number of corrections/reconciliations in emission calculations for certain equipment that did not involve PSD review. There are four projects that did require PSD review and assessment: 1) Storage vessels and loading racks, 2) Flares, 3) Hydrogen reformer furnaces, and 4) Dissolved air flotation units. Storage vessels and loading racks were assessed for VOC with an emissions increase of 38.6 tpy VOC which is below the 40 tpy threshold to trip PSD. Hydrogen reformer furnaces added 13.0 tpy of SO2 which is below the 40 tpy threshold. Dissolved air flotation units added 5.8 tpy VOC which is below the 40 tpy threshold. **Flare project is what tripped PSD major modification threshold for VOC.** Flare NOx increase was 39.2 tpy below the 40 tpy threshold, CO increase was 93.5 tpy below the 100 tpy threshold, SO2 increase was 19.6 tpy below the 40 tpy threshold, but VOC increase was 207.7 tpy over the 40 tpy threshold. **Hence, PSD major modification for VOC from the flares project.** |
| 195-M39R5 & P051-R3M2* | 9/15/2022 | Admin Rev NSR and TV | Facility name change from HollyFrontier Navajo Refining LLC to HF Sinclair Navajo Refining LLC ("Artesia Refinery"). |
| 195-M39R4 | 8/23/2021 | Admin Rev | Add minor NSR exempt equipment portable cooling tower with PTE for VOC, PM10, and PM2.5 less than 0.5 tpy. |
| 195-M39R3 | 3/16/2021 | PSD Technical Revision | ISOM project to increase octane content added new emissions to flare FL-0400 that were less than 1 pph meeting requirements at 20.2.72.219.B(1)(b) NMAC. |
| 195-M39R2 and P051-R3M1* | 2/15/2021 | Admin Rev | Correcting a LHV (lower heating value) for Unit H-5401. Emission calculations were correct, but not the LHV value. |
| *P051R3 | 12/31/2020 | TV renewal | Title V renewal and incorporate the NSR revisions from Permit Nos. 0195-M35R2 to 0195-M37-39. |
| 0195M39R1 | 8/13/2020 | Re-Opening | The re-opening of the permit corrects the permit to incorporate information on four tanks that were included in a revision to the application. This reopening adds four internal floating roof (IFR) tanks for gasoline blending: four 50,000-bbl IFR tanks (T-0020, T-0021, T-0022 and T-0023). The reopening also adds components to fugitive area, FUG-29-BLENDER/TK FARM, due to installation of piping associated with the added gasoline blending tanks. |

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| 0195M39 | 7/2/20 | PSD Minor Modification | **Existing PSD Major Source with BACT. Project emissions for this modification are not significant, therefore a PSD Minor Modification. Only installation of new tanks and increases in fugitives and SSM Misc 2 count as part of the PSD Project.** This Significant Permit modification application consisted of an update of flare emission limits, correction/clarification of various permit conditions, tank number changes, tank removals, addition of fugitive components, addition of startup/shutdown/maintenance particulate matter emission limits, clarification of federal fugitive regulatory applicability/compliance, and addition of tanks. Removing GHG BACT from a permit PSD 0195-M38: In an email from Eric LeDoux, she states: "Based on your information and email exchanges provided, you have indicated the PSD permit 0198M33 to install Boiler (Unit B-0009) did not trigger PSD due to no significant emission increase for any criteria pollutants and only triggered PSD for GHG pollutant. This requirement as indicated in the "McCabe" memorandum is no longer effective. Therefore, this PSD permit issued January 18, 2013 was not required and the PSD permit can be rescinded per EPA's rescission rule that is attached. Please note the rescission must go through public participation requirements with supporting documentation that includes the new boiler project didn't trigger significant emission increases for all NAAQS criteria pollutants. I highly recommend you include the boiler specification sheets in the supporting documentation." |
| 0195M38R2 & TV 502(b)(10) | 1/14/2020 | PSD Admin & TV 502(b)(10) | NSR Administrative Form to add the temporary Cooling Tower to a period not to exceed 2,640 hours. Also, the approval for the 502(b)10 change to Title V Permit P051-R2. |
| 0195M38R1 | denied | Technical Revision | Application was deemed to be too complex for a Technical Revision and applicant was told to re-submit as PSD Minor Modification. |

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| 0195M38 | 9/20/19 | PSD Minor Modification | **Existing PSD Major Source with BACT. Project emissions for this modification are not significant, therefore a PSD Minor Modification.**<br>This Significant Permit Revision application includes the following primary changes:<br>The new emission units are: B-0010 Boiler 10 RDU Receiving; H-2601 Unit 26 RDU Reactor Heater; ten feed tanks (T-0904 through T-0913) that are exempt from permitting, three fixed-roof, product tanks (T-0901, T-0902, and T-0903)RLO-26 RDU Railcar Loading & Off-Loading Rack; Y-0014 RDU Cooling Tower; FUG-26-RDU Renewable Diesel Unit Fugitive Area. The modified existing emission unit is: FUG-FUEL GAS Fuel Gas Fugitive Area - New RDU Components; Update/Decrease of Cooling Tower PM10 and PM2.5 Emission Limits. |
| 195M37R3 | 3/26/19 | PSD Admin | 1) Addition of exempt emissions-generating activity, Lime Handling; and 2) Addition of exempt emissions-generating activity, Lime Delivery Road. |
| 195M37R2 | 11/14/2018 | PSD Technical Revision | Fuels Truck Loading Rack Vapor Combustion Unit NSR Technical Revision: changing the unit number of the Fuels Truck Loading Rack VRU control to TL-4 VRU; adding the existing TL-4 VRU control to Table 105.A; adding a Vapor Combustion Unit (TL-4 VCU) as an alternate control device to the existing TL-4 VRU for the Fuels Truck Loading Rack (TL-4); increasing the truck loading throughput; reducing pph and increasing tpy VOC emission limits from TL-4; and updating Table 106.G to be consistent with the existing PSD-NM-37R2 permit |
| 195M37R1 | | PSD Admin | Added Server Backup Generator and Propane Dryness Testing NSR Administrative Revision, adding the G-0102 Server Backup Generator. |
| 195M37 | 8-12-16 | PSD Minor Modification | Existing PSD Major Source with BACT. Project emissions for this modification are not significant, therefore a PSD Minor Modification.<br>The modification and permit revisions consist of:<br>1) Authorizing process equipment modifications to increase production at the following units:<br>a. Unit FUG-06-NHDU – Naphtha Hydrodesulfurization Unit<br>b. Unit FUG-13-NHDU – Naphtha Hydrodesulfurization Unit<br>c. Unit FUG-20-ISOM – BenFree Unit (previously identified as Isom Unit)<br>d. Unit FUG-33-DIST HDU – Diesel Hydrodesulfurization Unit, and<br>e. Additionally, a stream from Unit 44 (Gas Oil Hydrotreater) will be routed to Unit 33.<br>2) Remove the following storage tanks that are out of service: T- |

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | 0013, T-0058, T-0404, T-0405, T-0409, T-0810, and T-0078 which was never constructed.,<br>3) TK-NEWETHANOL and TK-BIODIESEL were originally permitted as an external floating roof tank and fixed roof tank; however, both were constructed as internal floating roof tanks. Permit representations for these tanks are being updated with the as constructed information and tank ID Numbers: T-0451 and T-0452.<br>4) SSM T-0078, SSM T-0079, and SSM T-1225 are being removed from the permit. SSM tank emissions are included under ID "SSM Tanks" which is being updated as part of the project.<br>5) SSM Misc 1 for catalyst handling emissions is being removed from Table 2A and is exempted on Table 2B. Emissions associated with changing catalyst at the refinery meet exemption criteria in 20.2.72.202.B.5. |
| 195M36 | 1/28/2016 | PSD Minor Modification | Existing PSD Major Source with BACT. Project emissions for this modification are not significant, therefore a PSD Minor Modification.<br>The project consists of 1) the installation of a new Prime G operating unit necessary to comply with EPA's Tier 3 program to reduce sulfur in gasoline. Emission sources associated with the project will include: a reactor charge heater H-5401, an external floating roof tank for off-spec material T-5401, and piping component fugitive emissions, 2) updating the emission calculations for the wastewater unit, and 3) owners name changed from Navajo Refining Company L.L.C. to HollyFrontier Navajo Refining LLC. |
| P051R2M1 | 1/22/2016 | Administrative Amendment | Owners name changed from Navajo Refining Company L.L.C. to HollyFrontier Navajo Refining LLC |
| 195M35R2 | 7/16/2015 | Administrative Permit Rev | This revision consists of the installation of a new tank to store treated wastewater. The new tank is necessary to store off-spec wastewater that will need retreatment prior to sending offsite. Tank T-7107 will hold 3,500 bbl of treated waste water that has been treated in the selenium removal process (SeRT Process). The potential VOC partial pressure is less than 0.2 psia. The estimated emissions are 0.71 tons per of VOCs. Since this is a PSD Source, it was verified that this project did not trigger PSD significance under 20.2.74 NMAC. |
| P051R2 | 5/6/2015 | TV renewal | Title V renewal and incorporate the NSR revisions from Permit Nos. 0195-M32 to 0195-M35. |
| 0195M35R1 | 12/4/2014 | PSD Tech Rev | Denial of Air Quality Permit Application No. PSD0195-M35R1. The minor NSR regulations require either a technical permit revision or a significant permit revision to replace an existing emissions unit. |

**5.0 History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | The permit revision is required regardless if this is a "modification" to the facility or not.<br>Request: update for H-0011, manufacturer, model number, and date of manufacturer. Replacement of burners only. |
| 195M35 | 5/6/2014 | PSD Minor Modification | Existing PSD Major Source with BACT. Project emissions for this modification are not significant, therefore a PSD Minor Modification.<br>Navajo Refining Company, LLC (Navajo) is requesting a significant revision under 20.2.72.219.D NMAC to authorize two new storage tanks and ancillary equipment, authorize internal combustion engines, and update several emissions calculations.<br>Navajo proposes to install two new storage tanks (Units TK-NEWBIODIESEL and TK-NEWETHANOL) at the Artesia Refinery for biodiesel and ethanol storage. Biodiesel and ethanol will be trucked to the facility and unloaded into storage tanks. Ethanol will be blended with gasoline and biodiesel with diesel produced at the site before sending off site through pipeline, tank, or railcar. Fugitive component counts will be added to FUG-29-BLENDER/TK FARM for the new tanks and blending skid. Truck unloading fugitive piping components will be added to FUG-08-TRUCK RK.<br>An increase in gasoline loading is not necessary; however, diesel loading throughput was increased and emissions are increased fuels loading rack TL-4.<br>Navajo proposes to authorize the use of internal combustion engines at the Artesia Refinery. Most of the engines meet exemption criteria in 20.2.72.202 NMAC; however, they are subject to 40 CFR 63, Subpart ZZZZ or 40 CFR 60, NSPS IIII requirements. Therefore, Navajo has included all of the engines on Table 2A since they must all be included in the Title V permit.<br>Additionally, several emissions calculation updates are included:<br>1. spew gauge emissions were removed from the butane loading rack TLO-13. Pressure vessels are not equipped with spew gauges so these emissions are no longer applicable. Since these were the only emissions for this source, TLO-13 is no longer needed in the permit.<br>2. The fugitive emissions from FUG-BLR09 were moved to FUG-FUEL GAS to more accurately represent the source of these emissions, so FUG-BLR09 is being removed from the permit.<br>3. VOC emissions from FUG-FUEL GAS were updated to reflect the percentage of VOC in refinery gas. |

