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SCS ENGINEERS

September 11, 2012
File No. 01201097.00

Mr. Patrick Mohn
Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class I Permitting Branch
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701
(775) 687-9345

SUBJECT: RESPONSE TO REQUEST FOR ADDITIONAL TECHNICAL INFORMATION FOR APPLICATION FOR CLASS I-B OPERATING PERMIT RENEWAL, LOCKWOOD LANDFILL, STOREY COUNTY, NEVADA

Dear Mr. Mohn:

Refuse, Inc. (RI) hereby submits two (2) copies of the additional information in support of the application for a Class I-B Operating Permit Renewal for the Lockwood Landfill. This additional information is submitted in response to your June 29, 2012 letter submitted to RI. This addendum presents a restatement of the Nevada Division of Environmental Protection – Bureau of Air Pollution Control's (NBAPC's) information requests on the permit renewal, as well as a summary of response information (e.g., answer, reference to application text, forms, etc.) for each of the comments.

NBAPC Item #1

General Company Information – Applicable Requirements

This item pertains to the identification of applicable NSPS and NESHAP requirements in the first part of your Class I application. Please refer to No. 9 of the General Company Information part of your Class I application.

- *The NPAPC noted that RI identified the NESHAP 40 CFR Part 63, Subpart AAAA as applicable to the Lockwood Landfill. However, the NBAPC recommends that RI evaluate other potential NESHAP standards that apply to specific emission sources at Lockwood, such as those that are applicable to the diesel engines of Systems 02, 03, 05, 07 and 07, plus the existing gasoline storage tank, which is currently listed as an Insignificant Activity in your current Title V permit.*
- *If RI amends the entry in No. 9 of the General Company Information form, so as to include additional NESHAP standards, then please re-submit the amended form to this office.*

As recommended by NBAPC, RI evaluated other potential NESHAP standards that apply to specific emission sources at Lockwood. NESHAP additions to the form included Subparts ZZZZ and CCCCCC. The General Company Information has been updated and can be found in Appendix A.

NBAPC Item #2

UTM Coordinates & Hours of Operation – Landfill (F1:001)
Please refer to the Industrial Process Application Form for the Landfill (F1.001).

- *Please specify the UTM datum (NAD 27 or NAD 83) for the Landfill by checking the appropriate box in Section 1 of the form.*
- *The NBAPC noted that RI is currently permitted to operate the landfill 8,760 hours per year.*
- *However, RI requested only 20 hours per day (7,300 hours per year) on the Industrial Process Application Form (Section 2) for the Landfill in its renewal application. RI needs to reconsider its requested hours of operation for the landfill; as it would be expected that landfill gas is generated, collected, and controlled on a continuous basis at Lockwood, not just for 20 hours per day.*
- *Please re-submit Sections 1 and 2 of the Industrial Process Application Form for the Landfill if amendments are made to Sections 1 and 2 of the form.*

RI has specified the UTM datum and has corrected the Industrial Application Form from Sections 1 and 2 for the Landfill to reflect the currently permitted hours of operation (8,760 hours per year). The revised form can be found in Appendix B.

NBAPC Item #3

EPA LandGEM Model- Methane Generation Capacity L_0
Upon review of RI's LandGEM model input, we noted that the Potential Methane Generation Capacity, Lo, was set at 69m3/Mg. For "Arid Area" landfills, the LandGEM User's Guide (EPA 600/R-05/047, May 2005, Table 3) recommends an L_0 of 170 m^3/Mg as a model input value.

The NBAPC also noted that the L_0 value of 69 m^3/Mg was referenced in RI's September 2001 Title V permit application. According to RI's 2001 application, the L_0 value was based on information contained in a database maintained by SCS Engineers for 35 landfill sites located in similar climates. However, the NBAPC is concerned as to whether the L_0 value proposed by RI is still valid, considering that the aforesaid database is over 10 years old.

Therefore, we request that RI re-evaluate the proposed L_0 value based on more recent information. If RI proposes continued use of 69 m^3/Mg as the L_0 input value, or if RI proposes a new value for L_0, then please provide documentation to the NBAPC that justifies your proposed L_0 value. If a new L_0 value is proposed, then RI must re-run the LandGEM model and revise the Section 7 Requested Emission Limits portion of the Industrial Process Application Farm for the Landfill (F1.001).

RI re-evaluated the proposed L_0 value of 69 m^3/Mg and believes that the value should remain in the model. Please note that the default L_0 value of 170 m^3/Mg would only be used for New Source Performance Standards (NSPS) applicability and would not apply to this situation. If a default L_0 value were to be used, it would be 100 m^3/Mg, which is required by U.S. EPA to be used for all other Clean Air Act (CAA) purposes. RI evaluated the landfill gas (LFG) generation rates from each scenario (69 m^3/Mg versus100 m^3/Mg) and what the resulting estimated recovery rate would be using 75% collection of the actual recovered flows from 2009 through 2011:

Year	LFG Generation using 69 m^3/Mg (scfm)	Resulting Recovery rate based on 75% collection using 69 m^3/Mg (scfm)	LFG Generation using 100 m^3/Mg (scfm)	Resulting Recovery rate based on 75% collection using 69 m^3/Mg (scfm)	Actual Average Flow (scfm)
2009	2,649	1,987	3,828	2,871	930
2010	2,733	2,050	3,949	2,962	1,405
2011	2,816	2,112	4,069	3,052	1,710

Based on the table above, using the default L_0 of 100 m^3/Mg is highly overestimating LFG generation and subsequent recovery. Using the 69 m^3/Mg would still appear to represent an overestimation but not nearly as severe. Therefore, maintaining 69 m^3/Mg as the L_0 is still conservative for Lockwood but more accurate than using the CAA default.

NBAPC Item #4

Controlled Landfill Gas (LFG) Pollutants- Landfill (Fl.00l)
Upon review of Section 4 of the Industrial Process Application Form for the Landfill (Fl.001) the NBAPC noted that RI specified NMOC's, VOCs, and HAPs as landfill gas (LFG) constituents controlled by the Candlestick Flare. However, according to your application, reduced sulfur compounds (represented collectively as H2S) in the LFG are also controlled by the flare. The NBAPC requests that RI amend and re-submit Section 4 of the form so as to include H2S as one of the LFG constituents controlled by the flare.

RI has revised Section 4 of the Industrial Process Application Form for the Landfill to include hydrogen sulfide (H_2S) as one of the LFG constituents controlled by the flare. The revised form can be found in Appendix B.

NBAPC Item #5

Landfill Fugitive Emissions (Fl.00l)
Please refer to Section 7 of the Industrial Process Application Form for the Landfill (Fl.001). Upon review of Section 7 of the form, the NBAPC noted that the LFG pollutants VOC, H_2S, NMOC, and HAPs are represented on the form entirely as fugitive emissions. These emissions were calculated by RI, in part, using the EPA's LandGEM model. Because the Lockwood Landfill has a LFG collection system, most of these emissions are not considered fugitive. The NBAPC is aware that the currently-accepted default LFG collection efficiency is 75% (25% allowable as fugitive).

Based on the foregoing, the NBAPC requests that RI revise and re-submit Section 7 of the Industrial Process Application Form for the Landfill (Fl.001) specifying only the fugitive emissions of VOC, H_2S, NMOC, and HAPs.

If a collection efficiency higher than 75% is proposed (fugitive emissions< 25% of the total LPG pollutants), then please provide documentation supporting RI's proposed collection efficiency.

RI has revised Section 7 of the Industrial Application From for the Landfill to show fugitive emissions based on the U.S. EPA's LandGEM model and a 75% LFG collection efficiency. The revised form can be found in Appendix B.

NBAPC Item #6

Wood Chipping Circuit (System 02) Emission Unit Application Forms
Upon review of your application, the NBAPC noted that RI submitted an Industrial Process Application Form for the Wood Chipper only (PF1.002). Be advised that RI must also submit emission unit application forms for the other material transfers of System 02 as well. Therefore, we require that RI submit an Industrial Process Application Form for each of the following emission units currently listed in your Title V permit:

- *PF1.001- Material Transfer by Loader to Tub Grinder (Wood Chipper)*
- *PF1.003- Wood Chipper and Transfer to Conveyor (Phase 1 Belt)*
- *PF1.004- Conveyor (Phase 1 Belt) and Transfer to Conveyor (Phase 2 Belt)*
- *PF1.005- Conveyor (Phase 2 Belt) and Transfer to Stockpile for Trailer Discharge*

RI has created Industrial Application Forms for the other material transfers of System 02. The forms can be found in Appendix B.

NBAPC Item #7

Specification of Control for the Wood Chipper (PF1.002)
Please refer to Section 4 of the Industrial Process Application Form for the Wood Chipper. RI specified "Water Truck" with 75% control for particulates. Be advised wet dust suppression for process fugitive equipment must be properly designated as "Water Sprays."

Therefore, please revise and re-submit Section 4 of the form with "Water Sprays" instead of "Water Truck." In addition, please note that for other material transfers in your permit, "Water Sprays" must also be specified as the control technology, if wet dust suppression is proposed for a particular material transfer.

RI has revised Section 4 of the Industrial Application Form for the Wood Chipper to note "Water Sprays" instead of "Water Truck". The revised form can be found in Appendix B.
NBAPC Item #8

750 HP Engine for Wood Chipper Circuit
Please refer to the Combustion Equipment Application Form for the 750 HP diesel engine (S2.001).

