Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** shall include a brief description of the facility and its processes.

Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions: Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

Application Summary:

This application and accompanying material is a revision of New Source Review (NSR) Construction Permit No. 7482 for the 3Bear Libby Gas Plant (Libby), owned and operated by 3 Bear Delaware Operating – NM, LLC (3Bear). NSR Permit No. 7482 was issued on January 8, 2018. The facility will receive up to 60 MMscf/day of gas from three surrounding compressor stations owned and operated by 3Bear. Libby will separate natural gas liquids (NGL's) from the field gas, producing natural gas liquids and a residue gas for transmission to a pipeline owned by others. The process utilizes a cryogenic gas separation plant and associated compressors for collecting field gas from the gathering system nearby. Gas and NGL's will be piped to the respective nearby interconnect metering stations, by others. The plant is to be located within 5 miles of the residue gas and NGL pipelines. Changes to the last application since the last permit issuance include: addition of residue compressor engine options, addition of generator engine, corrected tank battery configuration and process, removal of methanol tank, addition of loadout, updated fugitive emissions, and updated flaring volumes.

The facility will consist of one of the inlet compressor engine options listed in Table 3-1.

Table 3-1: Compressor Engine Options

Option No.	Unit Name	Make & Model
1	ENG-1	Caterpillar G3508
2	ENG-2	Caterpillar G3516

The facility will consist of one of the residue compressor engine options listed in Table 3-2.

Table 3-2: Compressor Engine Options

Option No.	Unit Name	Make & Model
1	ENG 5-8	Caterpillar G3516
2	ENG 9-12	Waukesha 7044GSI

Notes:
The worst-case emissions are included in the total facility emissions.

In addition to the compressor engine options, the facility will consist of the following emission units: two additional inlet compressor engines, one gunbarrel tank, four condensate tanks, one slop oil tank, one produced water tank, one hot oil heater, one regen gas heater, one amine unit, one condensate loadout, one oil loadout, one thermal oxidizer, one upset/maintenance flare, one tank flare, process piping fugitives, and haul road fugitives. The facility will also have two generators (GEN 1-2) on site that are exempt under 20.2.72.202.B.3.

SSM Overview:

SSM emissions are expected at the facility and are included in the total facility wide emissions. The compressor blowdowns and plant blowdowns will be controlled by the maintenance flare. Additional maintenance flaring has been included in the application to account for other maintenance activities. Maintenance activities that cannot be controlled, such as painting and tank degassing, have been included in the application as well. An estimated 10 tpy has been used for these uncontrolled maintenance activities. In the event that the thermal oxidizer is down, the maintenance flare (FL-1) is used as a backup control device for the amine unit.

Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

The facility process flow sheet is provided on the next page.

Section 5

Plot Plan Drawn To Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

The facility plot plan is provided on the next page.

Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

(1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;

(2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**

(3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.

(4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO_2e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO_2e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following □ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

Global Warming Potentials (GWP):
Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO_2 over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC).** You may also find GHGs defined in 40 CFR 86.1818-12(a).

Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.
1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

- ☑ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
- ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
- ☑ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
- ☐ If an older version of AP-42 is used, include a complete copy of the section.
- ☑ If an EPA document or other material is referenced, include a complete copy.
- ☐ Fuel specifications sheet.
- ☑ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

Information included in this section:

1. Promax information
2. Tanks 4.0.9d information
3. Amine Enerflex information
4. Equipment information
5. 40 CFR 60 Subpart JJJJ Table-1
6. AP-42 Tables/Figures/Equations:
    a. Table 1.4-1,1.4-2,1.4-3 – Heaters / Thermal Oxidizer
    b. Table 3.2-2 – Lean Burn Engines
    c. Table 5.2-1 – Loadout
    d. Table 7.1-2 – Loadout
    e. Table 13.5-1 & Table 13.5-2 – Flare
    f. Table 13.2.2-2, Figure 13.2.2-1, Equation 13.2.2-1a – Road Dust
7. Fugitives:
    a. Dexter ATC Field Services Fugitive Counts
    b. EPA Office of Air Quality Planning and Standards, Protocol for Equipment Leak Emission Estimates, Table 2-4, EPA-453/R-95-017, November 1995
    c. EPA Office of Enforcement and Compliance Assurance, Leak Detection and Repair, A Best Practices Guide, Table 4.1, EPA-305-D-07-001, October 2007
    d. API Publ 4615, Emission Factors for Oil and Gas Production Operations, Table 5, January 1995
    e. API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry Table 6-5
    f. 40 CFR 98 Subpart W, Tables W-1A and W-1C
8. Department Accepted Values For: Aggregate Handling, Storage Pile and Haul Road Emissions
9. Inlet Gas Analysis data – Sample dated 1/9/2019
10. Residue Gas Analysis data - Promax