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | 4. An error was noted in the previous emission calculations for hydrogen sulfide ($H_2S$) from storage tanks, so these emission calculations are updated.<br><br>5. A tank fitting loss factor was incorrectly calculated for Tank T-0056. The revised fitting factor results in decreased tank emissions which are also updated.<br><br>6. Loading emissions were updated for TL-4 to show an increased throughput for diesel and update the authorized loading emission for gasoline loading. Additionally, several loading racks meet the exemption in 20.2.72.202 B.2 for loading materials with a true vapor pressure less than 0.2 psia, and also do not have any applicable regulatory requirements, so they are listed in Table 2B of the application.<br><br>7. Heater and boiler calculations used the NSPS J or Ja limit as a sulfur limit rather than $H_2S$ resulting in a slight emission difference. Boiler B-0009 sulfur limits were not updated. Emissions were recalculated using the combustion device design rating to simplify the conversions required and potential for error.<br><br>During permit process and applicant review of initial draft permit the following was added to scope of modification.<br>Add condition for Unit H-3402 to incorporate the Alternative Monitoring Plan (AMP) approved by US EPA. |
| 195M34 | 8/5/2013 | PSD Minor Modification | Existing PSD Major Source with BACT. Project emissions for this modification are not significant, therefore a PSD Minor Modification.<br>The proposed project would authorize improvements to the Artesia Refinery's wastewater treatment process for improved biological treatment. Tank T-0829 will have the ability to operate as an equalization tank or biological treatment tank. Additionally, several units that were either shut down or not constructed are being removed from the permit with this application. Units T-0836, T0801, T-0896, and T-0806 became exempt equipment but still regulated under 20.2.70 NMAC. Units T-0896, T-0801, T-0806, T-0836, and T-0896 are exempt under NSR but don't qualify for insignificant activities under Title V since these units are subject to MACT CC. To ensure consistency between the NSR and Title V permits, the permittee has agreed to have these units shown as |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
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| | | | regulated in the NSR permit. Add condition for Unit H-3402 to incorporate the Alternative Monitoring Plan (AMP) approved by US EPA.<br>Finally, several emission sources were not constructed or were recently shut-down, so it is requested that these sources be removed from the permit. The following sources should be removed from the permit:<br>Source Description and Reason for removal<br>T-0844 Stilling Well T-0844 Not constructed<br>T-0001 Process Lift Station T-0001 Not constructed<br>T-0846 Storm water Lift Station T-0846 Not constructed<br>HCKR-FRN2 Unit 34 hydrocracker Charge Furn 2 Not constructed<br>HCKR-BOIL2 Unit 34 hydrocracker Reboiler I Not constructed<br>FUG-SAT GAS-2 Proposed Sat Gas Unit Not constructed<br>Y-8001 WWTP Cooling Tower Not constructed<br>H-0031 Unit 3 ROSE Unit No. l Hot Oil Heater Shut down in 2011.<br>H-0460 SRU Hot Oil Heater Shut down in 2010.<br>H-3401 Unit 34 Hydrocracker Charge Furnace l Shut down in 2012.<br>FUG-03-ROSE-l ROSE Solvent Deasphalting Unit Shut down in 2011.<br>M-8010 WWTP Diesel Pump Engine Electric pump installed. |
| 195M33R2 | 6/19/2013 | PSD-Tech Rev | Navajo Refining Company, LLC (Navajo) is requesting a technical permit revision under 20.2.72.219.B.1.b to authorize the use of odor controlling atomizers along the property line. Only fugitive emissions are associated with this project. A blend of water and surfactants will be atomized to help with odor control from the refinery. VOC emissions associated with the project are less than 1.0 pounds per hour; therefore, Navajo believes the project qualifies for a technical permit revision under 20.2.72.219.B.1.b. |
| 195M33R1 | 6/7/2013 | PSD-Admin | Navajo is requesting an administrative revision to correct a typographical error in Permit 0195-M33. Conditions A.100.B(13) and A.106.E both refer to a CO2 emission limitation of 0.037 lb/MMBtu; however, that is the CO emission factor provided by the boiler manufacturer. The CO2 emission limit is based on equation C-5 found in 40 CFR 98, Subpart C. The calculated CO2 emission factor based on information submitted with the application is as follows: (108,025 tons CO2/yr) / (2,282 MMscf/yr) / (845 Btu/scf) * (2,000 lb/ton) = 112.1 lbCO2/MMBtu. Navajo believes this correction of a typographical error can be authorized as an administrative revision, per 20.2.72.219(A)(1)(a) NMAC. |
| PSD 195M33 | 1/18/2013 | PSD Major | Add new Boiler. This action is a PSD significant modification and |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
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| | | Modification | required BACT. B-0009 |
| PSD 195M32 | 10/22/2012 | PSD Minor Modification | Add SSM for entire facility, update Table 107. This action is a PSD minor modification. |
| PSD 195M31 | 10/17/11 | Significant Revision | The Project changes the Naphtha Hydrotreaters (Units 06 and 13), the Isomerization Unit (Unit 20), the Gasoline Blending Unit (Unit 29), and the tank farm (Unit 08) in order to comply with the EPA's Mobile Source Air Toxics II (MSAT2) regulation limiting the amount of benzene in gasoline. As part of this project, some new equipment and associated piping will be installed. The only new potential emissions will be volatile organic compounds (VOCs) from new piping components.<br>Permit representations for fugitive area FUG-06-NHDU will be updated. This fugitive area was previously represented as being unmonitored. It is now monitored according to the MACT CC leak detection and repair program. This application updated the unit's fugitive piping component count. The net result of these corrections is a decrease in permit allowable fugitive VOC emissions. However, Navajo submitted the application as a significant permit revision because calculated emissions from the new piping components associated with the MSAT2 project exceed 1.0 tpy VOC.<br>Physical Modifications<br>The Artesia Refinery's Naphtha Hydrotreaters (Units 06 and 13), their Isomerization Unit (Unit 20), their Gasoline Blending Unit (Unit 29), and their tank farm (Unit 08) will be the only units physically modified as part of the MSAT2 Project. As part of this project, Navajo proposes to install the following new equipment: a fractionation tower to function as the bottom section of the existing Naphtha Splitter tower (W-0180), two Naphtha Splitter Pumps, a Naphtha Splitter Steam Reboiler, two Naphtha Splitter Overhead Condensers, and piping. The only potential emissions from this new equipment consist of piping fugitives.<br>Downstream Impacts: The above-listed physical changes will allow Unit 20 to process approximately 2,000 bbl/day more material. |
| PSD 195M30 | 8/1/2011 | Significant Revision | The proposed project would authorize improvements to the Artesia Refinery's Hydrocracker Unit. These improvements are intended to provide additional heat to minimize the Hydrocracker Unit's startup time. Two changes related to other units are also proposed.<br>The project consists of the following: This description is for informational purposes only and is not enforceable.<br>• A new Hydrocracker Reactor Charge Heater (H-3403) will be permitted as a replacement for the existing Hydrocracker (Unit |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | 34) Charge Furnace 1 (H-3401). The replacement heater will have a maximum firing rate limit of 32 MM Btu/hr (LHV basis). H-3401 is permitted with a maximum firing rate limit of 9.6 MM Btu/hr (LHV basis) and shall be permanently shut down (isolated and blinded) after the successful startup of the replacement heater.<br>• The existing Hydrocracker Fractionator Reboiler 1 (H-3402) maximum firing rate limit will be revised from 35 to 52 MM Btu/hr (LHV basis) to reflect the "as built" heater.<br>• The existing ROSE1 (Unit 03) Hot Oil Heater (H-0031) will be permanently shut down.<br>• The existing Vacuum Unit (Unit 21) Heater H-0028 maximum firing rate limit will be revised from 9.3 to 12.3 MM Btu/hr (LHV basis) to provide operational flexibility.<br>• The project will also involve removing two existing fin-fan coolers and installing four new fin-fan coolers to condense the overhead stream from the FUG-13-NHDU (Unit 13) Naphtha Splitter (W-180). Added Condition A209.C, "Minor changes within the facility to piping and components that affect fugitive VOC emission source shall be updated and added during the next available significant modification to the NSR permit. The VOC total emissions have a safety level due to rounding to accommodate these minor variations in emissions."<br>The project will not affect the major/minor source status of the facility (either for PSD or Title V). The project does affect the applicability of NSPS Subpart Ja and MACT Subpart DDDDD. Facility is PSD Major and this action in PSD minor. |
| PSD 195M29 | 7/13/11 | Significant Revision | The original BACT PSD Permit 0195-M25 and Permit 0195-M28 required Navajo to submit a permit revision application proposing a new 365-day rolling average SO2 concentration limit for Sulfur Recovery Unit Number 3 (SRU3) based on data collected during the initial 18 months of operation. This permit revision application satisfies that requirement. No emission rate increase is proposed, and no new pollutants will be emitted. In Condition 1.J on page 6, the requirement to submit an application after data collection has been removed and retains the current permit's 365-day rolling average SO2 concentration limit of 192 ppmv.<br>Air dispersion modeling is not included in this application because no emission rate increase is proposed and no new pollutants will be emitted. |
| | Added to 195M30 | | The project will also involve removing two existing fin-fan coolers and installing four new fin-fan coolers to condense the overhead |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | stream from the FUG-13-NHDU (Unit 13) Naphtha Splitter (W-180). Added Condition A209.C, "Minor changes within the facility to piping and components that affect fugitive VOC emission source shall be updated and added during the next available significant revision to the NSR permit. The VOC total emissions have a safety level due to rounding to accommodate these minor variations in emissions." Still must meet the total VOC limit for fugitive category until next permit revision. |
| PSD 195M28 | 4/29/11 | Significant Revision | The proposed project is intended to provide additional capacity to handle storm water event surge flows and to increase biological activity in the aggressive biological treatment system. The revision will allow for installation of new equipment in the wastewater treatment plant, will authorize a higher total dissolved solids content for the refinery's cooling towers, will clean up the permit to remove references to equipment that is no longer in place and will revise the permit's unit numbers to be consistent with the refinery's equipment numbering system.<br>Added condition 1.C.2) for use of temporary boiler in place of either or both Boilers B-0007 and B-0008.<br>The refinery will continue to operate 24 hours/day, 7 days/week, and 52 weeks/year. Project was not significant under PSD regulation. |
| PSD 195M27R1 | 3/28/11 | Admin Revision | This revision consists of Navajo using a portable flare (FL-HEP-PORT), so that natural gas inside the Holly Energy Partners (HEP) pipeline is removed and safely combusted. FL-HEP-PORT's primary purpose will be to operate as a safety device, where small amounts of VOC contained in the natural gas will be burned. No actual construction is required to implement this change, since the pipeline already has the necessary tie-ins. Portable flare FLHEP-PORT has a potential emission rate of no more of one-half (1/2) ton per year of any pollutant for which a National or New Mexico Ambient Air Quality Standard has been set or one-half (1/2) ton per year of any VOC, therefore qualified as exempted activities under 20.2.202(B)(5) NMAC. |
| PSD 195M27 | 1/13/11 | Significant Revision | The proposed project will authorize storage of additional hydrocarbons in existing storage tanks T-0056 and T-0834. The revision will provide operating flexibility to use T-0056 and T-0834 for storage of hydrocarbons that are already stored in other tanks at the refinery. VOC emissions increased by 1.3 tpy, no modeling was required.<br>Project was not significant. |
| P051R1 | 9/11/09 | Title V renewal | Title V renewal, added applicability to 40 CFR 64, CAM, and incorporate PSD-NM Permit 195M26 and M26R1. |
| PSD | 9/4/09 | Tech Rev | This technical revision PSD-NM-0195-M26-R2 consists of changes |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| 195M26R2 | | | in the Unit 13 Naphtha Hydrotreater. The proposed changes include re-tubing Heater H-40 and adding some piping equipment to fugitive component group FUG-13-NHDU. The re-tubing will not increase the maximum fired duty of the heater, so the only expected change in emissions will come from the additional fugitive components. Volatile Organic Compounds (VOCs) emissions for Unit FUG-13-NHDU and the Plant total VOCs increased by 0.89 tons per year. Corrections from Administrative Revision 0195M26R1 were incorporated. No new requirements were added. Updates were made on pages 1, 2, 3, 9, 24, 25, 31, 36, 70, and 77, pages numbers may not be valid for future permits. |
| No rev | 5/1/09 | | Responsible Official change from James Resinger to Michael Whatley. |
| PSD 195M26R1 | 4/24/09 | Admin Rev | This revision consists of: 1) Re-routing all streams other than pilot and purge gas to FL-404 instead of FL-403 during normal operation. This is being done for safety reasons to prevent potential problems in the flare header. 2) Correct a typographical error in Permit 0195M26 Condition 2.B. Permit 0195M25R2 authorized the retrofit of H-600 with next-generation ultra-low NOx burners (NGULNBs). The value in the last sentence of Condition 2B should be changed from 0.03 to 0.05 so that the revised version of the last sentence states “After the retrofit, the NOx emissions from H-600 shall not exceed 0.05 lb per MM Btu (LHV) on a 3-hour rolling average basis at 3% excess oxygen.” 3) Permit 0195M26 conditions 2.OO and 3.I will become obsolete with this administrative revision. |
| PSD 195M26 | 2/16/09 | Significant revision | The Artesia Refinery’s South Crude Unit (Unit 02), Vacuum Unit (Unit 21), and two loading racks (RLO-19 and TLO-20) will be the only units physically modified as part of the Heavy Crude Expansion. West Canadian Select (WCS) crude oil is significantly heavier than the crude oil currently processed at the refinery. WCS crude oil contains approximately 55% gas oils and heavier per barrel, while WTS crude oil contains approximately 35% gas oils and heavier per barrel. Therefore, the South Crude and Vacuum Units will be reworked to accommodate processing of more heavy crude oil.<br>Increased tank throughputs.<br>This action will also incorporate three (3) Admin. Revisions.<br>This action will remove all reference to MACT Subpart DDDDD. All requirements/conditions added previously will stand on their own. |
| PSD | 10/31/08 | Admin Rev | This revision consists of authorizing a crude oil unloading system |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| 195M25R5 | | | (FUG-RRTOTRUCK) between railcars and trucks with closed loop piping. The Unit has emissions less than 0.5 tpy of VOC and therefore exempt per 20.2.72.202(B)(5) NMAC. Conditions: Table 2G. |
| PSD 195M25R4 | 6/30/08 | Admin Rev | This revision consists of replacing cooling tower CT Y-9 (40,000 gal/min) with two smaller towers, CT Y-11 (30,000 gal/min) and CT Y-12 (10,000 gal/min) and repositioning the units within the plant site. No Change in emissions. |
| PSD 195M25R3 | 6/10/08 | Admin Rev | This revision consists of correcting the hourly NOX emission limits for Heater H-28, Heater H-355, Heater H-600 and Heaters H-352/H-353/H-354; correcting the $SO_2$ limit for Flare FL-400; correcting the hourly and annual VOC limits for FUG-29-BLENDER/TK FARM; correcting the annual storage tank throughput limits for asphalt/pitch and gasoline; and correcting the allowable annual VOC emissions from floating-roof storage tanks. |
| PSD 195M25R2 | 5/14/08 | Technical Revision supersedes 195M25 | The proposed revisions do not constitute major modifications, so a PSD review is not required. Tech. Rev. 0195-M25-R1 consists of a request to construct one 50,000 bbl and one 80,000 bbl external floating roof storage tanks and associated components in lieu of two 90,000 bbl tanks authorized by NSR 0195-M19. The 90,000 bbl tanks have never been constructed, and have not been listed as regulated equipment is recent modifications. The two tanks will be permitted to store high vapor pressure liquids (max. vapor pressure of 11.00 psia). The typical materials stored are isomerates.<br>Because 0195-M25 specifically incorporated all portions of permits 0195-M17 through 0195-M24-R5, permit 0195-M19 has been superseded. Therefore, Tech Rev. 195M25R1 will be combined with Tech. Rev. 0195-M25-R2.<br>Tech. Rev. 0195-M25-R2 consists of the following:<br>1. An update on the location, dimensions, and deck fitting component count for the proposed naphtha tank NAP-TK authorized for construction under the refinery expansion project. This tank will be renumbered as T-1225.<br>2. Relocating, revising dimensions, and revising the permitted throughput of the proposed pitch tanks PITCH-TK1 and PITCH-TK2, and adding a new pitch tank, PITCH-TK3.<br>3. Correcting the column diameter and rim seal loss factors for tank T-56.<br>In addition, there are a number of administrative revisions included in the M25-R2 package:<br>1. Correcting a typographical error in the CO emission rate for cooling tower CTY-8. |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | 2. Adding VOC allowable emission rates for all combustion sources in Table 1 - Allowable Emission Limits. The rates were included in the permit application submittals, but historically, have not been included in the permit. Navajo has included this revision at the request of Joe Kimbrell for consistency with the Title V permit.<br>3. Revising all emission rate limit tables to show rounding to the nearest tenth instead of the nearest hundredth.<br>4. Relocating three proposed process units (ROSE2, Hydrocracker, and Hydrogen Plant 2).<br>5. Relocating existing Tank T-437 to make room for the proposed relocated ROSE2 and Hydrocracker units.<br>Navajo revised their request on May 6 to include the retrofit of Heater H-600 with next-generation ultra-low NOX burners as required by the consent decree for a reduction in the unit's NOX emission rate. The request also increases the stack height of H-600 to 177 ft and H-40 to 99 ft.<br>The original calculations submitted for the construction of the 50,000 bbl and 80,000 bbl storage tanks in lieu of the two 90,000 bbl indicated an increase in hourly and annual floating roof losses and a reduction in fugitive emissions from associated components. When questioned, Doug Price explained that the calculations compared an average vapor pressure liquid with the maximum vapor pressure allowed by the permit. The revised calculations do indeed demonstrate a reduction in the VOC PTE from both the floating roof losses and component count. |
| PSD-NM 195M25R1 | Not issued, rolled into M25R2 | Admin or Tech Revision | See description above for 195M25R2. |
| PSD-NM 195M25 | 12/14/07 | PSD Major Modification | This permit authorizes the modification and operation of the Artesia Refinery by allowing the construction and operation of the 2007 Refinery Expansion Project (2007-REP). The current significant revision primarily concerns the Artesia 2007 Refinery Expansion Project, and associated construction of the following: a Hydrocracking Unit, a Solvent De-Asphalting Unit (SDA or ROSE), a saturates gas plant, a sulfur recovery unit, a hydrogen plant, a wastewater treatment plant, a flare, a cooling tower, and associated piping, piping components, and storage tanks. The refinery's crude oil feed charge rate after the modification is approximately 150 – 180 barrels per day. BACT review for entire refinery, and BACT applied to new/modified sources. |
| 195M24R4 | 08/31/07 | Technical revision. | Propane Test and Release Project. Adding to new pressurized tanks and modifying several existing fugitive source areas |
| 195M24R3 | 08/14/07 | Administrative | To relocate existing Tank T-437. |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | revision | |
| 195M24R2 | N/A | Technical revision | This was an application to convert existing internal floating roof tank 439 to an external floating roof tank. |
| 195M24R1 | 05/18/07 | Technical revision | To add a naphtha splitter to the Unit 06 naphtha unit, resulting in an increase in fugitive components and emissions. |
| 195M24 | 6/23/06 | Significant revision | Added: 3.I.6; Modified: Table 1, conditions 2.K, 10.I, 11.B.3; Deleted: H-20 reference in condition 3.E.1. |
| 195M23 | N/A | Significant revision | Withdrawn 3/27/06. |
| P051M1 | 11/03/05 | Significant Modification | Update TV to integrate changes from NSR permits 195-M17 through M18-R1. In addition, certain requirements as stated in Consent Decree (CEMS on FCCU regenerator) were integrated in operating permit. |
| 195-M22 | 10/13/05 | Significant revision | Construct a new heater, process vessels, and other associated equipment including heat exchangers, pumps, valves, and piping. The Hydrogen Plant will provide a reliable supply of hydrogen critical to the refinery's future production of low-sulfur content gasoline and will provide additional supply flexibility for hydrogen used in the refinery's hydrotreating units.<br>Conditions: 1. GG (EE & FF reserved) & 7 B.1&2 (new); 2.OO.3; 3.I.5; 3.J; 4.N; 4.Q.2; 5.D; 5.I; 5.J; 9.A; 9.B; 10.A; and Table(s) 1, 2.D. and 2.E. (modified) |
| 195-M21 | 11/18/05 | Significant revision | Construct one new crude oil heater (H-19) to supplement existing crude oil heater (H-20). Other new or replaced equipment includes heat exchangers, pumps, valves, and piping. The South Crude Efficiency Project will reduce energy usage or process additional crude oil at the existing heater firing rates.<br>Conditions: 1.FF (new); 2.OO, 3.F, 3.I, 4.N, 4.Q.3, 5.D, 5.I, 7.B.1, 9.A, 10.A, Table 1 and Table 2.D (modified). |
| 195-M20 | 01/23/06 | Significant revision | Construct 5 new process heaters, process vessels, and other associated equipment including heat exchangers, pumps, valves, and piping and the option to modify SRU2 by enriching the O2 content in the SRU's burner/thermal reactor. This equipment will allow the production of Ultra Low Sulfur Diesel (ULSD) fuel consistent with the federal clean fuels requirements.<br>Conditions: 1.EE (new); 2.A, 2.C, 2.E, 2.F, 2.OO, 3.I, 4.N, 4.Q.3, 5.D, 5I and 5.J.7.B.1, 9.A, 11.A.1.b, Table 1, and Table 2.D (modified). |
| 195-M19 | 08/22/05 | Significant revision | Construct the Naphtha/Light Oil tanks project consisting of two new 90,000 bbl external floating roof tanks and other associated equipment including pumps, valves, and piping. This equipment will provide additional storage capacity for naphtha/light oil processed or produced by the refinery.<br>Conditions: 1. DD & 2 RR (new); 4A; 5G; 10A; 11C and Table(s) 2.B. |