- *Please specify the UTM datum (NAD 27 or NAD 83) for the engine by checking the appropriate box in Section 1 of the form.*
- *Please specify stack parameters in Section 4 of the form. The stack parameters required include: Stack Height, Stack Inside Diameter, Stack Exhaust Temperature, and Gas Volume Flow Rate (ACFM) or Stack Exit Velocity.*
- *Please re-submit the Combustion Equipment Application Form with the amendments noted above.*

RI has specified the UTM datum and provided stack parameters in Sections 1 and 4 of the Industrial Application Form from Sections 1 and 4 for the 750 horsepower (HP) diesel engine. The revised form can be found in Appendix B.

NBAPC Item #9

Request for 200 tph for the Asphalt Grinding Circuit (System 03)
Please refer to the Industrial Process Application Farm for the Asphalt Grinder (PF1.008). The NBAPC noted that RI requested a process rate of 200 tons per hour for PF1.008. The NBAPC must point out that PF1.008 is currently permitted for only 110 tons per hour.

The requested change cannot be made under the auspices of a permit renewal. Therefore, we recommend that RI submit a separate application for revision to increase the hourly throughput rate of the Asphalt Grinder (and associated material transfers) and to establish new annual throughput limits in the permit.

In the meantime, RI must revise and re-submit the Industrial Process Application Form for the Asphalt Grinder (PF1.008) specifying the currently-permitted process rates, daily hours of operation, and annual hours of operation

In addition, the NBAPC noted that RI did not submit emission unit application forms for the other material transfers of System 03. Therefore, we require that RI submit an Industrial Process Application Form for each of the following emission units currently listed in your Title V permit:

- *PF1.006- Material Transfer by Loader to Coleman Power Unit and Transfer to Conveyor (Phase 1Belt)*
- *PF1.007- Conveyor (Phase 1 Belt) and Transfer to Asphalt Grinder*
- *PF1.009- Fines Conveyor and transfer fine materials to Stockpile*
- *PF1.010 - Conveyor (Phase 2 Belt) and transfer asphalt materials to Stockpile*

Again, only currently-permitted throughputs and hours of operation can be specified on these forms to process your renewal application.

RI understands that the requested change cannot be done through a Title V renewal application; therefore, RI will submit a separate Class I application for revision to establish new annual throughput limits. RI has revised the Industrial Process Application Form for the asphalt grinder and created Industrial Application Forms for the other material transfers of System 03. The forms can be found in Appendix B.

NBAPC Item #10

519 HP Engine for Asphalt Grinding Circuit
Please refer to the Combustion Equipment Application Form for the 519 HP diesel engine (S2.002).

- *Please specify the UTM datum (NAD 27 or NAD 83) for the engine by checking the appropriate box in Section 1 of the form.*
- *Please revise the heat input value (in MMBtu/hr) in Section 2 of the form, so that it is consistent with your proposed fuel usage (13 gall/hr) and the heating value for diesel fuel (140,000 Btu/gal).*
- *Please specify stack parameters in Section 4 of the form. The stack parameters required include: Stack Height, Stack Inside Diameter, Stack Exhaust Temperature, and Gas Volume Flow Rate (ACFM) or Stack Exit Velocity.*
- *Please re-submit the Combustion Equipment Application Form with the amendments noted above.*

RI has specified the UTM datum and provided stack parameters in Sections 1 and 4 of the Industrial Application Form from Sections 1 and 4 for the 519 HP diesel engine as well as revised the heat input value. The revised form can be found in Appendix B.

NBAPC Item #11

UTM Coordinate- PCS Storage and Disposal
Please refer to the Industrial Process Application Form for the Petroleum Contaminated Soil (PCS) Storage and Disposal facility. Please specify the UTM datum (NAD 27 or NAD 83) for the PCS facility by checking the appropriate box in Section 1 of the form.

RI has specified the UTM datum in Section 1 of the Industrial Application Form for the PCS Storage and Disposal facility. The revised form can be found in Appendix B.

NBAPC Item #12

PCS Storage and Disposal- Requested Operating Rate
Please refer to the Industrial Process Application Form for the PCS Storage and Disposal facility (System 04). The NBAPC noted that RI specified the requested operating rates in cubic yards/year. However, the form requires that these operating rates must be provided in units of tons/year.

Therefore, please revise and re-submit Section 2 of the form with the RI's requested PCS storage limits in units of tons/year (ton/yr).

RI has specified the PCS storage limits in units of tons/year and the revised Industrial Process Application Form can be found in Appendix B.

NBAPC Item #13

Truck Tipper Engines- Emission Unit Application Forms
Upon review of your application, the NBAPC noted that RI submitted a single Combustion

Equipment Application Form for the three Truck Tipper engines.

However, in order to be consistent with your current Title V permit, in which the emission limits, fuel usage, and hours of operation are not combined, the NBAPC requests that RI submit a Combustion Equipment Application Form for each of the three Truck Tipper engines (S2.003 - S2.005).

When including UTM coordinates on the forms, the UTM datum (NAD 27 or NAD 83) must be specified by checking the appropriate box in Section 1 for each of the engines. In addition, please be sure to put stack parameters in Section 4 of the forms, including Stack Height, Stack Inside Diameter, Stack Exhaust Temperature, and Gas Volume Flow Rate (ACFM) or Stack Exit Velocity.

RI has prepared three separate Combustion Equipment Application forms for the three tipper engines as well as specified the UTM datum and provided stack parameters in Sections 1 and 4. The new forms can be found in Appendix B.

NBAPC Item #14

Light Plant Engines - Emission Unit Application Forms
Upon review of your application, the NBAPC noted that RI submitted a single Combustion Equipment Application Form for the three Light Plant engines.

However, in order to be consistent with your current Title V permit, in which the emission limits, fuel usage, and hours of operation are not combined, the NBAPC requires that RI submit a Combustion Equipment Application Form for each of the three Light Plant Engines (S2.006-S2.008).

When including UTM coordinates on the forms, the UTM datum (NAD 27 or NAD 83) must be specified by checking the appropriate box in Section 1 for each of the engines. In addition, please be sure to put stack parameters in Section 4 of the forms, including Stack Height, Stack Inside Diameter, Stack Exhaust Temperature, and Gas Volume Flow Rate (ACFM) or Stack Exit Velocity.

RI has prepared three separate Combustion Equipment Application forms for the three light plant engines as well as specified the UTM datum and provided stack parameters in Sections 1 and 4. The new forms can be found in Appendix B.

NBAPC Item #15

Diesel Generator (96 HP)
Please refer to the Industrial Process Application Form for the 96 HP Diesel Generator (S2.009). Please specify the UTM datum (NAD 27 or NAD 83) for S2.009 by checking the appropriate box in Section 1 of the form, and then re-submit the form with the UTM datum specified. In addition, please be sure to put stack parameters in Section 4 of the form, including Stack Height, Stack Inside Diameter, Stack Exhaust Temperature, and Gas Volume Flow Rate (ACFM) or Stack Exit Velocity.

RI has specified the UTM datum and provided stack parameters in Sections 1 and 4 of the Industrial Application Form from Sections 1 and 4 for the 96 HP diesel generator. The revised form can be found in Appendix B.

NBAPC Item #16

Candlestick Flare
Please refer to the Combustion Equipment Application Form for the Candlestick Flare (System 08). The NBAPC noted that RI quoted manufacturer's guarantees for NOx and CO emissions in Section 4 of the form. Please provide copies of the manufacturer's guarantee documentation for each of these pollutants, so that the NBAPC can include them in your renewal application packet.

RI provided the manufacturer's guarantees as part of the candlestick flare application in 2008; however, the guarantees have been provided again for NBAPC's records in Appendix C.

NBAPC Item #17

Caterpillar LFG Engines
The NBAPC noted that RI proposed including two landfill gas engines as part of the renewal application. In February 2012, the NBAPC issued to RI a stand-alone, Class I Operating Permit-to-Construct (OPTC) for the LFG engines in question. The Class I OPTC included two, Caterpillar G3520C engines combusting LFG to generate electricity.

However, to facilitate issuance of the Class I OPTC, RI requested an Administrative Revision to its existing Title V permit, effectively removing three of the same LFG engines that had been permitted in May 2011. The Administrative Revision to RI's existing Title V permit was issued March 9, 2012.

Be advised that conversion of emission units from a Class I OPTC to a Title V operating permit cannot be done through a Title V renewal application. The required mechanism for the rollover of a Class I OPTC to an existing Title V is through a separate Class I (Title V) permit revision. Therefore, we recommend that RI submit a separate Class I application for revision to have the two LFG engines included as emission units your existing Title V permit.

RI understands that the conversion of emission units from a Class I OPTC to a Title V operating permit cannot be done through a Title V renewal application; therefore, RI will submit a separate Class I application for revision to have the two LFG engines included as emission units in the existing Title V permit.

NBAPC Item #18

NESHAP for Gasoline Dispensing Facilities
The NBAPC noted that RI has a 2,000-gallon underground storage tank listed as an Insignificant Activity (IA1.003) in its current Title V permit. Upon review of RI's renewal application, the NBAPC also noted that RI included this tank on the List of Insignificant Activities in Section 3 of the application.

Gasoline Dispensing Facilities (GDFs) are now subject to a new federal NESHAP standard, 40 CFR Part 63, Subpart CCCCCC. As such, gasoline storage tanks are subject to the rule and must be permitted.

Please fill out and submit a Liquid Storage Tank Application Form for the gasoline tank. Based on RI's projected monthly gasoline usage, the NBAPC will determine the appropriate Subpart CCCCCC permit requirements.

RI has completed the Liquid Storage Tank Application Form for the gasoline tank and the form can be found in Appendix D. RI has also added Subpart CCCCCC to the list of applicable regulations as referenced in Item #1.