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

A map is provided on the following page.

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)
(This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

☑ **I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"**
This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and **Significant Permit Revision** public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☑ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
2. ☑ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
3. ☑ A copy of the property tax record (20.2.72.203.B NMAC).
4. ☑ A sample of the letters sent to the owners of record.
5. ☑ A sample of the letters sent to counties, municipalities, and Indian tribes.
6. ☑ A sample of the public notice posted and a verification of the local postings.
7. ☑ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
8. ☑ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
9. ☑ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
10. ☑ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
11. ☑ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.

Section 10

Written Description of the Routine Operations of the Facility

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A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

The 3Bear Libby Gas Plant will be equipped to gather natural gas from three surrounding compressor stations: 3Bear Aztec Compressor Station, 3Bear Outland Compressor Station, and 3Bear Lariat Compressor Station, which are owned and operated by 3Bear. The gas from the compressor stations is sent to the gas processing plant for treatment.

Libby will separate natural gas liquids (NGL's) from the field gas, producing natural gas liquids and a residue gas for transmission to a pipeline owned by others. The process utilizes a cryogenic gas separation plant and associated compressors for collecting field gas from the gathering system nearby. Gas and NGL's will be piped to the respective nearby interconnect metering stations, by others. The plant is to be located within 5 miles of the residue gas and NGL pipelines.

Compressor engines on site (ENG 1-4) will compress inlet gas and send the gas to the processing plant where an amine unit (AMINE-1) on site will treat and sweeten the gas. The amine unit is controlled by a thermal oxidizer (TO-1), and in the event that the thermal oxidizer is down, the gas will be sent to a flare (FL-1). The NGLs produced will be stored in pressurized vessels. Liquids from process drains will be sent to a gunbarrel tank (TK-1) for hydrocarbon separation. Oil from the gunbarrel separation will be stored in one 400-bbl slop oil tank (TK-6) and produced water will be stored in produced water tank (PWTK-1). Condensate tanks will store stabilized condensate (TK 2-5). A tank flare (FL-2) controls all tanks on site, and condensate and oil will be trucked off site (CONDLOAD-1 and OILLOAD-1). An emergency and maintenance flare (FL-1) will control compressor blowdowns (COMP), plant blowdowns (PLANT BD), and emergency upset conditions. Fugitive emissions occur from process piping and other components (FUG 1-2). Road dust emissions occur from daily routine traffic to the production facility (HR-1). Additional equipment on site will include: residue compressor engines (Either ENG 5-8 or ENG 9-12), two generator engines (GEN 1-2), one 50 MMBtu/hr hot oil heater (HTR-1), and one 11 MMBtu/hr regen gas heater (HTR-2).

Section 11
Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe)**:**
3Bear evaluated the Libby Gas Plant with respect to two nearby facilities that will also be owned and operated by 3Bear:

- The Libby plant site is located south of a new crude oil terminal, associated pipeline pumps, and containment area. The crude storage system pumps oil to a nearby oil pipeline.

- The plant site is also located south of a central liquid waste treatment and storage system that includes tank battery and containment with oil-water separators, filtration, and treatment equipment for receiving drill pad waste liquids for processing.