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| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | and 2.D. (modified) |
| 195-M18R1 | 08/30/05 | Administrative revision | Incorporated exempt diesel tank T-815 (vapor pressure of tank < 0.2 psi) |
| 195-M18 | 02/22/05 | Significant revision | Construct an alkylate splitter and other equipment associated w/the CBG Premium Project including valves and piping to be located in the existing north and south Alky Units, and treating, blending, and tank farm areas at Navajo's Artesia, NM Refinery. This equipment will allow Navajo to produce a high octane alkylate to meet gasoline specifications w/o the use of MTBE for gasoline blending.<br>Conditions: 1. BB & CC (new); 4A; 10A; 11C and Table 2.D. (modified) |
| 195-M17 | 12/15/04 | Significant revision | construct an SDA Unit, to incorporate Consent Decree emission limits, standards, and/or schedules effective as of the date of lodging (12/20/01), to incorporate CD-driven NOx limits for B-7, B-8 and H-601, and to reflect a scrubber instead of ESPs on FCCU. Additionally includes administrative changes to storage tank tables per October 3, 2002 revision request and to FL-400 acid gas flaring chart, and authorizing the operation of B-105 by requiring the unit to be retrofitted with low NOx burners.<br>Conditions: 1.X-Z (new); 2.AA-QQ (new); 2.A, 2.B, 2.W, 2.Z; 3.D.3 & 4 (new); 3.G-I (new), 4.I (new); 4.M; 4O-~~Q~~ R (new); 5.A.4 (new); 5.D, 5.G, 5.I, 5.J; 8.C; 9.A, 9.B; 10.S, 10.T (new); 11.C; 11.F (new). |
| 195-M16 | N/A | | Withdrawn per actions agreed to by Navajo and NMED. Resubmitted with M-17 application.<br>Conditions: N/A |
| 195-M15-R2 | 10/22/03 | | Installation of a 9.6 MMBTU/hr Hot Oil Heater w/CTI Low-NOx burners. Conditions: 1.X, 1.Y, 2.AA & 2.BB (all new). 3.A and Table 1.A (modified). |
| P051 | 09/09/03 | Original Title V permit | |
| 195M15R1 | 06/27/02 | Administrative revision | Incorporate 2 exempt gas oil storage tanks.<br>Conditions: 5.G (modified) |
| 195-M15 | 12/13/01 | | New: GOHT Unit, H-601, ESPs (changed to scrubber) and air lift blower on FCCU, and new FL-404. Add minor equipment to Amine Unit, CCR Unit, Diesel HDS Unit, FCCU, Naphtha HDS Unit, JP-8 HDS Unit. Upgrade tower internals on FCCU, Vacuum/Flasher Unit. Increase refinery-wide throughput; See Condition 1.W. for details.<br>Conditions: 1.W (new), 2.A, 2.C, 2.W-Z (new), 3.E-F (new), 4.M-N (new), 5.D, 5.I, 5.J, 9.A, 9.B, 10.Q-R (new), Tables 1, 2A, 2B, 2C, 2D. |
| 195M14R2 | 06/28/01 | | Add sour water storage tank, T-802.<br>Conditions: 1.O, 3.A, 5.G, 7, Table 2B, Table 2D |
| 195M14R1 | 03/15/01 | | Corrected the SRU1/SRU2 combined SO2 emission limit. |