NBAPC Item #19

The NBAPC noted that the dust control plan submitted in Section 9 of your renewal application is nearly 5 years old. Please submit an updated dust control plan using the form located at the web link below. The form is also available in MS Word format. Please fill out and sign the form, then return it to this office.

http://ndep.nv.gov/bapc/permitting/download/class2/SAD AND PROCESS FORM EXISTING.pdf

RI has prepared an updated dust control plan using the web form provided on NBAPC's website and the signed version of the plan can be found in Appendix E.

NBAPC Item #20

Supplemental RICE Information Form
Upon review of your application for renewal, the NBAPC noted that a 16 HP water pump engine and a 25 kW emergency generator were listed as new Insignificant Activities in Section 3 of your application. These emission units may be subject to one of the new NSPS or NESHAP standards for internal combustion engines (i.e. 40 CFR Part 60, Subparts IIII or JJJJ, and/or 40 CFR Part 63, Subpart ZZZZ).

Please fill out and submit a Supplemental RICE Information Form for the 16 HP water pump engine and the 25 kW emergency generator. The Supplemental RICE Information Form is an Excel spreadsheet and can be found at the web link below, under the box "All Facilities."

The information RI provides in the spreadsheet will assist the agency in establishing NSPS and NESHAP applicability for the water pump engine and the emergency generator.

http://ndep.nv.gov/bapc/permitting/permitd.html

RI has completed the Supplemental RICE Information Forms for the water pump and emergency generator and the forms can be found in Appendix F. Both the water pump and emergency generator are required to comply with 40 CFR Part 63 Subpart ZZZZ.

NBAPC Item #21

Facility-Wide Applicable Requirements
Please refer to Table 1 of the Facility-Wide Applicable Requirements, identified in Section 4 of RI's renewal application.

- *The NBAPC noted that RI listed two applicable NSPS standards in Table 1. However, NBAPC recommends that RI evaluate NESHAP standards that may apply to specific emission sources at Lockwood, such as those that are applicable to the diesel engines of Systems 02, 03, 05, 06 and 07, plus the existing gasoline storage tank, which is listed as an Insignificant Activity in your current Title V permit.*
- *If RI amends Table 1 of the Facility-Wide Applicable Requirements, so as to include NESHAP standards, then please re-submit the amended form to this office.*

RI has evaluated Table 1 of the Facility-Wide Applicable Requirements and has included relevant NESHAP standards as necessary. A revised Table 1 can be found in Appendix G. In addition, an engine NESHAP applicability table has been prepared and can be found in Appendix H.

Should you have any questions regarding this submittal, please do not hesitate to contact the undersigned at (916) 361-1297 or Joseph Prary of Refuse, Inc. at (775) 343-7372.

Sincerely,

Patrick S. Sullivan, R.E.A., C.P.P.
Senior Vice President
SCS ENGINEERS

Attachments

cc: Bill Carr; Waste Management of Nevada, Inc. (w/attachments)
Christian Colline; Waste Management, Inc. (w/attachments)
Marc Franc; Waste Management, Inc. (w/attachments)
Joseph Prary; Refuse, Inc. (w/attachments)

APPENDIX A

GENERAL COMPANY INFORMATION

GENERAL COMPANY INFORMATION

All applicants shall complete each item or explain in the space provided why no information is needed. Please specify "N/A" (Not Applicable) if necessary. The application will be returned to the applicant if it is deemed incomplete.

1. **COMPANY NAME AND ADDRESS THAT ARE TO APPEAR ON THE OPERATING PERMIT** [NAC 445B.295.1]:

Refuse Inc.
(Name)

2401 Canyon Way
(Address)

Sparks Nevada 89434
(City) (State) (Zip Code)

2. Owner's Name and Address [NAC 445B.295.1]:

Waste Management of Nevada, Inc.
(Name)

100 Vassar Street
(Address)

Reno Nevada 89520
(City) (State) (Zip Code)

3. Source Name and Mailing Address, if different from #1 [NAC 445B.295.1]:

Lockwood Regional Landfill
(Name)

2401 Canyon Way
(Address)

Sparks Nevada 89434
(City) (State) (Zip Code)

4. Name and Address of Owner's Agent [NAC 445B.295.1]

(Name)

(Address)

(City) (State) (Zip Code)

5. Physical Location of Stationary Source [NAC 445B.295.8]: (if no physical address, describe location, e.g., 4 miles south of I-80 at xx Interchange)

2401 Canyon Way, Sparks, Nevada 89434

Township(s) 19N Range(s) 21E Section(s) 22-23, 26-27

GENERAL COMPANY INFORMATION (CONTINUED)

6. Plant Manager or Other Appropriate Contact [NAC 445B.295.1]:

Joseph Prary (Name) | District Manager (Title)

2401 Canyon Way (Address)

Sparks (City) | Nevada (State) | 89434 (Zip Code)

(775) 343-7372 (Telephone #) | (775) 342-0101 (FAX #) | jprary@wm.com (E-mail address)

7. Responsible Official Name, Title and Address [NAC 445B.295.1]:

Joseph Prary (Name) | District Manager (Title)

2401 Canyon Way (Address)

Sparks (City) | Nevada (State) | 89434 (Zip Code)

(775) 343-7372 (Telephone #) | (775) 342-0101 (FAX #) | jprary@wm.com (E-mail address)

8. If records required under the operating permit will be kept at a location other than the source, specify that location [NAC 445B.295.7].

(Name)

(Address)

(City) | (State) | (Zip Code)

9. This application is submitted for (please check appropriate boxes below):

☐ **A new Class I Operating Permit**

- ☐ This application is for a source subject to PSD requirements (40 CFR § 52.21).
- ☐ This application is for a source subject to the following NSPS requirements (40 CFR § 60):

_____

_____

_____

- ☐ This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

_____

_____

_____

☐ **A significant modification of an existing Class I Operating Permit**

- ☐ This application is for a source subject to PSD requirements (40 CFR § 52.21).
- ☐ This application is for a source subject to the following NSPS requirements (40 CFR § 60):

_____

_____

_____

- ☐ This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

_____

_____

_____

☒ **The renewal of an existing Class I Operating Permit**

- ☐ This application is for a source subject to PSD requirements (40 CFR § 52.21).
- ☒ This application is for a source subject to the following NSPS requirements (40 CFR § 60):

40 CFR 60.1-60.19	40 CFR 60 Subpart WWW
40 CFR 61.01-61.19	40 CFR 60 Subpart JJJJ
40 CFR 60.140-60.157	

- ☒ This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

40 CFR 63.1-63.15
40 CFR 63 Subpart AAAA
40 CFR 63 Subpart CCCCCC
40 CFR 63 Subpart ZZZZ

10. The application must contain, if applicable:
    a. For a proposed new major source, or a proposed significant modification to an existing stationary source which is not subject to the provisions of 40 CFR §52.21, include all information as required by NAC 445B.308 to 445B.313, inclusive [NAC 445B.3368.3(b)].
    b. For stationary sources subject to the provisions regarding new source review set forth in 42 USC §§7501 - 7515, inclusive (nonattainment areas), all information required by 42 USC §7503 [NAC 445B.3363.2(b)(3)].
    c. For a proposed new major source or a proposed significant modification to an existing stationary source that is subject to the provisions of 40 CFR §52.21, include all information required by 40 CFR §52.21 [NAC 445B.3368.3(a)].
    d. For a proposed new major source or a proposed significant modification to an existing stationary source which is subject to the requirements of 42 USC §7412 regarding hazardous air pollutants, include all information required by NAC 445B.308 to 445B.313, inclusive [NAC 445B.3368.3(c)].

11. Will the construction occur in more than one phase? ☐ Yes ☒ No

12. If the construction will occur in more than one phase, please provide the projected date of the commencement for each phase of construction:

Phase 1: _____

Phase 2: _____

Phase 3: _____

13. For a new source or modification of a stationary source, provide a Compliance Assurance Monitoring (CAM) plan for all emission units subject to the monitoring requirements of 40 CFR Part 64. For significant revisions provide a CAM plan for those emission units for which a significant revision to the operating permit is requested and which is required pursuant to the monitoring requirements of 40 CFR Part 64. If a CAM plan is not required, provide an explanation. [NAC 445B.295.8]

14. Compliance Plan/Certification
    a. Attach a compliance plan, signed by the responsible official, that contains the following with respect to all applicable requirements:
        (1) A narrative description of the compliance status of the stationary source with respect to all applicable requirements. [NAC 445B.3368.2(h)(1)]
        (2) A compliance certification by a responsible official stating that the stationary source will comply in a timely manner with any new applicable requirements that become effective during the operating permit term. Include a description of the test methods and the requirements for monitoring, enhanced monitoring, recordkeeping and reporting that will be used to comply with the new applicable requirements, fuel use, the rate of production, raw materials, and operating schedules which are used to determine the compliance status of the stationary source. [NAC 445B.3368.2(h)(2)]
        (3) If the stationary source is not in compliance with any applicable requirements at the time the operating permit is issued, include a narrative description and a proposed schedule for achieving compliance which includes remedial measures, an enforceable sequence of actions with milestones, and a schedule to submit certified progress reports every six months. This schedule must be at least as stringent as that contained in any consent decree rendered by a federal court, a court of this state, or an administrative order which applies to the stationary source. [NAC 445B.3368.2(h)(3))III)]
    b. A schedule for submission of compliance certifications during the term of the operating permit, to be submitted annually or more frequently to the Bureau of Air Pollution Control. [NAC 445B.3368.2(i)(3)]

15. **Application Submittal:**
    Please remove the cover page, Table of Contents and General Information page and all Attachments of the application packet. Submit the remainder of the application packet as your formal application. This should consist of, at a minimum, the Class I-B Application cover page, the general Company Information, and Appendices 1 through 10.