As defined by 40 CFR Part 70.2, "*Major source* means any stationary source (or any group of stationary sources that are located on one or more continuous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that are described in paragraph (1), (2), or (3) of this definition. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (*i.e.*, all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987. State programs may adopt the following provision: For onshore activities belonging to Standard Industrial Classification (SIC) Major Group 13: Oil and Gas Extraction, pollutant emitting activities shall be considered adjacent if they are located on the same surface site; or if they are located on surface sites that are located within 1⁄4 mile of one another (measured from the center of the equipment on the surface site) and they share equipment. Shared equipment includes, but is not limited to, produced fluids storage tanks, phase separators, natural gas dehydrators or emissions control devices. Surface site, as used in the introductory text of this definition, has the same meaning as in 40 CFR 63.761."

Per 40 CFR 63.761, *Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

The crude oil terminal and liquid waste treatment and storage system are on the same property owned by 3Bear but are not associated with plant operations and do not share equipment. The facilities will each have their own separate fence-lines and entrances. The Libby plant site is separated from the liquid waste treatment site by a pipeline laydown yard and the crude oil terminal as well as the separate fence-lines and entrances.

The oil terminal operates under SIC 5171, whereas, the Libby plant and the liquid waste treatment and storage system both operate under 2-digit SIC 13.

Based on this analysis, the three facilities are not on the same surface site and do not share equipment, therefore, they are not adjacent as defined by the regulation. Air authorization/permit applications for both nearby facilities will be submitted under separate cover.

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☑ **Yes** ☐ **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

☑ **Yes** ☐ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☐ **Yes** ☑ **No**

C. Make a determination:

☑ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "**YES**" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "**NO**" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Section 12

Section 12.A
PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ☑ **a minor PSD source before and after this modification (if so, delete C and D below).**
- ☐ **a major PSD source before this modification. This modification will make this a PSD minor source.**
- ☐ **an existing PSD Major Source that has never had a major modification requiring a BACT analysis.**
- ☐ **an existing PSD Major Source that has had a major modification requiring a BACT analysis**
- ☐ **a new PSD Major Source after this modification.**

B. **This facility [is not] one of the listed 20.2.74.501 Table I – PSD Source Categories. The "project" emissions** for this modification are **[not significant]. The "project" emissions listed below [do not] only result from changes described in this permit application, thus no emissions from other [revisions or modifications, past or future] to this facility. Also, specifically discuss whether this project results in "de-bottlenecking", or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:**

a. **NOx: 145.8 TPY**
b. **CO: 241.7 TPY**
c. **VOC: 182.8 TPY**
d. **SOx: 238.4 TPY**
e. **PM: 9.1 TPY**
f. **PM10: 8.9 TPY**
g. **PM2.5: 8.9 TPY**
h. **Fluorides: N/A TPY**
i. **Lead: N/A TPY**
j. **Sulfur compounds (listed in Table 2): N/A TPY**
k. **GHG: 254,861 TPY**

C. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

Section 13

Determination of State & Federal Air Quality Regulations

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

Required Information for Specific Equipment:
For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply**. **For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

Required Information for Regulations that Apply to the Entire Facility:
See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

Regulatory Citations for Regulations That Do Not, but Could Apply:
If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example,** if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

Regulatory Citations for Emission Standards:
For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

Federally Enforceable Conditions:
All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVENT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: http://cfpub.epa.gov/adi/

Example of a Table for STATE REGULATIONS:

STATE REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	This facility is located in New Mexico, therefore the requirements of this part applicable.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This facility is subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and is thus subject to the requirements of this regulation.
20.2.23 NMAC	Fugitive Dust Control	No	Facility	This is a permitted facility therefore this regulation does not apply.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No		This facility DOES NOT have new gas burning equipment **(external combustion emission sources, such as gas fired boilers and heaters)** having a heat input of greater than 1,000,000 million British Thermal Units per year per unit This facility DOES NOT have existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No		This facility DOES NOT have oil burning equipment **(external combustion emission sources, such as oil fired boilers and heaters)** having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	Yes	Facility	This facility is a natural gas processing plant; therefore it is subject to the requirements of NMAC 2.35 for "New Natural **Gas Processing** Plants" as defined by the rule.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	**These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.**
20.2.38 NMAC	Hydrocarbon Storage Facility	Yes	TK 2-6	This regulation applies to the oil and condensate storage tanks at the facility. The tanks will be manifolded to a flare to meet the requirements of this regulation.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No		This facility is NOT a sulfur recovery plant.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	ENG 1-12, GEN 1-2, HTR 1-2, TO-1, FL 1-2	Engines, generators, heaters, and flares are Stationary Combustion Equipment.
20.2.70 NMAC	Operating Permits	Yes	Facility	As proposed, this facility is a Title V Major source and is in turn subject to 20.2.70.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is subject to 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	**Emissions Inventory Reporting:** 20.2.73.300 NMAC applies. This facility will be issued a permit under 20.2.72 NMAC, therefore it will meet the applicability requirements of 20.2.73.300 NMAC.