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| | | | Conditions: 11.A (corrected) |
| 195-M14 | 03/12/01 | | Replaced Boilers B-1, B-2, B-4, B-6, B-103, B-104, B-105 with Boilers B-7, B-8.<br>Replaced Heater H-26 with Heater H-30.<br>Conditions: 1.O, 1.P, 1.Q, 5.H, 5.I (new)<br>5.B, 5.E (modified) |
| 195-M13 | 08/30/00 | | New No. 3 Blender, Remove KES/SOLSEP from WWTP<br>Conditions: 1.Q (new),<br>1.P, 1.L.a.1, 8.O, Table 2.A, Table 2.D (modified) |
| 195-M12 | 5/11/00 | | New 100 LT/D SRU2/TGU2<br>Conditions: 1.P (new),<br>2.C, 3.B, 4.B, 4.C, 4.D, 4.E, 5.B, 5.F, 7.A, 7.B, 8.C, 9.A, 9.B, Table 1 (modified) |
| 195-M11 | Permit not issued | | Application received June 29, 1999, ruled incomplete July 28, 1999. Application for Gas Oil Hydrotreater (GOHT) and FCCU expansion. Subject to PSD review, application not reviewed, permit not issued. Modification would subject to PSD review. |
| 195M10R1 | 2/18/00 | Technical Revision | Increase Heater H40 (H463) capacity and allowable emissions. Did not quality for technical revision under 2.72,219.B.1.b, Permit not issued |
| 195-M10 | 01/07/00 | | Increase SRU/TGU (H463) capacity to 40 LT/D. Conditions: 9.A.(1-6, 10, 12, 13) (removed),<br>2.C, 2.D, 4.D, 8.C, Table 1 (modified) |
| 195M9R3 | 10/13/99 | | New Polymer Modified Asphalt. Conditions: 1.O (new) |
| 195M9R2 | 01/11/99 | | New LDMAR – North Plant Amine Treating/Regeneration.<br>Conditions: 1.O, 4.K (new) |
| 195M9R1 | 10/13/98 | | Replacing LPG tanks. Conditions: 1.N (new) |
| 195-M9 | 05/05/98 | | Replacement of Boiler B-3 (58.0 MMBTU/hr) with Boiler B-6 (43 MMBTU/hr) |
| 195-M8 | | | Records are between the dates for 195-M-5-Rev & 195-M-6. Withdrawn requests for changes to 195-M-5-Rev that included CCR Reformer Project, North Alkylation Unit, Flare FL-403, and Naphtha HDS and Sulfur Recovery Upgrade (FL-400) |
| 195-M7 | 09/04/97 | | Wastewater Treatment Plant Upgrade, Changes in Supplemental Heat for Flare Fl-403, Changes in Throughput and Vapor Pressure for Material Stored in Tank T-450, Construction of a tail gas cleanup unit and auxiliary blower for the SRU. Tanks T-0801 and T-0836 are vented to the atmosphere. |
| 195-M6 | 03/13/96 | | Powerformer/Penex Project |
| 195-M5<br>195M5Rev | 11/25/92 &<br>12/16/93 | | Relocation of Diesel HDS Unit and Associated SRU Upgrade Project |
| 195-M4 | 01/16/92 | | 20-Long-Ton-Per-Day Sulfur Recovery Unit (SRU) and Supporting Equipment |

**5.0** **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| 195-M3 | 03/14/91 | | Installing a 6700 Barrel per Day Alkylation Unit and Supporting Equipment |
| 195-M2 | 08/28/90 | | Construction of the Continuous Catalyst Regeneration (CCR) Reformer and Expansion of the Naphtha HDS Unit |
| 195-M1 | 11/29/82 | | Construction of Two 55,000 Barrel Floating Roof Hydrocarbon Storage Tanks. Permit No. 195-M-1 |
| PSD-NM-208 | 04/19/79 | | PSD Permit (Rescinded Nov. 9, 1981) |
| 236 | 05/02/79 | | Replacement of an Existing Thermoform Catalytic Cracking Unit (TCCU) with a Fluid Catalytic Cracking Unit (FCCU). No permit required, file no. 236, and permit No. PSD-NM-208, later rescinded |
| 195 | 05/22/78 | | Construction of a 108,000 Barrel Crude Oil Storage Tank |
| 155 | 11/16/77 | | Boilers B-1, B-2, B-3, B-4, and Heater H-20 for Optional Combustion of Fuel Oil or Fuel Gas |
| 80 | 11/14/75 | | Construction of Naphtha HDS Unit and a Powerformer Catalytic Reformer |
| 31 | 08/20/73 | | Construction of 1000 Barrel per Day Cycle Oil Hydrodesulfurizer (HDS) |

**6.0** **Public Response/Concerns:** As of the date in the footer of this document or the issuance date of this permit, this permit writer is not aware of any public comment or concern.

**7.0** **Compliance Testing:** From Section 17 of the permittee's application.

| Unit No. | Test Description | Test Date |
|---|---|---|
| FL-0404 TS CMS | Annual CMS RATA and 3-year linearity | 02/23/2021 |
| FL-0402 TS CMS | Annual CMS RATA and 3-year linearity | 02/25/2021 |
| FL-0401 TS CMS | Annual CMS RATA and 3-year linearity | 02/22/2021 |
| FL-0400 TS CMS | Annual CMS RATA and 3-year linearity | 02/24/2021 |
| FL-0404 H2S CMS | Annual CMS RATA and 3-year linearity | 02/23/2021 |
| FL-0402 H2S CMS | Annual CMS RATA and 3-year linearity | 02/25/2021 |
| FL-0401 H2S CMS | Annual CMS RATA and 3-year linearity | 02/22/2021 |
| FL-0400 H2S CMS | Annual CMS RATA and 3-year linearity | 02/24/2021 |
| FL-0404 H2S CMS | Annual CMS RATA | 03/03/2020 |
| FL-0402 H2S CMS | Annual CMS RATA | 02/27/2020 |
| FL-0401 H2S CMS | Annual CMS RATA | 02/26/2020 |
| FL-0400 H2S CMS | Annual CMS RATA | 03/02/2020 |
| FL-0404 H2S CMS | Annual CMS RATA | 03/27/2019 |
| FL-0402 H2S CMS | Annual CMS RATA | 02/19/2019 |
| FL-0401 H2S CMS | Annual CMS RATA | 02/21/2019 |
| FL-0400 H2S CMS | Annual CMS RATA | 02/20/2019 |

| Unit No. | Test Description | Test Date |
|---|---|---|
| FL-0404 H2S CMS | Annual CMS RATA | 02/14/2018 |
| FL-0402 H2S CMS | Annual CMS RATA | 01/23/2018 |
| FL-0401 H2S CMS | Annual CMS RATA | 01/26/2018 |
| FL-0400 H2S CMS | Annual CMS RATA | 01/24/2018 |
| FL-0404 H2S CMS | Annual CMS RATA | 01/19/2017 |
| FL-0402 H2S CMS | Annual CMS RATA | 01/20/2017 |
| FL-0401 H2S CMS | Annual CMS RATA | 01/17/2017 |
| FL-0400 H2S CMS | Annual CMS RATA | 01/24/2017 |
| FL-0404 H2S CMS | Initial CMS RATA | 02/03/2016 |
| FL-0402 H2S CMS | Initial CMS RATA | 01/31/2016 |
| FL-0401 H2S CMS | Initial CMS RATA | 01/26/2016 |
| FL-0400 H2S CMS | Initial CMS RATA | 01/23/2016 |
| FCC REGEN DynaWave Scrubber CEMS | Annual CEMS RATA | 03/05/2021 |
| FCC REGEN DynaWave Scrubber CEMS | Annual CEMS RATA | 02/05/2020 |
| FCC REGEN DynaWave Scrubber CEMS | Annual CEMS RATA | 02/13/2019 |
| FCC REGEN DynaWave Scrubber CEMS | Annual CEMS RATA | 01/09/2018 |
| FCC REGEN DynaWave Scrubber CEMS | Annual CEMS RATA | 01/04/2017 |
| FCC REGEN DynaWave Scrubber | Annual Performance Test for CD Alternative Monitoring Plan | 01/042017 |
| SRU3-TGI | Annual CEMS RATA | 03/04/2021 |
| SRU3-TGI | Annual CEMS RATA | 03/18/2020 |
| SRU3-TGI | Annual CEMS RATA | 04/18/2019 |
| SRU3-TGI | Annual CEMS RATA | 03/21/2018 |
| SRU3-TGI | Annual CEMS RATA | 07/26/2017 |
| SRU2-TGI | Annual CEMS RATA | 03/03/2021 |
| SRU2-TGI | Annual CEMS RATA | 03/19/2020 |
| SRU2-TGI | Annual CEMS RATA | 04/10/2019 |
| SRU2-TGI | Annual CEMS RATA | 03/22/2018 |
| SRU2-TGI | Annual CEMS RATA | 04/27/2017 |
| SRU2-TGI | Annual CEMS RATA | 05/05/2016 |
| B-9 | Annual CEMS RATA | 03/01/2021 |
| B-9 | Annual CEMS RATA | 03/11/2020 |
| B-9 | Annual CEMS RATA | 03/20/2019 |
| B-9 | Annual CEMS RATA | 03/07/2018 |
| B-9 | Annual CEMS RATA | 07/24/2017 |
| B-8 | Annual CEMS RATA | 03/02/2021 |
| B-8 | Annual CEMS RATA | 03/11/2020 |
| B-8 | Annual CEMS RATA | 03/19/2019 |
| B-8 | Annual CEMS RATA | 03/07/2018 |
| B-8 | Annual CEMS RATA | 06/22/2017 |
| B-8 | Annual CEMS RATA | 07/14/2016 |
| B-7 | Annual CEMS RATA | 03/11/2021 |
| B-7 | Annual CEMS RATA | 03/10/2020 |
| B-7 | Annual CEMS RATA | 03/19/2019 |
| B-7 | Annual CEMS RATA | 03/06/2018 |