APPENDIX B

REVISED APPLICATION FORMS

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Landfill

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment N/A

d. Model number N/A Serial number N/A *Equip. number N/A

e. Date equipment manufactured: N/A

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☐ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☐ Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4360.225 kilometers N; 275.407 kilometers E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L_____ W_____ H_____

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 46,848,200 tons total capacity

b. Requested operating rate (tons per hour)* No Limit

c. Requested operating time: (time of day)* 12:00 A to 12:00 P

Hours per day 24 Days per year 365

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) No Limit

g. Requested operating rate (tons per year)* No Limit

f. Type of material processed Municipal Solid Waste

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)	N/A				
	gallons				
	gallons				
Gasoline	N/A gallons				
Propane	N/A cubic feet				
Natural Gas	N/A cubic feet				
*Waste Oil	N/A gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	CONTROLLED (see Form for candlestick flare)	
Pollutant(s) Controlled	NMOCs, VOCs, HAPs, H_2S	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS (LANDFILL)
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter			
Particulates as PM_{10}			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds	13.48	59.04	See Attached
Lead			
Hydrogen Sulfide	3.29	14.40	See Attached
Hazardous Air Pollutants (Specify Each Pollutant[1])			
1,1,1-Trichloroethane (methyl chloroform)	2.29E-03	0.010	See Attached
1,1,2,2-Tetrachloroethane	1.94E-04	0.001	See Attached
1,1-Dichloroethane (ethylidene dichloride)	4.85E-02	0.212	See Attached
1,1-Dichloroethene (vinylidene chloride)	4.75E-04	0.002	See Attached
1,2-Dichloroethane (ethylene dichloride)	9.45E-04	0.004	See Attached
1,2-Dichloropropane (propylene dichloride)	1.77E-04	0.001	See Attached
Acrylonitrile	2.56E-04	0.001	See Attached
Benzene	5.48E-03	0.024	See Attached
Carbon disulfide	4.70E-03	0.021	See Attached
Carbon tetrachloride	2.37E-04	0.001	See Attached
Carbonyl sulfide	2.12E-03	0.009	See Attached
Chlorobenzene	2.17E-04	0.001	See Attached
Chloroethane (ethyl chloride)	4.88E-03	0.021	See Attached
Chloroform	7.14E-04	0.003	See Attached
Chloromethane (methyl chloride)	2.40E-04	0.001	See Attached
Dichlorobenzene (1,4-Dichlorobenzene)	7.43E-04	0.003	See Attached
Dichloromethane (Methylene Chloride)	1.12E-01	0.489	See Attached
Ethylbenzene	3.24E-02	0.142	See Attached
Ethylene dibromide (1,2-Dibromoethane)	2.17E-04	0.001	See Attached
Hexane	3.86E-02	0.169	See Attached
Methyl ethyl ketone	1.47E-01	0.643	See Attached
Methyl isobutyl ketone	1.45E-02	0.063	See Attached
Perchloroethylene (tetrachloroethylene)	2.04E-02	0.089	See Attached
Toluene	3.13E-01	1.370	See Attached
Trichloroethylene (trichloroethene)	6.29E-03	0.028	See Attached
Vinyl chloride	2.10E-04	0.001	See Attached
Xylenes	1.35E-01	0.593	See Attached
Other Regulated Pollutants (Specify[2])			
Mercury (total)[(c)]	1.12E-05	4.92E-05	See Attached
Non-Methane Organic Compounds	34.56	151.39	See Attached

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FOR THE LANDFILL
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

COMPOUNDS	Molecular Weight (g/Mol)	Ave. Concentration of Compounds Found In LFG (ppmv)(b)	Uncontrolled Fugitive Emission Rate from Landfill (lbs/hr)	Uncontrolled Fugitive Emission Rate from Landfill (tons/yr)	Controlled Fugitive Emission Rate from Landfill (tons/yr)
1,1,1-Trichloroethane (methyl chloroform)*- HAP	133.41	8.88E-02	9.14E-03	4.00E-02	1.00E-02
1,1,2,2-Tetrachloroethane* - HAP/VOC	167.85	6.00E-03	7.77E-04	3.40E-03	8.51E-04
1,1-Dichloroethane (ethylidene dichloride)* - HAP/VOC	98.97	2.54E+00	1.94E-01	8.50E-01	2.12E-01
1,1-Dichloroethene (vinylidene chloride)* - HAP/VOC	96.94	2.54E-02	1.90E-03	8.32E-03	2.08E-03
1,2-Dichloroethane (ethylene dichloride)* - HAP/VOC	98.96	4.95E-02	3.78E-03	1.66E-02	4.14E-03
1,2-Dichloropropane (propylene dichloride)* - HAP/VOC	112.99	8.12E-03	7.08E-04	3.10E-03	7.75E-04
2-Propanol (isopropyl alcohol) - VOC	53.06	5.00E+01	2.32E+00	1.02E+01	2.54E+00
Acetone	78.11	7.00E+00	3.14E-01	1.37E+00	3.44E-01
Acrylonitrile* - HAP/VOC	53.06	2.50E-02	1.02E-03	4.48E-03	1.12E-03
Benzene* - HAP/VOC	78.11	3.64E-01	2.19E-02	9.61E-02	2.40E-02
Bromodichloromethane - VOC	163.83	3.10E+00	3.92E-01	1.72E+00	4.29E-01
Butane - VOC	58.12	5.00E+00	2.24E-01	9.82E-01	2.46E-01
Carbon disulfide - HAP/VOC	76.13	3.20E-01	1.88E-02	8.23E-02	2.06E-02
Carbon monoxide	28.01	1.40E+02	3.03E+00	1.33E+01	3.31E+00
Carbon tetrachloride* - HAP/VOC	153.84	8.00E-03	9.50E-04	4.16E-03	1.04E-03
Carbonyl sulfide - HAP/VOC	60.07	1.83E-01	8.48E-03	3.72E-02	9.29E-03
Chlorobenzene* - HAP/VOC	112.56	1.00E-02	8.69E-04	3.80E-03	9.51E-04
Chlorodifluoromethane	86.47	1.30E+00	8.67E-02	3.80E-01	9.50E-02
Chloroethane (ethyl chloride)* - HAP/VOC	64.52	3.92E-01	1.95E-02	8.55E-02	2.14E-02
Chloroform* - HAP/VOC	119.39	3.10E-02	2.86E-03	1.25E-02	3.13E-03
Chloromethane (methyl chloride)* - VOC	50.49	2.46E-02	9.58E-04	4.20E-03	1.05E-03
Dichlorobenzene (1,4-Dichlorobenzene)* - HAP/VOC	147.00	2.62E-02	2.97E-03	1.30E-02	3.25E-03
Dichlorodifluoromethane	120.91	1.60E+01	1.49E+00	6.54E+00	1.63E+00
Dichlorofluoromethane - VOC	102.92	2.60E+00	2.06E-01	9.04E-01	2.26E-01
Dichloromethane (Methylene Chloride)* - HAP	84.94	6.81E+00	4.46E-01	1.96E+00	4.89E-01
Dimethyl sulfide (methyl sulfide) - VOC	62.13	7.80E+00	3.74E-01	1.64E+00	4.09E-01
Ethane	30.07	8.90E+02	2.07E+01	9.05E+01	2.26E+01
Ethanol - VOC	46.08	2.70E+01	9.60E-01	4.21E+00	1.05E+00
Ethyl mercaptan (ethanethiol) - VOC	62.13	2.30E+00	1.10E-01	4.83E-01	1.21E-01
Ethylbenzene* - HAP/VOC	106.16	1.58E+00	1.29E-01	5.67E-01	1.42E-01
Ethylene dibromide (1,2-Dibromoethane)* - HAP/VOC	187.88	6.00E-03	8.70E-04	3.81E-03	9.52E-04
Fluorotrichloromethane - VOC	137.38	7.60E-01	8.06E-02	3.53E-01	8.82E-02
Hexane - HAP/VOC	86.18	2.32E+00	1.55E-01	6.77E-01	1.69E-01
Hydrogen Sulfide	34.08	5.00E+02	1.31E+01	5.76E+01	1.44E+01
Methyl ethyl ketone - HAP/VOC	72.11	1.06E+01	5.87E-01	2.57E+00	6.43E-01
Methyl isobutyl ketone - HAP/VOC	100.16	7.50E-01	5.80E-02	2.54E-01	6.35E-02
Methyl mercaptan - VOC	48.11	2.50E+00	9.28E-02	4.07E-01	1.02E-01
Pentane - VOC	72.15	3.30E+00	1.84E-01	8.05E-01	2.01E-01
Perchloroethylene (tetrachloroethylene)* - HAP	165.83	6.38E-01	8.16E-02	3.58E-01	8.94E-02
Propane - VOC	44.09	1.10E+01	3.74E-01	1.64E+00	4.10E-01
t-1,2-Dichloroethene - VOC	96.94	2.80E+00	2.09E-01	9.17E-01	2.29E-01
Toluene* - HAP/VOC	92.13	1.76E+01	1.25E+00	5.48E+00	1.37E+00
Trichloroethylene (trichloroethene)* - HAP/VOC	131.40	2.48E-01	2.51E-02	1.10E-01	2.75E-02
Vinyl chloride* - HAP/VOC	62.50	1.74E-02	8.39E-04	3.68E-03	9.19E-04
Xylenes* - HAP/VOC	106.16	6.61E+00	5.41E-01	2.37E+00	5.93E-01
Mercury (total)[C] - HAP	200.61	2.92E-04	4.49E-05	1.97E-04	4.92E-05
Totals: HAPs			3.56	15.61	3.90
Totals: VOCs			8.56	37.47	9.37
Criteria Air Pollutants					
Total Non-Methane Organic Compounds (NMOCs) as Hexane[d]	86.18	2079.0	138.254	605.551	151.388
Volatile Organic Compounds (VOCs)[e]	86.18	810.8	53.919	236.165	59.041

Notes:

(a) List of hazardous air pollutants was from Title III Clean Air Act Amendments, 1990, and include compounds found in landfill gas, as determined from a list in AP-42 Tables 2.4-1 ("Default Concentrations for Landfill Gas Constituents, 11/98").