STATE REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	This facility is NOT a PSD major source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	Subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC.
20.2.77 NMAC	New Source Performance	Yes	ENG 1-12, GEN 1-2, HTR 1-2, FUG-1, COMP, AMINE -1	HTR 1-2 are subject to NSPS Dc ENG 1-12 and GEN-1 are subject to NSPS Subpart JJJJ. GEN-2 is subject to NSPS Subpart IIII. FUG-1, COMP, AMINE-1 are subject to NSPS Subpart OOOOa.
20.2.78 NMAC	Emission Standards for HAPS	No		This facility DOES NOT emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61, as amended through January 31, 2009.
20.2.79 NMAC	Permits – Nonattainment Areas	No		This facility is located in an attainment area for all regulated pollutants. PTE is major for NOx, CO, and SO2. The significance levels for NOx, CO and SO2 will meet the national ambient air quality standard, therefore this regulation is not applicable to those pollutants.
20.2.80 NMAC	Stack Heights	Yes		3Bear considered GEP requirements in the analysis. Stack heights do not exceed GEP.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	ENG 1-12, GEN 1-2	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. Applies if other MACT subpart applies. The MACT Subpart ZZZZ applies as discussed below.

Example of a Table for Applicable FEDERAL REGULATIONS (Note: This is not an exhaustive list):