| Unit No. | Test Description | Test Date |
|---|---|---|
| B-7 | Annual CEMS RATA | 06/21/2017 |
| B-7 | Annual CEMS RATA | 07/13/2016 |
| H-362,363,364 Unit 70 | Annual Performance Test | 02/03/2021 |
| H-362,363,364 Unit 70 | Annual Performance Test | 02/07/2020 |
| H-362,363,364 Unit 70 | Annual Performance Test | 02/14/2019 |
| H-362,363,364 Unit 70 | Annual Performance Test | 01/31/2018 |
| H-362,363,364 Unit 70 | Annual Performance Test | 01/10/2017 |
| H-362,363,364 Unit 70 | Annual Performance Test | 07/11/2016 |
| H-9851 | Annual CEMS RATA | 03/08/2021 |
| H-9851 | Annual CEMS RATA | 02/07/2020 |
| H-9851 | Annual CEMS RATA | 03/21/2019 |
| H-9851 | Annual CEMS RATA | 03/20/2018 |
| H-9851 | Annual CEMS RATA | 06/20/2017 |
| H-9851 | Annual CEMS RATA | 07/14/2016 |
| H-8801, H-8802 | Annual CEMS RATA | 02/12/2020 |
| H-8801, H-8802 | Annual CEMS RATA | 02/18/2019 |
| H-8801, H-8802 | Annual CEMS RATA | 01/30/2018 |
| H-8801, H-8802 | Annual CEMS RATA | 01/08/2017 |
| H-5401 (Prime G) | Annual Performance Test | 02/05/2021 |
| H-5401 (Prime G) | Annual Performance Test | 03/16/2020 |
| H-5401 (Prime G) | Annual Performance Test | 04/08/2019 |
| H-5401 (Prime G) | Annual Performance Test | 03/08/2018 |
| H-5401 (Prime G) | Initial Performance Test | 10/25/2017 |
| H-3402 (HCKR-BOIL1) | Annual Performance Test for $NO_X$, CO and $O_2$ CMS RATA (AMP Req is bi-annual) | 03/09/2021 |
| H-3402 (HCKR-BOIL1) | Annual Performance Test for $NO_X$, CO and $O_2$ CMS RATA (AMP Req is bi-annual) | 02/11/2020 |
| H-3402 (HCKR-BOIL1) | Annual Performance Test for $NO_X$, CO and $O_2$ CMS RATA (AMP Req is bi-annual) | 02/15/2019 |
| H-3402 (HCKR-BOIL1) | Annual Performance Test for $NO_X$, CO and $O_2$ CMS RATA (AMP Req is bi-annual) | 02/22/2018 |
| H-3402 (HCKR-BOIL1) | Annual Performance Test for $NO_X$, CO and $O_2$ CMS RATA (AMP Req is bi-annual) | 01/11/2017 |
| H-3402 (HCKR-BOIL1) | Annual Performance Test for $NO_X$, CO and $O_2$ CMS RATA (AMP Req is bi-annual) | 07/11/2016 |
| H-3403 (HCKR) Unit 34 | Annual Performance Test | 03/09/2021 |
| H-3403 (HCKR) Unit 34 | Annual Performance Test | 02/10/2020 |
| H-3403 (HCKR) Unit 34 | Annual Performance Test | 02/14/2019 |
| H-3403 (HCKR) Unit 34 | Annual Performance Test | 02/01/2018 |
| H-3403 (HCKR) Unit 34 | Annual Performance Test | 01/23/2017 |
| H-3403 (HCKR) Unit 34 | Annual Performance Test | 07/12/2016 |
| H-2501 (ROSE2-HOH) Unit 25 | Annual CEMS RATA | 03/10/2021 |
| H-2501 | Annual CEMS RATA | 02/13/2020 |

| Unit No. | Test Description | Test Date |
|---|---|---|
| (ROSE2-HOH) Unit 25 | | |
| H-2501 (ROSE2-HOH) Unit 25 | Annual CEMS RATA | 02/10/2019 |
| H-2501 (ROSE2-HOH) Unit 25 | Annual CEMS RATA | 01/10/2018 |
| H-2501 (ROSE2-HOH) Unit 25 | Annual CEMS RATA | 01/09/2017 |
| H-2501 (ROSE2-HOH) Unit 25 | Annual CEMS RATA | 01/09/2017 |
| H-2501 (ROSE2-HOH) Unit 25 | Annual CEMS RATA | 05/05/2016 |
| H-2421 | Annual Performance Test | 02/02/2021 |
| H-2421 | Annual Performance Test | 03/13/2020 |
| H-2421 | Annual Performance Test | 04/18/2019 |
| H-2421 | Annual Performance Test | 03/20/2018 |
| H-2421 | Annual Performance Test | 01/05/2017 |
| H-2421 | Annual Performance Test | 07/25/2017 |
| H-0020 | Annual Performance Test | 02/01/2021 |
| H-0020 | Annual Performance Test | 02/07/2020 |
| H-0020 | Annual Performance Test | 02/20/2019 |
| H-0020 | Annual Performance Test | 01/11/2018 |
| H-0020 | Annual Performance Test | 01/05/2017 |
| H-0019 | Annual Performance Test | 02/01/2021 |
| H-0019 | Annual Performance Test | 02/06/2020 |
| H-0019 | Annual Performance Test | 02/20/2019 |
| H-0019 | Annual Performance Test | 01/11/2018 |
| H-0019 | Annual Performance Test | 01/05/2017 |
| LP (D-19) Fuel Gas H2S | Annual CMS RATA | 03/03/2021 |
| LP (D-19) Fuel Gas H2S | Annual CMS RATA | 03/17/2020 |
| LP (D-19) Fuel Gas H2S | Annual CMS RATA | 03/07/2019 |
| LP (D-19) Fuel Gas H2S | Annual CMS RATA | 02/15/2018 |
| LP (D-19) Fuel Gas H2S | Annual CMS RATA | 01/03/2017 |
| HP (D-770) Fuel Gas H2S (Permanent) | Annual CMS RATA | 03/02/2021 |
| HP (D-770) Fuel Gas H2S (Permanent) | Annual CMS RATA | 03/17/2020 |
| HP (D-770) Fuel Gas H2S (Permanent) | Annual CMS RATA | 04/04/2019 |
| HP (D-770) Fuel Gas H2S (Permanent) | Annual CMS RATA | 02/27/2018 |
| HP (D-770) Fuel Gas H2S (Permanent) | Annual CMS RATA | 06/22/2017 |
| HP (D-770) Fuel Gas H2S (Permanent) | Annual CMS RATA | 07/14/2016 |
| 2 Backup Analyzers (Horiba brand with data logger) | Annual CEMS RATA | 12/19/2019-sent to factory for rebuild and recertification. |
| 2 Backup Analyzers (Horiba brand with data logger) | Annual CEMS RATA | 03/07/2019 |
| 2 Backup Analyzers (Horiba | Annual CEMS RATA | 03/06/2018 |

| Unit No. | Test Description | Test Date |
|---|---|---|
| brand with data logger) | | |
| 2 Backup Analyzers (Horiba brand with data logger) | Annual CEMS RATA | 06/20/2017 |
| 2 Backup Analyzers (Horiba brand with data logger) | Annual CEMS RATA | 08/16/2016 |
| TL-4 | CEMS RATA | 11/06/2019 |
| TL-4 | CEMS RATA | 09/28/2018 |
| TL-4 | CEMS RATA | 09/12/2017 |
| TL-4 | CEMS RATA | 04/07/2016 |
| Fuel Gas $H_2S$ (Portable Back-up Analyzer) | Annual CMS RATA | 07/13/2016 |

**8.0 Startup and Shutdown:**

A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? This is an NSR permit action.
B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? Yes
C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? Yes
D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? Yes. If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? Yes

**9.0 Compliance and Enforcement Status [Title V and NSR/PSD new or modification]:**

Based on email received from Teri Waldron on January 11, 2022, a Notice of Violation (NOV) was issued to the facility by the US EPA on May 1, 2020, and an Enforcement Discretion was partially approved on September 24, 2021. The process is on-going.

**10.0 Modeling: Current: for PSD-195-M40:**

Eric Peters, AQB modeler conducted the modeling and completed the modeling report March 15, 2023. Modeling was required for the following pollutants: Carbon Monoxide (CO), Hydrogen sulfide (H2S), Ammonia (NH3), Nitrogen Dioxide (NO2), O3, Particulate Matter 10 micrometers or less in aerodynamic diameter (PM10), Particulate Matter (2.5 microns or less) (PM2.5), Sulfur Dioxide (SO2), and Sulfuric acid. The modeling analysis demonstrated that operation of the facility described in this report neither causes nor contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NAAQS for CO, NO2, O3, PM10, PM2.5, and SO2; NMAAQS for CO, H2S, NO2, and SO2; and Class I and Class II PSD increments for NO2, PM10, PM2.5, and SO2. Modeled parameters that were closest to the standards were: 1-hr NO2 (92.5% of standard), annual NO2 PSD Class II (94.2%), 24-hr PM2.5 (98.3%), and annual PM2.5 (96.5%).

Prior Modeling:

**For NSR 195M39:** Eric Peters provided the following modeling requirements for permit 0195M39 on 7/2/20. “Modeling is not a requirement for short-term impacts because there are

no emission increases that would trigger modeling requirements. The emission rates allowed under the permit are not increased. Though the accounting or classification of the emissions are changing, the increases are only in classification and new emissions are not being permitted. To be more specific, the allowable emission rate listed for normal operation is increasing, but the maximum emission rate allowed by the permit from those pieces of equipment is not increasing. There is only a decrease in the difference between the startup-shutdown-maintenance rate and the normal operation rate.
A compliance demonstration for annual emissions appears to be required. The following analysis demonstrates compliance with the annual standards and increments.
The SSM flare emissions were modeled for permit 0195M33, but the model had only been run for the short-term periods. I re-ran the model assuming the SSM event (1243 lb/hr NOX) occurred continuously for the entire year, and the NO2 concentration produced was 0.29 ug/m3. Were this value to be added to previous cumulative modeling (17.47 ug/m3), the results would be well below the allowed PSD increment (25 ug/m3), the NMAAQS (94.06 ug/m3), and the NAAQS (99.66 ug/m3). Cumulative modeling was performed for permit 0195M35. Flares were modeled at an annual emission rate of 4.19 lb/hr of NOX in permit 0195M35 and are currently requesting 6.33 lb/hr. The main reason the flares have such minimal impact on ground concentrations of pollutants is due to the very tall flare stack heights. Inspection of other pollutants shows that no pollutants emitted by the flares would produce enough impact to cause or contribute to any violations of annual air quality standards or PSD increments. This analysis includes many overly conservative assumptions regarding the duration of flaring at the maximum rate and the double-counting of previously modeled flare emissions. This compliance demonstration based on US EPA approved modeling or analysis demonstrates that the flares will not cause or contribute to any exceedances of PSD increments, NMAAQS, or NAAQS if operated at the requested emission rates.
VOC emission rates do not have air quality standards and no modeling analysis is applicable for VOC emissions."