(b) Average concentration of compounds found in LFG based on "Waste Industry Air Coalition (WIAC) Comparison of Recent Landfill Gas Analyses with Historic AP-42 Values," and site-specific data collected from a Tier 2 Study conducted August 14-17, 2001. Compounds marked with an "*" reflects site-specific data.

(c) Concentration of Mercury based on the Revised EPA AP-42 Section 2.4 Table 2.4-1 (11/98).

(d) NMOC concentration based on results from Tier 2 Study conducted July 24-28, 2006.

(e) According to AP-42, Table 2.4-2 (11/98), note C, VOC content at MSW sites with unknown concentrations equals 39% by weight of total.

(f) LFG generation modeling was performed using the U.S. Environmental Protection Agency (EPA) LandGEM model to estimate the amount of LFG being generated from the entire landfill. Generation year (2041) reflects the maximum generation rate.

(g) The landfill has a GCCS; therefore, approzimately 75% of the landfill emissions are collected and remaining 25% considered fugitive.

Variables:

MODEL INPUT VARIABLES:		
Methane Concentration (%)	50%	
LFG Collection Efficiency (%)	75%	
LFG generation rate (year 2041)[f]	4,963	SCFM

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (LANDFILL)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (LANDFILL)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	This Emission Unit has the potential to emit hazardous air pollutants, volatile organic compounds and non-methane organic compounds from the microbial degradation of refuse. Therefore, this rule does not apply since no emissions of particulate matter are anticipated from this process.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ ($4.10P^{0.67}$) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	This Emission Unit has the potential to emit hazardous air pollutants, volatile organic compounds and non-methane organic compounds from the microbial degradation of refuse. Therefore, this rule does not apply since no emissions of particulate matter are anticipated from this process.		

SECTION 8
EMISSION UNIT SPECIFIC (LANDFILL)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}-18.14 (55P^{0.11}- 40)$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	This Emission Unit has the potential to emit hazardous air pollutants, volatile organic compounds and non-methane organic compounds from the microbial degradation of refuse. Therefore, this rule does not apply since no emissions of particulate matter are anticipated from this process.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (LANDFILL)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: $Y = 0.7X$ ($Y = 0.4X$) Solid Fuels: $Y = 1.1X$ ($Y = 0.6X$) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emissions of sulfur compounds are a byproduct of the decomposition of municipal solid waste. No material containing sulfur is processed; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emissions of sulfur compounds are a byproduct of the decomposition of municipal solid waste. No material containing sulfur is processed; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being	Emissions of sulfur compounds are a byproduct of the decomposition of municipal solid waste. No material containing sulfur is		

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	processed; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Material Transfer by Loader to Tub Grinder

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment N/A

d. Model number N/A Serial number N/A *Equip. number N/A

e. Date equipment manufactured: N/A

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,279 meters N; 274,865 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L N/A W N/A H N/A

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 60 tons per hour

b. Requested operating rate (tons per hour)* 60 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 10 Days per year 265

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 159,000 tons per year

g. Requested operating rate (tons per year)* 159,000 tons per year

f. Type of material processed Waste Wood

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 750 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other-					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled		
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.013	0.017	See Attached
Particulates as PM_{10}	0.006	0.008	See Attached
Particulates as $PM_{2.5}$	0.002	0.002	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM WOOD CHIPPING OPERATIONS
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Throughput (a) (tons/hour)	Maximum Throughput (a) (tons/yr)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Wood Chipper (c)							
PM2.5	60	159,000	10	2,650	5.71E-02	0.857	1.136
PM10	60	159,000	10	2,650	2.00E-01	3.000	3.975
TSP	60	159,000	10	2,650	3.50E-01	5.250	6.956
Material transfer by loader to tub grinder (wood chipper)							
PM2.5	60	159,000	10	2,650	2.86E-05	0.002	0.002
PM10	60	159,000	10	2,650	1.00E-04	0.006	0.008
TSP	60	159,000	10	2,650	2.10E-04	0.013	0.017
Wood chipper and transfer to Conveyor (Phase 1 Belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 1 belt) and transfer to Conveyor (Phase 2 belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 2 belt) and transfer to stockpile for trailer discharge (c)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.006	0.008
PM10	60	159,000	10	2,650	1.40E-03	0.021	0.028
TSP	60	159,000	10	2,650	2.94E-03	0.044	0.058
					TOTAL PM-2.5:	**0.91**	**1.21**
					TOTAL PM-10:	**3.20**	**4.23**
					TOTAL TSP:	**5.66**	**7.50**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

(a) Process amounts based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emissions factors based on previously used emission factors from Class I Air Quality Permit No. AP4953-1148. Same limits are requested for renewal. Updated emission factors (AP-42 and FIRE) were not used.

(c) Control efficiency for water sprays; 75% is a default value established by NDEP-BAPC. No change requested.

(d) Emission factors for operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO TUB GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of wood. The equipment which operates the chipper is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO TUB GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 3.2 pounds per hour or 4.23 tons per year total for complete process which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 5.66 pounds per hour or 7.5 tons per year for complete process which is more stringent than emissions allowed by NAC.

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO TUB GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
			In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO TUB GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
"S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.			
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ $(0.292P^{0.904})$ When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO TUB GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.			
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Wood Chipper and Transfer to Conveyor Belt (Phase I Belt)

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment N/A

d. Model number N/A Serial number N/A *Equip. number N/A

e. Date equipment manufactured: N/A

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,279 meters N; 274,865 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L N/A W N/A H N/A

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 60 tons per hour

b. Requested operating rate (tons per hour)* 60 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 10 Days per year 265

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 159,000 tons per year

g. Requested operating rate (tons per year)* 159,000 tons per year

f. Type of material processed Waste Wood

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 750 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other-					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled		
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

EMISSION SOURCE ESTIMATES FROM WOOD CHIPPING OPERATIONS
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Throughput (a) (tons/hour)	Maximum Throughput (a) (tons/yr)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Wood Chipper (c)							
PM2.5	60	159,000	10	2,650	5.71E-02	0.857	1.136
PM10	60	159,000	10	2,650	2.00E-01	3.000	3.975
TSP	60	159,000	10	2,650	3.50E-01	5.250	6.956
Material transfer by loader to tub grinder (wood chipper)							
PM2.5	60	159,000	10	2,650	2.86E-05	0.002	0.002
PM10	60	159,000	10	2,650	1.00E-04	0.006	0.008
TSP	60	159,000	10	2,650	2.10E-04	0.013	0.017
Wood chipper and transfer to Conveyor (Phase 1 Belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 1 belt) and transfer to Conveyor (Phase 2 belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 2 belt) and transfer to stockpile for trailer discharge (c)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.006	0.008
PM10	60	159,000	10	2,650	1.40E-03	0.021	0.028
TSP	60	159,000	10	2,650	2.94E-03	0.044	0.058
					TOTAL PM-2.5:	**0.91**	**1.21**
					TOTAL PM-10:	**3.20**	**4.23**
					TOTAL TSP:	**5.66**	**7.50**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

(a) Process amounts based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emissions factors based on previously used emission factors from Class I Air Quality Permit No. AP4953-1148. Same limits are requested for renewal. Updated emission factors (AP-42 and FIRE) were not used.

(c) Control efficiency for water sprays; 75% is a default value established by NDEP-BAPC. No change requested.

(d) Emission factors for operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.176	0.234	See Attached
Particulates as PM_{10}	0.084	0.111	See Attached
Particulates as $PM_{2.5}$	0.024	0.032	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPER AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of wood. The equipment which operates the chipper is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

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Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 3.2 pounds per hour or 4.23 tons per year total for complete process which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 5.66 pounds per hour or 7.5 tons per year for complete process which is more stringent than emissions allowed by NAC.