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	Applies since the source emits air pollutants subject to NAAQS. Defined as applicable at 20.2.70.7.E.11, any national ambient air quality standard.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				See Section 16 for modeled demonstration of NAAQS compliance.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	ENG 1-12, GEN 1-2, HTR 1-2, FUG-1, COMP, AMINE-1	HTR 1-2 are subject to NSPS Dc ENG 1-12 and GEN-1 are subject to NSPS Subpart JJJJ. GEN-2 is subject to NSPS Subpart IIII. FUG-1, COMP, AMINE-1 are subject to NSPS Subpart OOOOa.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No		There is not a steam generating unit that commenced construction, modification, or reconstruction after September 18, 1978, and that is capable of combusting more than 73 megawatts (MW) (250 million British thermal units per hour (MMBtu/hr)), therefore this facility is not applicable to this regulation.
NSPS 40 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	No		There is not a steam generating unit that commenced 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 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)), therefore this facility is not applicable to this regulation.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Yes	HTR 1-2	This facility has steam generating units for which construction, modification, or reconstruction is 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/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). This regulation therefore, applies to the specified heaters.
NSPS 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	No		This facility does not have storage vessels greater than 151,416 liters (40,000 gallons) that are used to store petroleum liquids for which construction is commenced after May 18, 1978, therefore the facility is not applicable to this regulation.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for **Volatile Organic Liquid Storage Vessels** (Including Petroleum Liquid Storage Vessels) for	No		Gunbarrel TK-1 is a vessel with capacity greater than or equal to 75 cubic meters (m^3) but less than 1,589,874 m^3 but does not meet the definition of storage vessel, therefore is not applicable to this subpart. TK 2-6 and PWTK-1 are not storage vessels with capacities greater than or equal to 75 cubic meters (m^3) but less than 1,589,874 m^3 that are used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984			commenced after July 23, 1984.
NSPS 40 CFR 60.330 Subpart GG	**Stationary Gas Turbines**	No		There are no stationary gas turbines exceeding 10 MMBtu/hr at this facility.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No		This facility is an onshore natural gas processing plant that will commence construction, reconstruction, or modification AFTER August 23, 2011, therefore the facility is not applicable to this subpart.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for **Onshore Natural Gas Processing**: SO_2 Emissions	No		This facility is an onshore natural gas processing plant that will commence construction, reconstruction, or modification AFTER August 23, 2011, therefore the facility is not applicable to this subpart.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No		The facility is NOT subject to the provisions of NSPS Subpart OOOO because the facility will be constructed after September 18, 2015.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Yes	FUG-1, COMP, AMINE-1	The facility IS subject to the provisions of NSPS Subpart OOOOa listed below because: - The compressors (COMP) are not co-located with a wellhead, so the reciprocating compressor requirements are applicable. - AMINE-1 is a sweetening unit located at onshore natural gas processing plants that process natural gas produced from onshore wells. - This is an onshore natural gas processing plant therefore the equipment leak standards apply to the affected facilities (FUG-1). The facility is NOT subject to the provisions of NSPS Subpart OOOOa listed below because: - There are no gas-fired, continuous high bleed pneumatic controllers at this site, so the pneumatic controller requirements are not applicable. - TK-1 is a process vessel not a storage vessel, therefore the storage vessel affected facility requirements are not applicable. - TK 2-6 and PWTK-1 are storage vessels that emit less than 6 tpy VOC, therefore the storage vessel affected facility requirements are not applicable.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal	Yes	GEN-2	GEN-2 is a stationary CI that commenced construction after July 11, 2005 where the stationary CI ICE was manufactured after April 1, 2006. This engine is not a fire pump engine.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Combustion Engines			
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	ENG 1-12	ENG-1 is subject to NSPS Subpart JJJJ because the engine has a manufacture date after July 1, 2007 and has a maximum engine power greater than or equal to 500 hp and less than 1,350 hp. ENG 2-12 are subject to NSPS Subpart JJJJ because the engines have a manufacture date after July 1, 2007 and have a maximum engine power greater than 500 hp. GEN-1 is subject to NSPS Subpart JJJJ because the engine has a manufacture date after July 1, 2008 and has a maximum engine power less than 500 hp.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No		There are not any steam generating units, integrated gasification combined cycle (IGCC), or stationary combustion turbines on site, therefore this facility is not subject to this subpart.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No		There are not any steam generating units, integrated gasification combined cycle (IGCC), or stationary combustion turbines on site, therefore this facility is not subject to this subpart.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No		This facility is not a landfill; therefore, it is not applicable to this subpart.
NESHAP 40 CFR 61 Subpart A	General Provisions	No		This facility DOES NOT emit HAP's in quantities that trigger these requirements.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No		This facility DOES NOT process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No		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, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. 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). Link to 40 CFR 61 Subpart V Note: If 40 CFR 60 also applies source only needs to comply with this part. No equipment at this facility contains or contacts a fluid with at least 10 percent by weight of a VHAP.
MACT 40 CFR 63,	General Provisions	Yes	ENG 1-12, GEN	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
Subpart A			1-2	Applies if other MACT subpart applies. The MACT Subpart ZZZZ applies as discussed below.
MACT 40 CFR 63.760 Subpart HH	**Oil and Natural Gas Production Facilities**	No		There are no dehydrators located at this facility. This facility is not a major source of HAPs.
MACT 40 CFR 63 Subpart HHH		No		This facility IS NOT a natural gas transmission and storage facility or a major source of HAPs.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No		This facility is not a major source of HAPs, therefore it is not subject to this subpart.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No		There are not any coal and oil fired electric utility steam generating units on site, therefore it is not subject to this subpart.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	Yes	ENG 1-12, GEN 1-2	40 CFR 63, Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from existing, new, modified and reconstructed stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The regulation contains provisions for initial and continuous compliance demonstration. The facility is an **area** source of HAP, as defined under the regulation. **ENG 1-2 and GEN-1:** Under §63.6590(a)(2)(iii) and (a)(3)(iii), a RICE located at an area source of HAP is a *new* or *reconstructed* unit if it is constructed or reconstructed on or after June 12, 2006. Under §63.6590(c)(1), a *new* or *reconstructed* SI RICE at an area source of HAP must meet the requirements of the part by meeting the requirements of 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines). **GEN-2** Under §63.6590(a)(2)(iii) and (a)(3)(iii), a RICE located at an area source of HAP is a *new* or *reconstructed* unit if it is constructed or reconstructed on or after June 12, 2006. Under §63.6590(c)(1), a *new* or *reconstructed* SI RICE at an area source of HAP must meet the requirements of the part by meeting the requirements of 40 CFR 60, Subpart IIII (NSPS for Stationary Compression Ignition Engines).