**For NSR 195M38:** A modeling review was conducted by Angela Raso and approved 7/24/2019.
This modification includes emissions from installation of the Renewable Diesel Unit, including a boiler and reactor heater.
**Conclusion:** This modeling analysis demonstrates that operation of the facility described in this report neither causes nor contributes to any exceedances of applicable air quality standards.
The standards relevant at this facility are NAAQS for CO, NO2, PM10, PM2.5, and SO2; NMAAQS for CO, NO2, and SO2; and Class I and Class II PSD increments for NO2, PM10, and SO2.
**Action:** The permit can be issued based on this modeling analysis.

**Previously, For NSR 195M37:** A modeling waiver request dated 7/18/2016 was reviewed and approved by Eric Peters on 7/18/16 for the increased hourly H2S emission rate from the subject refinery that we spoke about last week. Results from two modeling reports were used that supported permits 0195-M25 and 0195-M32. All sources in the modeling reports along with the modeled H2S emission rates were added to estimate the refinery impact as identified in the attached calculation. The maximum impacts from both reports were added to determine a worst-case potential concentration. The impact associated with 0195-M32 includes all contributing sources so it may also already include the 0195-M25 sources; however, for a worst-case estimate, the impacts associated with 0195-M25 project sources were added for a total ambient impact of 0.512 or 51% of the standard. The maximum hourly H2S emissions from the refinery associated with 0195-M37 are slightly less than the total modeled H2S emissions;

therefore, the predicted impact is expected to be no greater than 51% of the H2S Standard.

**Previously, NSR 0195M36** review was completed by David Heath on12/23/2015.
**Conclusion:** This modeling analysis demonstrates that normal operation of the facility does not cause or significantly contribute to any exceedances of applicable air quality standard. The standards relevant at this facility are NMAAQS for TSP, CO and NO2 and NAAQS for PM2.5, PM10, and SO2.
A**ction:** The permit can be issued based on this modeling analysis. Modeling submitted by Tascosa Alliance Company dated Oct 9, 2015. The air quality analysis does demonstrate compliance with applicable regulatory requirements.

**Previously, NSR Permit 0195M35** modeled CO, NOx, PM10, PM2.5, SO2, and TSP.
**Modeling review completed by Eric Peters on April 2, 2014.**
This modeling analysis demonstrates that operation of the facility described in this report neither causes nor contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NAAQS for CO, $NO_2$, PM10, PM2.5, and $SO_2$; NMAAQS for CO, $NO_2$, $SO_2$, and TSP; and Class I and Class II PSD increments for $NO_2$, PM10, and $SO_2$.

## 11.0 State Regulatory Analysis (NMAC/AQCR):

| Citation 20 NMAC | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| **2.1** | GENERAL PROVISIONS | Yes, Always | Entire Facility | The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements. |
| **2.3** | Ambient Air Quality Standards | Yes for NSR, No for TV | Entire Facility | **NSR:** 20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.<br><br>**Title V:** 20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO 20.2.70 NMAC. The requirements of NMAAQS are not applicable requirements under 20.2.70 NMAC, as defined by 20.2.3.9 NMAC, 20.2.3.9 NMAC does not limit the applicability of this part to sources required to obtain a permit under the minor NSR regulation, 20.2.72 NMAC, nor does it limit which terms and conditions of NSR permits issued pursuant to 20.2.72 NMAC are applicable requirements in a Title V permit. |
| **2.7** | Excess Emissions | Yes, Always | Entire Facility | Applies to all of the facility's sources. |

| Citation 20 NMAC | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| **2.33** | Gas Burning Equipment - Nitrogen Dioxide | Yes | B-0007, B-0008, B-0009, H-8801/H-8802, H-2501, and H-9851 See permittee's Table 13-3 in the application | 20.2.33.108.A requires that "The owner or operator of new gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit shall not permit, cause, suffer or allow nitrogen dioxide emissions to the atmosphere in excess of 0.2 pounds per million British Thermal Units of heat input".<br><br>Each of the identified units are expected to comply with the 0.2 lbs/mmbtu of heat input requirement as they will be designed with ULNB's and SCR (H-H2-2 only) having an expected $NO_x$ emission rate of 0.03 lbs/mmbtu and 0.0125 lbs/mmbtu of heat input.<br>See Table 103.E (heaters) in the permit. |
| 20.2.37 and 20.2.36 NMAC | Petroleum Processing Facilities and Petroleum Refineries | N/A | N/A | The refinery had equipment subject to 20.2.36 and 20.2.37 NMAC before the repeal of these rules. Therefore, the affected combustion emission sources are now subject to 20.2.61 NMAC. |
| **2.38** | Hydrocarbon Storage Facilities | Yes | See permittee's Table 13-12 in the application | The Artesia Refinery does include storage vessels that store hydrocarbons containing hydrogen sulfide. The vessels will comply with the requirements of 20.2.38.109, 20.2.38.110, and 28.2.38.113. Section 20.2.38.111 is not applicable because the Artesia Refinery is located within a municipality per 38.110. Section 20.2.38.112 is not applicable because the refinery's storage vessels do not constitute a tank battery operated in conjunction with a petroleum production facility.<br>The permittee made numerous revisions to tank applicability, some tanks no longer subject, some tanks now subject per this permit action. Removed (retired) tanks no longer subject.<br>See Table 103.C (tanks) in the permit. |
| **2.39** | Sulfur Recovery Plant - Sulfur | No | | This rule might appear to apply as the refinery includes sulfur recovery plants. However, this rule only applies to sulfur recovery which is not part of petroleum or natural gas processing. Hence, per 20.2.39.6 NMAC this rule does not apply because the facility does petroleum processing. |
| **2.60** | Open Burning | Yes | Facility | 20.2.60 NMAC (Open Burning, 11/30/95) applies to all refinery areas, but only in reference to fire training exercises conducted at the facility. Fire training exercises shall require advance notification to the NMED. Even though the facility is subject due to training exercises there are no specific requirements beyond notifying NMED. |

| Citation 20 NMAC | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| **2.61** | Smoke and Visible Emissions | Yes | See Attached Applicability Lists – applies to all combustion equipment | This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC).<br>Applies to Stationary Combustion Equipment: boilers, heaters, SRU tail gas incinerators, flares, and engines. |
| **2.70** | Operating Permits | Yes | Entire Facility | The source is a Title V Major Source as defined at 20.2.70.7 NMAC. |
| **2.71** | Operating Permit Fees | Yes | Entire Facility | Source is subject to 20.2.70 NMAC as cited at 20.2.71.109 NMAC. |
| **2.72** | Construction Permits | Yes | Entire Facility | Section 200.A.2.<br>NSR Permits are the applicable requirement, including 20.2.72 NMAC. |
| **2.73** | NOI & Emissions Inventory Requirements | Yes, Always | Entire Facility | Applicable to all facilities that require a permit.<br>PER **>** 10 tpy for a regulated air contaminant. |
| **2.74** | Permits-Prevention of Significant Deterioration | Yes | Entire Facility | **20.2.74.7.AG (1)** A stationary source listed in Table 1 of this Part (20.2.74.501 NMAC) which emits, or has the potential to emit, emissions equal to or greater than one hundred (100) tons per year of any stack and fugitive emissions (as defined) of any regulated air pollutant; or<br><br>The Artesia refinery is a 100 ton per year major source under the PSD rule. PSD Section of this document contains a thorough review of applicability under this rule. |
| **2.75** | Construction Permit Fees | Yes | Entire Facility | This facility is subject to 20.2.72 NMAC. The facility is not subject to the 75.11.E annual fees because it is subject to 20.2.71 NMAC. |
| **2.77** | New Source Performance | Yes | See Sources subject to 40 CFR 60 | Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60. |
| **2.78** | Emissions Standards for HAPs | Yes | See Sources subject to 40 CFR 61 | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 61. |
| **2.79** | Permits Nonattainment Areas | No | | This facility is not located in, nor does it affect, a nonattainment area. |
| **2.82** | MACT Standards for Source Categories of HAPs | Yes | See sources subject to 40 CFR 63 | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. |

**12.0 Federal Regulatory Analysis:**

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| Air Programs Subchapter C (40 CFR 50) | National Primary and Secondary Ambient Air Quality Standards | Yes | Entire Facility | Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard. |
| NSPS Subpart A (40 CFR 60) | General Provisions | Yes | See sources subject to a Subpart in 40 CFR 60 | Applies if any other subpart applies. |
| 40 CFR 60.40a, Subpart Da | Standards of Performance for Electric Utility Steam Generating Units | No | | The Artesia Refinery does not own or operate an electric utility steam generating unit, as the term is defined in 40 CFR §60.41Da. |
| 40 CFR 60.40b, Subpart Db | Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units | Yes | See permittee's Table 13-3 in the application | The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).<br><br>NSPS Subpart Db is applicable to the existing B-0007, B-0008, and B-0009 boilers, and heater H-2501.<br><br>See Table 103.E (heaters) in the permit. |

Db review carried forward from previous NSR Statement of Basis:
Units are complying with SO2 emission limitation in NSPS J or Ja. The NOx and PM emission limitations are not applicable to units firing refinery fuel gas.

NSPS Subpart Db is not applicable to the hydrogen plant reformer heaters (H-8801/H-8802 and H-9851). Although they will produce some steam as a result of energy efficiency heat recovery, the sources meet the definition of a "process heater" and are therefore excluded from the definition of a "steam generating unit". Excerpts from the NSPS Subpart Db rules are provided below for reference.