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPER AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
			In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPER AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
"S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.			
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ $(0.292P^{0.904})$ When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPER AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.			
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Conveyor (Phase I Belt) and Transfer to Conveyor (Phase 2 Belt)

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment N/A

d. Model number N/A Serial number N/A *Equip. number N/A

e. Date equipment manufactured: N/A

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,279 meters N; 274,865 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L N/A W N/A H N/A

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 60 tons per hour

b. Requested operating rate (tons per hour)* 60 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 10 Days per year 265

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 159,000 tons per year

g. Requested operating rate (tons per year)* 159,000 tons per year

f. Type of material processed Waste Wood

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 750 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other-					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled		
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.176	0.234	See Attached
Particulates as PM_{10}	0.084	0.111	See Attached
Particulates as $PM_{2.5}$	0.024	0.032	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM WOOD CHIPPING OPERATIONS
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Throughput (a) (tons/hour)	Maximum Throughput (a) (tons/yr)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Wood Chipper (c)							
PM2.5	60	159,000	10	2,650	5.71E-02	0.857	1.136
PM10	60	159,000	10	2,650	2.00E-01	3.000	3.975
TSP	60	159,000	10	2,650	3.50E-01	5.250	6.956
Material transfer by loader to tub grinder (wood chipper)							
PM2.5	60	159,000	10	2,650	2.86E-05	0.002	0.002
PM10	60	159,000	10	2,650	1.00E-04	0.006	0.008
TSP	60	159,000	10	2,650	2.10E-04	0.013	0.017
Wood chipper and transfer to Conveyor (Phase 1 Belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 1 belt) and transfer to Conveyor (Phase 2 belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 2 belt) and transfer to stockpile for trailer discharge (c)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.006	0.008
PM10	60	159,000	10	2,650	1.40E-03	0.021	0.028
TSP	60	159,000	10	2,650	2.94E-03	0.044	0.058
					TOTAL PM-2.5:	**0.91**	**1.21**
					TOTAL PM-10:	**3.20**	**4.23**
					TOTAL TSP:	**5.66**	**7.50**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

(a) Process amounts based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emissions factors based on previously used emission factors from Class I Air Quality Permit No. AP4953-1148. Same limits are requested for renewal. Updated emission factors (AP-42 and FIRE) were not used.

(c) Control efficiency for water sprays; 75% is a default value established by NDEP-BAPC. No change requested.

(d) Emission factors for operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO CONVEYOR [PHASE 2 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of wood. The equipment which operates the chipper is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO CONVEYOR [PHASE 2 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 3.2 pounds per hour or 4.23 tons per year total for complete process which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ ($4.10P^{0.67}$) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 ($55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 5.66 pounds per hour or 7.5 tons per year for complete process which is more stringent than emissions allowed by NAC.

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO CONVEYOR [PHASE 2 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
			In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO CONVEYOR [PHASE 2 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
"S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.			
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO CONVEYOR [PHASE 2 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.			
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Conveyor (Phase 2 Belt) and Transfer to Stockpile for Trailer Discharge

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment N/A

d. Model number N/A Serial number N/A *Equip. number N/A

e. Date equipment manufactured: N/A

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,279 meters N; 274,865 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L N/A W N/A H N/A

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 60 tons per hour

b. Requested operating rate (tons per hour)* 60 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 10 Days per year 265

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 159,000 tons per year

g. Requested operating rate (tons per year)* 159,000 tons per year

f. Type of material processed Waste Wood

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 750 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other-					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled		
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.044	0.058	See Attached
Particulates as PM_{10}	0.021	0.028	See Attached
Particulates as $PM_{2.5}$	0.006	0.008	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM WOOD CHIPPING OPERATIONS
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Throughput (a) (tons/hour)	Maximum Throughput (a) (tons/yr)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Wood Chipper (c)							
PM2.5	60	159,000	10	2,650	5.71E-02	0.857	1.136
PM10	60	159,000	10	2,650	2.00E-01	3.000	3.975
TSP	60	159,000	10	2,650	3.50E-01	5.250	6.956
Material transfer by loader to tub grinder (wood chipper)							
PM2.5	60	159,000	10	2,650	2.86E-05	0.002	0.002
PM10	60	159,000	10	2,650	1.00E-04	0.006	0.008
TSP	60	159,000	10	2,650	2.10E-04	0.013	0.017
Wood chipper and transfer to Conveyor (Phase 1 Belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 1 belt) and transfer to Conveyor (Phase 2 belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 2 belt) and transfer to stockpile for trailer discharge (c)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.006	0.008
PM10	60	159,000	10	2,650	1.40E-03	0.021	0.028
TSP	60	159,000	10	2,650	2.94E-03	0.044	0.058
					TOTAL PM-2.5:	**0.91**	**1.21**
					TOTAL PM-10:	**3.20**	**4.23**
					TOTAL TSP:	**5.66**	**7.50**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

(a) Process amounts based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emissions factors based on previously used emission factors from Class I Air Quality Permit No. AP4953-1148. Same limits are requested for renewal. Updated emission factors (AP-42 and FIRE) were not used.

(c) Control efficiency for water sprays; 75% is a default value established by NDEP-BAPC. No change requested.

(d) Emission factors for operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER TO STOCKPILE FOR TRAILER DISCHARGE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of wood. The equipment which operates the chipper is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER TO STOCKPILE FOR TRAILER DISCHARGE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 3.2 pounds per hour or 4.23 tons per year total for complete process which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ ($4.10P^{0.67}$) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 ($55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 5.66 pounds per hour or 7.5 tons per year for complete process which is more stringent than emissions allowed by NAC.

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER TO STOCKPILE FOR TRAILER DISCHARGE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
			In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER TO STOCKPILE FOR TRAILER DISCHARGE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
"S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.			
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER TO STOCKPILE FOR TRAILER DISCHARGE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.			
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Wood Chipper

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Diamond "Z"

d. Model number PWG1463 Serial number 9FX453MN147035 *Equip. number N/A

e. Date equipment manufactured: 1989

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,279 meters N; 274,865 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L 46 W 12 H 14

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 60 tons per hour

b. Requested operating rate (tons per hour)* 60 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 10 Days per year 265

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 159,000 tons per year

g. Requested operating rate (tons per year)* 159,000 tons per year

f. Type of material processed Waste Wood

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 750 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other-					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled		
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	5.25	6.96	See Attached
Particulates as PM_{10}	3.00	3.98	See Attached
Particulates as $PM_{2.5}$	0.86	1.14	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM WOOD CHIPPING OPERATIONS
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Throughput (a) (tons/hour)	Maximum Throughput (a) (tons/yr)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Wood Chipper (c)							
PM2.5	60	159,000	10	2,650	5.71E-02	0.857	1.136
PM10	60	159,000	10	2,650	2.00E-01	3.000	3.975
TSP	60	159,000	10	2,650	3.50E-01	5.250	6.956
Material transfer by loader to tub grinder (wood chipper)							
PM2.5	60	159,000	10	2,650	2.86E-05	0.002	0.002
PM10	60	159,000	10	2,650	1.00E-04	0.006	0.008
TSP	60	159,000	10	2,650	2.10E-04	0.013	0.017
Wood chipper and transfer to Conveyor (Phase 1 Belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 1 belt) and transfer to Conveyor (Phase 2 belt)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.024	0.032
PM10	60	159,000	10	2,650	1.40E-03	0.084	0.111
TSP	60	159,000	10	2,650	2.94E-03	0.176	0.234
Conveyor (Phase 2 belt) and transfer to stockpile for trailer discharge (c)							
PM2.5	60	159,000	10	2,650	4.00E-04	0.006	0.008
PM10	60	159,000	10	2,650	1.40E-03	0.021	0.028
TSP	60	159,000	10	2,650	2.94E-03	0.044	0.058
					TOTAL PM-2.5:	**0.91**	**1.21**
					TOTAL PM-10:	**3.20**	**4.23**
					TOTAL TSP:	**5.66**	**7.50**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

(a) Process amounts based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emissions factors based on previously used emission factors from Class I Air Quality Permit No. AP4953-1148. Same limits are requested for renewal. Updated emission factors (AP-42 and FIRE) were not used.

(c) Control efficiency for water sprays; 75% is a default value established by NDEP-BAPC. No change requested.

(d) Emission factors for operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the processing of wood. The equipment which operates the chipper is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

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APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 3.2 pounds per hour or 4.23 tons per year total for complete process which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 5.66 pounds per hour or 7.5 tons per year total for complete process which is more stringent than emissions allowed by NAC.

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EMISSION UNIT SPECIFIC (WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
			In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
"S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.			
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ $(0.292P^{0.904})$ When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.			
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9**Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 750 HP Diesel Engine for Wood Chipping Circuit

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Caterpillar

d. Model number 3412 Serial number 38515306 *Equip. number

e. Date equipment manufactured: 1989

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,445 meters N; 274,997 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 6 W 5 H 5.5

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 750
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 2.52
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day 6:00 A to 6:00 P

Hours per day 10 Days per year 265 Hours per year 1,300

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	18 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	5.5	
Stack inside diameter (feet)	0.83	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	124.8	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.18	0.11	See Attached
Particulates as PM_{10}	0.14	0.09	See Attached
Particulates as $PM_{2.5}$	0.12	0.08	See Attached
Sulfur Dioxide	1.27	0.83	See Attached
Carbon Monoxide	2.14	1.39	See Attached
Oxides of Nitrogen	8.06	5.24	See Attached
Volatile Organic Compounds	0.23	0.15	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	6.35E-05	4.13E-05	See Attached
Acrolein	1.99E-05	1.29E-05	See Attached
Benzene	1.96E-03	1.27E-03	See Attached
Formaldehyde	1.99E-04	1.29E-04	See Attached
Naphthalene	3.28E-04	2.13E-04	See Attached
Toluene	7.08E-04	4.60E-04	See Attached
Xylenes	4.86E-04	3.16E-04	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM 750 HP DIESEL ENGINE
(WOOD CHIPPING CIRCUIT)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr)	Engine Rating (MMBtu/yr)	Operating Hours (a) (hrs/yr)	Emissions Factor (b) (lbs/MMBtu)	Maximum Emissions (lb/hr)	Maximum Emissions (tpy)
VOCs	2.52	3,276	1,300	9.00E-02	0.227	0.147
NO_x	2.52	3,276	1,300	3.20E+00	8.064	5.242
SO_x (c)	2.52	3,276	1,300	5.05E-01	1.273	0.827
CO	2.52	3,276	1,300	8.50E-01	2.142	1.392
TSP	2.52	3,276	1,300	6.97E-02	0.176	0.114
$PM_{2.5}$	2.52	3,276	1,300	4.79E-02	0.121	0.078
PM_{10}	2.52	3,276	1,300	5.73E-02	0.144	0.094