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 64	**Compliance Assurance Monitoring**	No		The amine sweetening unit has pre-control VOC and H2S emissions greater than 100 TPY and uses a control device to achieve compliance with an emission limitation or standard. The amine sweetening unit is an affected facility under NSPS OOOOa, therefore, it is exempt under §64.2(b)(1)(i) for control of H2S. 3Bear believes the performance testing and compliance demonstrations required to confirm H2S destruction are adequate to also demonstrate VOC destruction. Therefore, 3Bear believes this facility IS NOT subject to 40 CFR 64.
40 CFR 68	**Chemical Accident Prevention**	Yes		This facility will handle naturally occurring hydrocarbon mixtures at a natural gas processing plant and the Accidental Release Prevention Provisions may be applicable to this facility. The facility may be required to submit the appropriate accidental release emergency response program plan prior to operation of the facility with more than the threshold quantity of a regulated substance.
Title IV – Acid Rain 40 CFR 72	**Acid Rain**	No		Not an affected facility.
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	No		Not an affected facility.
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	No		Not an affected facility.
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	No		Not an affected facility.
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	N/A	N/A	Not Applicable –facility will not “service”, “maintain” or “repair” class I or class II appliances nor “disposes” of the appliances.

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☐ **Title V Sources** (20.2.70 NMAC)**:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☑ **NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☑ **Title V** (20.2.70 NMAC)**, NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: https://www.env.nm.gov/aqb/permit/aqb_pol.html. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title “Construction Scenarios”, specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

Please see Table 3-1 and Table 3-2.

Section 16

Air Dispersion Modeling

1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.
3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. **Note:** Neither modeling nor a modeling waiver is required for VOC emissions.	**X**
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

☐ See attached, approved modeling **waiver for all** pollutants from the facility.
☐ See attached, approved modeling **waiver for some** pollutants from the facility.
☑ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.
☐ No modeling is required.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Compliance Test History Table

Unit No.	Test Description	Test Date
ENG-2 (Previously ENG-1b)	Tested in accordance with EPA test methods as required by NSR permit 7482.	4/16/2019
ENG-3 (Previously ENG-2)	Tested in accordance with EPA test methods as required by NSR permit 7482.	4/18/2019

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

The following permit conditions are requested for the 3Bear Libby Gas Plant:

1. Requesting emission limits as specified in the summary table in Section 6 that are greater than 0.5 lb/hr and 0.5 tpy.

2. Individual HAP emissions will be less than 10 tpy. Facility wide HAP emissions will be less than 25 tpy.

3. Engine Emission Limits:
   - CO emissions on ENG 2-8 will be limited to 0.78 g/hp-hr

4. TK 1-6 and PWTK-1 will be controlled with a 95% control efficiency.

Section 22: Certification

Company Name: 3 Bear Delaware Operating – NM, LLC

I, Stephanie Swanson, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this ____ day of July, _____, upon my oath or affirmation, before a notary of the State of

_____.

_____ _____
*Signature Date

Stephanie Swanson Manager of Engineering
Printed Name Title

Scribed and sworn before me on this ____ day of _____, _____.

My authorization as a notary of the State of _____ expires on the

_____ day of _____, _____.

_____ _____
Notary's Signature Date

_____
Notary's Printed Name

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.