60.40B Applicability and delegation of authority

(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

60.41b Definitions

*Steam generating unit* means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart. | | | | |
| 40 CFR 60.40b, Subpart Dc | Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units | Yes | H-0464 and H-3101 See permittee's Table 13-3 in the application | Applies to units for which Construction, Reconstruction, or Modification Commenced After June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).<br><br>Hot oil systems are a "heat transfer medium" potentially subject to the NSPS Subpart Dc. NSPS Subpart Dc is applicable to the SRU hot oil heaters H-0464 and H-3101 because they are greater than 10 MMBtu/hr HHV.<br>Boiler unit B-0010 was subject, with a construction date after 6/9/89 and a heat input of 10 MMBtu/hr, but this unit is being removed in this permit action.<br>Most of the other heaters and boilers at the refinery are subject to NSPS J or Ja (see below).<br>*Process heater* means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.<br>H-0464 and H-3101<br>See Table 103.E (heaters) in the permit. |
| 40 CFR 60, Subpart J | Standards of Performance for Petroleum Refineries | Yes | See permittee's Tables 13-3 and 13-5 in the application | Several boilers and heaters, and the FCC regenerator, SRU2 are subject to requirements.<br><br>See Tables 103.E (heaters), 103.H (FCC Regen), 103.I (SRU) and 103.K (flares) in the permit. |
| 40 CFR 60, Subpart Ja | Standards of Performance for Petroleum Refineries | Yes | See permittee's Tables 13-3, 13-4, and 13-6 in the application | Several boilers and heaters, SRU3, and including the flares are subject to requirements.<br>SRU3 is a three-stage Clause sulfur recovery unit with a tail gas treating unit (TGTU) and a tail gas incinerator (TGI). Per § 60.100 (a) the provisions of this subpart are applicable to all Claus sulfur recovery plants except Claus plants of 20 long tons per day (LTD) or less and is . SRU3 is a new unit (installed after 10/4/76) with production greater than 20 LTD. This TGI must comply with the following standard: § 60.104(a)(2)(i) and § 60.104. Monitoring and testing include §60.105(a),(a)(5),(e), §60.105(e)(4),(e)(4)(i) §60.106(a),(f). Recordkeeping includes §60.105(a)(5) and reporting includes §63.1568(b)(7), §63.1570(f),(g), 63.1574, |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | | | | §63.1575(a),(b),(c),(d), §63.1575(e),(f),(g),(h)<br><br>See Tables 103.E (heaters), 103.H (FCC Regen), 103.I (SRU) and 103.K (flares) in the permit. |
| Previous Statement of Basis comments carried forward:<br>The facility's fuel gas system will continue to be subject to the fuel gas sulfur content requirement limit of 0.10 grains/dscf. It is expected that Navajo will demonstrate compliance with this requirement by maintaining sulfur fuel gas content no greater than 0.0375 to 0.05 grains S/dscf on an annual basis.<br>Fuel gas will be monitored in accordance with §60.105(a)(3).<br>**SRU2 NSPS Ja Applicability** - Change the applicability for SRU2 from NSPS J to NSPS Ja (Equipment Specific Requirements A207.D, consistent with A207.E of this condition for SRU3 (the two units recover sulfur from a common source of sour gas); make corresponding changes to Table 103.I in the permit).<br>Boiler, Unit B-0010 has been removed and is no longer subject. | | | | |
| 40 CFR 60, Subpart K | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. | Yes | T-0437 and T-0838<br>See permittee's Table 13-12 in the application | (a) Except as provided in §60.110(b), the affected facility to which this subpart applies is each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons).<br>(b) This subpart does not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.<br>(c) Subject to the requirements of this subpart is any facility under paragraph (a) of this section which:<br>(1) Has a capacity greater than 151, 416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978.<br><br>Tanks T-0437 and T-0838<br><br>See Table 103.C (tanks) in the permit. |
| 40 CFR 60, Subpart Ka | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and **Prior** to July 23, 1984 | Yes | See permittee's Table 13-12 in the application | Applies to tanks that have a storage capacity greater than 151,416 liters (40,000 gallons) that are used to store petroleum liquids for which construction is commenced after May 18, 1978.<br><br>See Table 103.C (tanks) in the permit. |
| 40 CFR 60, | Standards of | Yes | See | This subpart applies to each storage vessel with a |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| Subpart Kb | Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984 | | permittee's Table 13-12 in the application | capacity greater than or equal to 75 cubic meters ($m^3$) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. The pitch tanks are exempt from the rule as the vapor pressure of the material stored is less than 0.5 PSI.<br>For 4/28/14: The new ethanol storage vessel will have an external floating roof tank that complies with NSPS Kb requirements. The new biodiesel storage tank is exempt from NSPS Kb requirements, because the maximum true vapor pressure will be less than 0.5 psia.<br><br>See Table 103.C (tanks) in the permit. |
| 40 CFR 60 Subpart XX | Standards of Performance for Bulk Gasoline Terminals | No | See permittee's Table 13-10 in the application | Per 40 CFR 63.640(r) the Fuels Truck Loading Rack (TL-4) is not subject.<br>See permittee's Table 13-10 in the application. |
| 40 CFR 60, Subpart GGG | Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries | No | | The provisions of this subpart apply to affected facilities in petroleum refineries that commence construction or modification after January 4, 1983. Affected facilities include: each valve, pump, pressure relief device, sampling connection system, open-ended valve or line and flange or other connector in VOC service. VOC service is defined as any piece of equipment that contains or contacts a process fluid that is at least 10 % VOC by weight. This determination should be made by looking at final plant identification drawings ("PID's").<br><br><u>Permittee statement:</u> The Artesia Refinery affected facilities were constructed, reconstructed, or modified after November 7, 2006, and are therefore subject to 40 CFR 60, Subpart GGGa, rather than Subpart GGG.<br>See GGGa below. |
| 40 CFR 60, Subpart GGGa | Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced | Yes | See permittee's Table 13-11 in the application | Included were more recently added new piping fugitive components added to FUG-29-BLENDER/TK FARM and FUG-08-TRUCK RK. The new components will be monitored according to requirements under NSPS GGGa.<br><br>See Table 103.B (fugitives) in the permit. |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | After November 7, 2006 | | | |
| 40 CFR 60 Subpart NNN | Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations | Yes | W-623 | The depropanizer column in the Alkylation Unit is subject to this rule because it produces, among other things, propane as a product. (See, 40 CFR §§ 60.660(b) and 60.667.) |
| 40 CFR 60, Subpart QQQ | Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems | Yes | See permittee's Tables 13-9 13-11, and 13-12 in the application | Affected facilities are individual drain systems, oil-water separators and aggregate facilities that commenced construction, reconstruction or modification after May 4, 1987. The Consent Decree, Paragraph #29 makes NSPS Subpart QQQ applicable refinery-wide. The storage tanks, MAIN API, and fugitive areas are affected units.<br><br>See Tables 103.B (fugitives), 103.C (tanks), and 103.G (wastewater) in the permit. |
| 40 CFR 60 Subpart RRR | Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes | Yes | Alky Reactor | The reactor in the Alkylation Unit is subject to this rule because it produces, among other things, propane as a product. (See, 40 CFR §§ 60.700(b) and 60.707.) |
| 40 CFR Part 60 Subpart IIII (Quad-I) | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | Yes | See permittee's Table 13-7 in the application MG-0001 to MG-0004, FWG-0600 to FWG-0603, and SG-0102 | (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.<br><br>See Table 103.J (engines) in the permit.<br>Includes 4 portable air compressors, 4 fire water pump engines, and 1 backup generator. SG-0100 and SG-0101 are not subject because there were constructed prior to |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | | | | applicable dates in IIII. |
| Historical Statement of Basis review carried forward: For 4/27/14: Three portable air compressors (V-0543, V-0545, and V-0546) and the WWTP emergency engine (E-8010) were all manufactured after April 1, 2006 applicability date so are subject to NSPS IIII requirements. This permitting project also includes six firewater water pumps (E-0600W, E-0601M, E-0602E, E-0603, E-0901). According to Title 40 of the Code of Federal Regulations (40 CFR) §60.4200(a)(2)(ii), owners and operators of stationary compression ignition internal combustion engines that were manufactured as certified National Fire Protection (NFTA) fire pump engines after July 1, 2006 are subject to these standards. The firewater pump engines were all manufactured after the July 1, 2006 applicability date so are subject to NSPS IIII requirements. | | | | |
| 40 CFR Part 60 Subpart JJJJ (Quad -J) | Standards of Performance for Stationary Spark. Ignition Internal Combustion Engines | No | | The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of section 60.4230. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.<br>Artesia Refinery does not operate any of these engines. |
| NESHAP Subpart A (40 CFR 61) | General Provisions | Yes | See sources subject to a Subpart in 40 CFR 61 | Applies if any other subpart applies. |
| 40 CFR 61 Subpart M | National Emission Standards for Asbestos | Yes | Facility | The Artesia Refinery complies with the requirements of 40 CFR §61.145 as applicable. |
| 40 CFR 61 Subpart V | National Emission Standards for Equipment Leaks (Fugitive Emission Sources) | No | | This regulation **ONLY** applies if 40 CFR 61, Subpart J applies. Other regulations like 40 CFR 63, Subpart HH may incorporate specific sections of 61-V but that doesn't make 61-V applicable.<br><br>NESHAP Subpart V added to the Applicable Rule Summary and Negative Applicability Summary Tables. Note that for NESHAP Subpart V to be applicable it must be referenced by another Subpart as indicated by §61.240(b). If NESHAP Subpart J had been applicable to equipment leaks, the applicable requirements would be found in Subpart V as referenced by §61.112(a) in Subpart J.<br><br>The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | | | | connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.<br>VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J).<br>Navajo's NSR permit application indicated they may construct piping components intended to operate in VHAP service. However, it was determined that no sources exceeded the 10 % threshold. |
| 40 CFR 61 Subpart FF | National Emission Standards for Benzene Waste Operations | Yes | Certain storage tanks and wastewater units are subject<br>See permittee's Tables 13-9 and 13-12 in application | The refinery is only subject to the recordkeeping requirement specified by 61.342 General and 61.356 Recordkeeping as Benzene waste operations at the refinery will exceed 1 Mg/yr and be less than 10 Mg/yr. Therefore, no controls are required.<br><br>See Tables 103.C (tanks) and 103.G (wastewater) in the permit. |
| MACT Subpart A (40 CFR 63) | General Provisions | Yes | See sources subject to a Subpart in 40 CFR 63 | Applies if any other subpart applies. |
| 40 CFR 63 Subpart Q | National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers | No | See permittee's Table 13-8 in the application | The rule regulates the use of chromium based treatment chemicals and the refinery did at one time use these chemicals in their cooling towers. Therefore, this rule still applies even though no longer used.<br>2/23/15: Chromium cooling tower additives are no longer used. All requirements have been met; **no current requirements.** |
| 40 CFR 63 Subpart R | National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline | No | See permittee's Table 13-10 in the application | MACT CC refers to specific sections of this rule. This rule does not apply to the Fuels Truck Loading Rack (TL-4) as it is subject to MACT CC per 63.420(i) for exemption since TL-4 rack is co-located with a Refinery subject to MACT Subpart CC.<br><br>See Table 103.D (loading) in the permit. |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | Breakout Stations) | | | |
| 40 CFR 63 Subpart CC | National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries | Yes | Facility<br>See permittee's Tables 13-6, 13-8, 13-9, 13-10, 13-11, and 13-12 in the application | Facility is subject to this subpart because it is a major source [63.640(a)(1)] and it emits or has equipment that emits one or more HAPs listed in table 1 of Subpart CC [63.640(a)(2)].<br>There are many tanks, storage vessels, wastewater systems, including flares, as well as fugitives subject to this Subpart.<br>Monitoring and Testing shall comply with the requirements of 40 CFR 63, Subpart G except as specified in 63.647. Recordkeeping shall comply with the requirements of 40 CFR 63, Subpart G. The following Reporting shall comply with the requirements in brackets: Notification of compliance status [63.654(e)(1)]; Periodic reports [63.654(e)(2)]; and Notification of storage vessel filling and refilling and inspections [63.654(h)(2)].<br><br>See Tables 103.B (fugitives), 103.C (tanks), 103.D (loading), 103.F (cooling towers), 103.G (wastewater), and 103.K (flares) in the permit. |
| Previous Statement of Basis summaries:<br>NSR 0195M39R1 added four internal floating roof (IFR) tanks for gasoline blending: four 50,000-bbl IFR tanks (T-0020, T-0021, T-0022 and T-0023).<br>Unit T-1225, naphtha storage tank (formerly NAP-TK) and Unit T-0737, sour water storage tank (formerly NEW-SOURTK) meets the definition of Group 1 Vessels (tanks) [63.641] because the design capacity for both tanks are greater than or equal to 177 cubic meters (15,898 $m^3$, 100,000 bbl and 3,179 $m^3$, 20,000 bbl) and stored-liquid maximum true vapor pressure greater than or equal to 10.4 kilopascals or 1.5 psi (both tanks are 11 psi). Therefore, in accordance with (IAW) 63.646(a) Storage vessel provisions. Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §§63.119 through 63.121(Subpart G) except as provided in paragraphs (b) through (l) of this section (Subpart CC). Definitions in Subpart CC supersede the same terms in Subpart G or A.<br>For 4/28/14: The applicability of MACT Subpart CC to existing equipment is unchanged. The new biodiesel storage tank is subject to this Subpart as a Group 2 storage vessel. The new ethanol storage tank is not subject to MACT Subpart CC because it does not contain any of the HAPS listed in Table 1 of Subpart CC.<br>Equipment leaks that are also subject to the previsions of 40 CFR 60, Subpart GGGa are required to comply only with the previsions specified in Subpart GGGa. | | | | |
| 40 CFR 63 Subpart DDDDD (5-Ds) | National Emission Standards for Hazardous Air Pollutants for | Yes | See permittee's Table 13-3 in the application | Facility is subject to this subpart if it owns or operates an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP as defined in §63.2 or §63.761 (40 CFR part 63, subpart HH, National Emission Standards |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | Industrial, | | | for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in §63.7491.<br>**All heaters and boilers at Artesia Refinery are subject to this subpart.**<br>See Table 103.E (heaters and boilers) in the permit. |
| 40 CFR 63 Subpart UUU | National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Units | Yes | See permittee's Tables 13-4 and 13-5 in the application | The FCC regenerator, the Continuous Catalyst Regenerator (CCR), and SRU2 and SRU3, are subject to requirements. Generally, requires that new SRU's demonstrate on-going compliance with the $SO_2$ emission standards found in 40 CFR 60 Subpart J. This includes initial $SO_2$ compliance testing, CEMS certification and compliance demonstration 63.1572, and an initial and on-going compliance demonstration of HAP emissions from SRU by-pass lines. FCC, CCR, SRU2 and SRU3.<br>See Tables 103.H (FCC-CCR) and 103.I (SRU) in the permit. |
| 40 CFR 63 Subpart ZZZZ (Quad-Z) | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT) | Yes | All RICE<br>See permittee's Table 13-7 in the application | A facility is subject to this subpart if they own or operate stationary RICE at a major source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. The internal combustion engines at the refinery are all subject to this subpart. The portable air compressors, the firewater pump engines, and the backup generators shall all comply with requirements of this subpart.<br>See Tables 103.J (engines) in the permit. |
| 40 CFR 63 Subpart BBBBBB (6-Bs) | National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities | No | | This rule applies to area sources of HAPs. Artesia Refinery is not an area source. |
| 40 CFR 63 Subpart CCCCCC (6-Cs) | National Emission Standards for Hazardous Air Pollutants for | No | | This rule applies to area sources of HAPs. Artesia Refinery is not an area source. |