Hazardous Air Pollutants	Engine Rating (MMBtu/hr)	Engine Rating (MMBtu/yr)	Operating Hours (a)	Emissions Factor (b) (lbs/MMBtu)	Maximum Emissions (lb/hr)	Maximum Emissions (tpy)
Acetaldehyde	2.52	3,276	1,300	2.52E-05	6.35E-05	4.13E-05
Acrolein	2.52	3,276	1,300	7.88E-06	1.99E-05	1.29E-05
Benzene	2.52	3,276	1,300	7.76E-04	1.96E-03	1.27E-03
Formaldehyde	2.52	3,276	1,300	7.89E-05	1.99E-04	1.29E-04
Naphthalene	2.52	3,276	1,300	1.30E-04	3.28E-04	2.13E-04
Toluene	2.52	3,276	1,300	2.81E-04	7.08E-04	4.60E-04
Xylenes	2.52	3,276	1,300	1.93E-04	4.86E-04	3.16E-04
Total HAPs					3.76E-03	2.44E-03

Notes:

(a) Operating hours based on existing Class I Air Quality Operating Permit No. AP4953-1148. No change requested.

(b) Emission factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Section 3.4 for Large Stationary Diesel and All Stationary Dual-Fuel Engines (greater than 600 Hp); Emissions factors based on previously used emission factors from Class I Air Quality Permit No. AP4953-1148. No change requested for emission factors or limits.

(c) Emission Factor for SOx = 1.01S1 = 1.01 x 0.5 = 0.505 (AP-42 Table 3.4-1)

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (750 HP DIESEL ENGINE FOR WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 2.52 MMBtu/hr.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Current permit allows only 0.18 pounds per hour of PM In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 2.52 MMBtu/hr.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 2.52 MMBtu/hr.		

SECTION 8
EMISSION UNIT SPECIFIC (750 HP DIESEL ENGINE FOR WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 2.52 MMBtu/hr.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-		Recordkeeping of fuel amounts.	Resultant sulfur max allowed:

SECTION 8
EMISSION UNIT SPECIFIC (750 HP DIESEL ENGINE FOR WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			E=1.76 pounds/hr based on 2.52 MMbtu/hr. Current permitted maximum emissions allowed for sulfur is 1.27 pounds per hour which is more stringent than emissions allowed by NAC. In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur 1.76 pounds/hr based on 2.52 MMbtu/hr. Current permitted maximum emissions allowed for sulfur is 1.27 pounds per hour which is more stringent than emissions allowed by NAC. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (750 HP DIESEL ENGINE FOR WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (750 HP DIESEL ENGINE FOR WOOD CHIPPING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Asphalt Grinder

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Hazemag (or equivalent)

d. Model number APSE1013Q Serial number FABSM1013K *Equip. number N/A

e. Date equipment manufactured: April 1999

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,246 meters N; 276,463 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L 24 W 7 H 16

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 110 tons per hour

b. Requested operating rate (tons per hour)* 110 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 8 Days per year 146

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 128,480 tons per year

g. Requested operating rate (tons per year)* 128,480 tons per year

f. Type of material processed Asphalt

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 519 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.00	0.00	See Attached
Particulates as PM_{10}	0.00	0.00	See Attached
Particulates as $PM_{2.5}$	0.00	0.00	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM ASPHALT GRINDING CIRCUIT
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Processed (a) (ton/hour)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Excavator/Loader to Coleman Power Unit (SCC 3-05-020-32)						
PM-2.5 (c)	110	8	1,168	2.86E-05	3.14E-03	1.84E-03
PM-10	110	8	1,168	1.00E-04	1.10E-02	6.42E-03
TSP (d)	110	8	1,168	2.10E-04	2.31E-02	1.35E-02
Conveyor to grinder (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Asphalt grinding (water spray) (SCC 3-05-020-01 -controlled)						
PM-2.5 (c)	110	8	1,168	ND	0	0
PM-10	110	8	1,168	ND	0	0
TSP (d)	110	8	1,168	ND	0	0
Fines conveyor to stockpile (SCC 3-05-020-06)						
PM-2.5 (c)	110	8	1,168	4.00E-04	4.40E-02	2.57E-02
PM-10	110	8	1,168	1.40E-03	1.54E-01	8.99E-02
TSP (d)	110	8	1,168	2.94E-03	3.23E-01	1.89E-01
Grinder conveyor to stockpile (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Total PM2.5 Emissions					**0.15**	**0.16**
Total PM10 Emissions					**0.53**	**0.56**
Total TSP Emissions					**1.11**	**1.18**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

SCC = Source Classification Code (AP-42 Section 11.19.2, Table 11.19.2-2).

(a) Values based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emission factors for grinding operations are from AP-42 Section 11.19.2 for Crushed Stone Processing Operations. SCC represents the Source Classification Code that best represents the specific activity.

(c) Emission factors for grinding operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

(d) From AP-42 Table 11.19.2-2, note c, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the processing of asphalt. The equipment which operates the grinder is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 0.53 pounds per hour or 0.56 tons per year which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 1.11 pounds per hour or 1.18 tons per year which is more stringent than emissions allowed by NAC. In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)*	This Emission Unit is not this		

SECTION 8
EMISSION UNIT SPECIFIC (ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.			
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment 519 HP Diesel Engine for Asphalt Grinding Circuit

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Caterpillar

d. Model number CT3406 Serial number 4ZR05076 *Equip. number

e. Date equipment manufactured: 1999

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4375,306 meters N; 276,369 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 10 W 5 H 6

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 519
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 1.82
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day 6:00 A to 6:00 P

Hours per day 8 Days per year 265 Hours per year 800

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	13 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.67	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	134.9	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.56	0.23	See Attached
Particulates as PM_{10}	0.56	0.23	See Attached
Particulates as $PM_{2.5}$	0.56	0.23	See Attached
Sulfur Dioxide	0.53	0.21	See Attached
Carbon Monoxide	1.73	0.69	See Attached
Oxides of Nitrogen	8.03	3.21	See Attached
Volatile Organic Compounds	0.66	0.26	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	2.79E-03	1.11E-03	See Attached
Acrolein	3.36E-04	1.34E-04	See Attached
Benzene	3.39E-03	1.36E-03	See Attached
1,3-Butadiene	1.42E-04	5.68E-05	See Attached
Formaldehyde	4.29E-03	1.71E-03	See Attached
Naphthalene	3.08E-04	1.23E-04	See Attached
Toluene	1.49E-03	5.94E-04	See Attached
Xylenes	1.04E-03	4.14E-04	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM 519 HP DIESEL ENGINE
(ASPHALT GRINDING CIRCUIT)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (hp)	Operating Hours (a)	Emissions Factor (b) (lbs/hp-hr)	Maximum Emissions (c) (lb/hr)	Maximum Emissions (tpy)
VOCs	519	800	2.51E-03	0.66	0.26
NO_x	519	800	3.10E-02	8.03	3.21
SO_x	519	800	2.05E-03	0.53	0.21
CO	519	800	6.68E-03	1.73	0.69
TSP (d)	519	800	2.20E-03	0.56	0.23
$PM_{2.5}$ (d)	519	800	2.20E-03	0.56	0.23
PM_{10}	519	800	2.20E-03	0.56	0.23
HAZARDOUS AIR POLLUTANTS (HAPs)					
Acetaldehyde	519	800	5.37E-06	2.79E-03	1.11E-03
Acrolein	519	800	6.48E-07	3.36E-04	1.34E-04
Benzene	519	800	6.53E-06	3.39E-03	1.36E-03
1,3-Butadiene	519	800	2.74E-07	1.42E-04	5.68E-05
Formaldehyde	519	800	8.26E-06	4.29E-03	1.71E-03
Napthalene	519	800	5.94E-07	3.08E-04	1.23E-04
Toluene	519	800	2.86E-06	1.49E-03	5.94E-04
Xylenes	519	800	2.00E-06	1.04E-03	4.14E-04
Total HAPs				1.38E-02	5.51E-03

Notes:

(a) Operating hours based on proposed new permit limit.

(b) Emissions factors for HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2. An average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr.

(c) Emission limit contained within existing Class II Air Quality Operating Permit No. AP999-0180

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1 According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (519 HP DIESEL ENGINE FOR ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 1.82 MMBtu/hr.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Current permit allows only 0.56 pounds per hour of PM In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 1.82 MMBtu/hr.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 1.82 MMBtu/hr.		