| Federal Regulation | Title | Applies (Y/N) | Unit(s) or Facility | Comments - Justification |
|---|---|---|---|---|
| | Source Category: Gasoline Dispensing Facilities | | | |
| 40 CFR 64 | Compliance Assurance Monitoring | No | | The Artesia Refinery FCC Regenerator and SRUs are subject to 40 CFR 63, Subpart UUU emission standards proposed after November 15, 1990, and are therefore exempt from the requirements of 40 CFR Part 64 per §64.2(b)(1)(i).<br>The Artesia Refinery fuels truck loading rack, TL-4, is subject to 40 CFR 63, Subpart CC emission standards proposed after November 15, 1990, and are therefore exempt from the requirements of 40 CFR Part 64 per §64.2(b)(1)(i). |
| 40 CFR 68 | Chemical Accident Prevention | Yes | Facility | An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115 Threshold determination and 68.130 List of substances.<br><br>The Artesia Refinery is a stationary source that processes more than the threshold quantity of a regulated substance, as determined under 40 CFR §68.115. |
| Title VI – 40 CFR 82 | Protection of **Stratospheric Ozone** | Yes | N/A | 40 CFR 82 may apply:<br><br>**(82.150)** if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, **if you are an owner or operator of an appliance**, if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sale or purchase class I or class I refrigerants.<br><br>The Artesia Refinery maintains and services building air conditioning units that may contain affected refrigerants. Therefore, the Artesia Refinery is subject to Subpart F to Part 82, which regulates activities to maintaining, servicing, or repairing appliances containing class I, class II or non-exempt substitute refrigerants. |

**13.0 <u>Exempt and/or Insignificant Equipment that do not require monitoring</u>:**

**NSR Exempt Equipment** (not entered into Tempo database)

Copied from Table 2-B of the application. The peach-colored cells indicates equipment to be removed in

this action. Light green colored cells indicates new equipment.

| Unit Number | Source Description | Manufacturer | Model No. | Max Capacity | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) |
|---|---|---|---|---|---|
| | | | Serial No. | Capacity Units | Insignificant Activity citation (e.g. IA List Item #1.a) |
| G-2601 | Emergency Generator | Caterpillar | G3512 | 1468 | 20.2.72.202.B.3 |
| | | | | HP | N/A |
| G-2602 | Emergency Generator | Caterpillar | G3512 | 1468 | 20.2.72.202.B.3 |
| | | | | HP | N/A |
| RLO-26 | RDU Railcar Loading and Off-Loading Rack | | | 2,250 | 20.2.72.202.B.2 |
| | | | | bbl/hr | N/A |
| FUG-26-RDU-LOVP | Renewable Diesel Unit - Low vapor Pressure | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0001 | DAF Waste Talon Tank | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0002 | DAF Waste Talon Tank | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0003 | DAF Waste Talon Tank | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0004 | DAF Waste Talon Tank | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0026 | Brine - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0028 | Scrubber Lime - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0031 | Spent Caustic - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0042 | Pressurized - Naphthas | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0045 | Pressurized - Propane/Butane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0046 | Pressurized - Isobutane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0064 | Caustic - Inorganic | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0071 | Pressurized - Propane | | | | 20.2.72.202.B.5 |

| Unit Number | Source Description | Manufacturer | Model No. | Max Capacity | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) |
|---|---|---|---|---|---|
| | | | | | N/A |
| T-0072 | Pressurized - Propane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0073 | Pressurized - Propane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0074 | Pressurized - Propane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0076 | Pressurized - Propane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0114 | Pressurized - n-Butane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0115 | Pressurized - n-Butane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0116 | Pressurized - Isobutane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0119 | Pressurized - Isobutane | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| T-0446 | Calcium Chloride - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0447 | Sulfuric Acid - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0448 | Antiscalant - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0449 | Cleaner - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0453 | Calcium Chloride - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0460 | Sulfur - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0465 | RO Water | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0466 | RO Water | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0467 | Sulfuric Acid - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |

| Unit Number | Source Description | Manufacturer | Model No. | Max Capacity | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) |
|---|---|---|---|---|---|
| T-0468 | Brine - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0600 | Soda Ash - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0803 | DAF Waste - Wastewater | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0804 | DAF Waste - Wastewater | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0807 | Caustic - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0809 | Wastewater | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0816 | Amine | | | 940 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0829 | RO Reject Tank | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0839 | Condensate Water | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0840 | Water | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0841 | Calcium Chloride - Inorganic | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0891 | Groundwater | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0892 | Groundwater | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-0901 | RDU Renewable Diesel | | | 89,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0902 | RDU Renewable Diesel | | | 89,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0903 | RDU Renewable Diesel | | | 89,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0904 | RDU Charge Tank | | | 29,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0905 | RDU Charge Tank | | | 29,000 | 20.2.72.202.B.2 |

| Unit Number | Source Description | Manufacturer | Model No. | Max Capacity | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) |
|---|---|---|---|---|---|
| | | | | BBL | N/A |
| T-0906 | RDU Feed Tank | | | 63,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0907 | RDU Feed Tank | | | 63,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0908 | RDU Feed Tank | | | 17,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0909 | RDU Feed Tank | | | 17,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0910 | RDU Feed Tank | | | 19,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0911 | RDU Feed Tank | | | 19,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0912 | RDU Feed Tank | | | 109,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0913 | RDU Feed Tank | | | 109,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-0929 | RDU Rail Unloading Acumulation Tank | | | 800 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0930 | RDU Rail Unloading Acumulation Tank | | | 800 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0931 | RDU Rail Unloading Acumulation Tank | | | 800 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0932 | RDU Rail Unloading Acumulation Tank | | | 800 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0933 | RDU Rail Containment Tank - Feed | | | 30,000 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0934 | RDU Rail Containment Tank - Renewable Diesel | | | 30,000 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-0935 | RDU Rail Containment Tank - Recovered Oil | | | 1,000 | 20.2.72.202.B.2 |
| | | | | BBL | N/A |
| T-1221 | RO Water | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| T-1222 | RO Water | | | | 20.2.72.202.B.2 |
| | | | | | N/A |

| Unit Number | Source Description | Manufacturer | Model No. | Max Capacity | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) |
|---|---|---|---|---|---|
| T-1223 | Fresh Caustic - Inorganic | | | 84,000 | 20.2.72.202.B.2 |
| | | | | GAL | N/A |
| T-1224 | Filter Backwash - Wastewater | | | | 20.2.72.202.B.2 |
| | | | | | N/A |
| SSM Misc 1 | Catalyst Handling | | | | 20.2.72.202.B.5 |
| | | | | | N/A |
| - | Gas Fueling Tanks | | | 500 | 20.2.72.202.B.5 |
| | | | | GAL | N/A |
| - | Diesel Fueling Tanks | | | 500 | 20.2.72.202.B.5 |
| | | | | GAL | N/A |
| - | Sampling Locations | | | | 20.2.72.202.B.5 |
| | | | | | N/A |

**14.0 New/Modified/Unique Conditions** (Format: Condition#: Explanation):

A. Previous A100.B BACT condition statements were moved to A106.D were BACT conditions are kept per current permit protocols.
B. Tables 102.A and 102.B updated. Largest change in facility-wide potential emissions was a reduction in VOC emissions of over 400 tpy.
C. Table 103.A Applicable Requirements updated (including its subsidiary tables A103.B through A103.K).
D. Table 104.A Regulated Sources List updated.
E. Table 105.A Control Equipment updated.
F. Table 106.A Allowable Emissions updated. To repeat, biggest change (facility-wide) was a reduction in fugitive VOC emissions of more than 400 tpy. Required NOx lb/MMBtu factors per either BACT or Consent Decree were moved from Table 106.A to a separate table at A106.D(13).
G. A106.D(14) new BACT condition and limits for the flares.
H. A107 SSM conditions revised to more closely meet current monitoring protocol language. A107. Some renumbering to move previous A107.E to A107.C.
I. A111.B new opacity condition for diesel engines.
J. A115 and A116 for NSPS NNN (depropanizer, for Unit W-623) and NSPS RRR (alky reactor) added, respectively.
K. A201.D: New hours of operation condition for fire water pumps and backup generators to verify they meet the NSR exemption.
L. A204.A: Heaters/boilers operational inspection condition updated to current Department monitoring protocol language.
M. A206.A and A206.B: New flare monitoring conditions to meet current Department monitoring protocol for flares.
N. A206.E: Flare good combustion practices as part of flare BACT.
O.

**15.0 For Title V action: Cross Reference Table between NSR Permit PSD-195-M40 and TV Permit P051-R3. NSR permit conditions cross referenced to the TV permit are federally enforceable conditions, and therefore brought forward into the TV permit:**

This is an NSR action. Comparison not needed.

**16.0 Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.**

A. Although the depropanizer (W-623) and Alky Reactor were existing units subject to NSPS NNN and NSPS RRR, respectively, no monitoring conditions were in the permit until this action. Hence, Conditions A115 and A116 for NSPS NNN (depropanizer, for Unit W-623) and NSPS RRR (alky reactor) were added, respectively.

B. Unit name designations changed for some units in this permit action, for example, many of the fire water pump engines were assigned new names.

C. Although this action triggered PSD major modification review with increased flare VOC emissions, the sum total facility-wide VOC emissions went down because fugitive VOC emissions went down by well over 400 tpy due to improved/corrected equipment fugitive counts.

D.