SECTION 8
EMISSION UNIT SPECIFIC (519 HP DIESEL ENGINE FOR ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply. Current permit states maximum allowable heat input is 1.82 MMBtu/hr.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-		Recordkeeping of fuel amounts.	Resultant sulfur max allowed:

SECTION 8
EMISSION UNIT SPECIFIC (519 HP DIESEL ENGINE FOR ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			E=1.27 pounds/hr based on 1.82 MMbtu/hr. Current permitted maximum emissions allowed for sulfur is 0.53 pounds per hour which is more stringent than emissions allowed by NAC. In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=1.27 pounds/hr based on 1.82 MMbtu/hr. Current permitted maximum emissions allowed for sulfur is 0.53 pounds per hour which is more stringent than emissions allowed by NAC. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (519 HP DIESEL ENGINE FOR ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.			
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).		No Specific Requirements	In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (519 HP DIESEL ENGINE FOR ASPHALT GRINDING)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.			
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Material Transfer by Loader to Coleman Power Unit and Transfer to Conveyor (Phase 1 Belt)

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Kolman (or equivalent)

d. Model number Unavailable Serial number Unavailable *Equip. number 900642

e. Date equipment manufactured: Unavailable

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,246 meters N; 276,463 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L 25 W 3.5 H 20

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 110 tons per hour

b. Requested operating rate (tons per hour)* 110 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 8 Days per year 146

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 128,480 tons per year

g. Requested operating rate (tons per year)* 128,480 tons per year

f. Type of material processed Asphalt

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 519 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	2.31E-02	1.35E-02	See Attached
Particulates as PM_{10}	1.10E-02	6.42E-03	See Attached
Particulates as $PM_{2.5}$	3.14E-03	1.84E-03	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM ASPHALT GRINDING CIRCUIT
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Processed (a) (ton/hour)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Excavator/Loader to Coleman Power Unit (SCC 3-05-020-32)						
PM-2.5 (c)	110	8	1,168	2.86E-05	3.14E-03	1.84E-03
PM-10	110	8	1,168	1.00E-04	1.10E-02	6.42E-03
TSP (d)	110	8	1,168	2.10E-04	2.31E-02	1.35E-02
Conveyor to grinder (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Asphalt grinding (water spray) (SCC 3-05-020-01 -controlled)						
PM-2.5 (c)	110	8	1,168	ND	0	0
PM-10	110	8	1,168	ND	0	0
TSP (d)	110	8	1,168	ND	0	0
Fines conveyor to stockpile (SCC 3-05-020-06)						
PM-2.5 (c)	110	8	1,168	4.00E-04	4.40E-02	2.57E-02
PM-10	110	8	1,168	1.40E-03	1.54E-01	8.99E-02
TSP (d)	110	8	1,168	2.94E-03	3.23E-01	1.89E-01
Grinder conveyor to stockpile (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Total PM2.5 Emissions					**0.15**	**0.16**
Total PM10 Emissions					**0.53**	**0.56**
Total TSP Emissions					**1.11**	**1.18**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

SCC = Source Classification Code (AP-42 Section 11.19.2, Table 11.19.2-2).

(a) Values based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emission factors for grinding operations are from AP-42 Section 11.19.2 for Crushed Stone Processing Operations. SCC represents the Source Classification Code that best represents the specific activity.

(c) Emission factors for grinding operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

(d) From AP-42 Table 11.19.2-2, note c, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO COLEMAN POWER UNIT AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of asphalt. The equipment which operates the grinder is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . 0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO COLEMAN POWER UNIT AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 0.53 pounds per hour or 0.56 tons per year which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 1.11 pounds per hour or 1.18 tons per year which is more stringent than emissions allowed by NAC. In Compliance

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO COLEMAN POWER UNIT AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity	This Emission Unit is not expected to emit sulfur compounds; therefore, this		

SECTION 8
EMISSION UNIT SPECIFIC (MATERIAL TRANSFER BY LOADER TO COLEMAN POWER UNIT AND TRANSFER TO CONVEYOR [PHASE 1 BELT])
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Conveyor (Phase 1 Belt) and Transfer to Asphalt Grinder

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Kolman (or equivalent)

d. Model number Unavailable Serial number Unavailable *Equip. number 900642

e. Date equipment manufactured: Unavailable

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,246 meters N; 276,463 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L 25 W 3.5 H 20

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 110 tons per hour

b. Requested operating rate (tons per hour)* 110 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 8 Days per year 146

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 128,480 tons per year

g. Requested operating rate (tons per year)* 128,480 tons per year

f. Type of material processed Asphalt

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 519 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	1.11E-02	6.48E-03	See Attached
Particulates as PM_{10}	5.28E-03	3.08E-03	See Attached
Particulates as $PM_{2.5}$	1.51E-03	8.81E-04	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM ASPHALT GRINDING CIRCUIT
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Processed (a) (ton/hour)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Excavator/Loader to Coleman Power Unit (SCC 3-05-020-32)						
PM-2.5 (c)	110	8	1,168	2.86E-05	3.14E-03	1.84E-03
PM-10	110	8	1,168	1.00E-04	1.10E-02	6.42E-03
TSP (d)	110	8	1,168	2.10E-04	2.31E-02	1.35E-02
Conveyor to grinder (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Asphalt grinding (water spray) (SCC 3-05-020-01 -controlled)						
PM-2.5 (c)	110	8	1,168	ND	0	0
PM-10	110	8	1,168	ND	0	0
TSP (d)	110	8	1,168	ND	0	0
Fines conveyor to stockpile (SCC 3-05-020-06)						
PM-2.5 (c)	110	8	1,168	4.00E-04	4.40E-02	2.57E-02
PM-10	110	8	1,168	1.40E-03	1.54E-01	8.99E-02
TSP (d)	110	8	1,168	2.94E-03	3.23E-01	1.89E-01
Grinder conveyor to stockpile (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Total PM2.5 Emissions					**0.15**	**0.16**
Total PM10 Emissions					**0.53**	**0.56**
Total TSP Emissions					**1.11**	**1.18**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

SCC = Source Classification Code (AP-42 Section 11.19.2, Table 11.19.2-2).

(a) Values based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emission factors for grinding operations are from AP-42 Section 11.19.2 for Crushed Stone Processing Operations. SCC represents the Source Classification Code that best represents the specific activity.

(c) Emission factors for grinding operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

(d) From AP-42 Table 11.19.2-2, note c, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO ASPHALT GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of asphalt. The equipment which operates the grinder is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO ASPHALT GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 0.53 pounds per hour or 0.56 tons per year which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}\text{-}18.14\ (55P^{0.11}\text{- } 40)$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 1.11 pounds per hour or 1.18 tons per year which is more stringent than emissions allowed by NAC. In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)*	This Emission Unit is not this		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO ASPHALT GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 1 BELT] AND TRANSFER TO ASPHALT GRINDER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.			
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ $(0.292P^{0.904})$ When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Fines Conveyor and Transfer Fine Materials to Stockpile

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Unknown

d. Model number Unavailable Serial number Unavailable *Equip. number N/A

e. Date equipment manufactured: Unavailable

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,246 meters N; 276,463 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L 40 W 3 H 35

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 110 tons per hour

b. Requested operating rate (tons per hour)* 110 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 8 Days per year 146

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 128,480 tons per year

g. Requested operating rate (tons per year)* 128,480 tons per year

f. Type of material processed Asphalt

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 519 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	3.23E-01	1.89E-01	See Attached
Particulates as PM_{10}	1.54E-01	8.99E-02	See Attached
Particulates as $PM_{2.5}$	4.40E-02	2.57E-02	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM ASPHALT GRINDING CIRCUIT
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Processed (a) (ton/hour)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Excavator/Loader to Coleman Power Unit (SCC 3-05-020-32)						
PM-2.5 (c)	110	8	1,168	2.86E-05	3.14E-03	1.84E-03
PM-10	110	8	1,168	1.00E-04	1.10E-02	6.42E-03
TSP (d)	110	8	1,168	2.10E-04	2.31E-02	1.35E-02
Conveyor to grinder (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Asphalt grinding (water spray) (SCC 3-05-020-01 -controlled)						
PM-2.5 (c)	110	8	1,168	ND	0	0
PM-10	110	8	1,168	ND	0	0
TSP (d)	110	8	1,168	ND	0	0
Fines conveyor to stockpile (SCC 3-05-020-06)						
PM-2.5 (c)	110	8	1,168	4.00E-04	4.40E-02	2.57E-02
PM-10	110	8	1,168	1.40E-03	1.54E-01	8.99E-02
TSP (d)	110	8	1,168	2.94E-03	3.23E-01	1.89E-01
Grinder conveyor to stockpile (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Total PM2.5 Emissions					**0.15**	**0.16**
Total PM10 Emissions					**0.53**	**0.56**
Total TSP Emissions					**1.11**	**1.18**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

SCC = Source Classification Code (AP-42 Section 11.19.2, Table 11.19.2-2).

(a) Values based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emission factors for grinding operations are from AP-42 Section 11.19.2 for Crushed Stone Processing Operations. SCC represents the Source Classification Code that best represents the specific activity.

(c) Emission factors for grinding operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

(d) From AP-42 Table 11.19.2-2, note c, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (FINES CONVEYOR AND TRANSFER FINE MATERIALS TO STOCKPILE)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of asphalt. The equipment which operates the grinder is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (FINES CONVEYOR AND TRANSFER FINE MATERIALS TO STOCKPILE)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 0.53 pounds per hour or 0.56 tons per year which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 1.11 pounds per hour or 1.18 tons per year which is more stringent than emissions allowed by NAC. In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)*	This Emission Unit is not this		

SECTION 8
EMISSION UNIT SPECIFIC (FINES CONVEYOR AND TRANSFER FINE MATERIALS TO STOCKPILE)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (FINES CONVEYOR AND TRANSFER FINE MATERIALS TO STOCKPILE)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.			
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Conveyor (Phase 2 Belt) and Transfer Asphalt Materials to Stockpile

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Unknown

d. Model number Unavailable Serial number Unavailable *Equip. number N/A

e. Date equipment manufactured: Unavailable

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☒ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374,246 meters N; 276,463 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L 40 W 3 H 35

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 110 tons per hour

b. Requested operating rate (tons per hour)* 110 tons per hour

c. Requested operating time: (time of day)* 6:00 A to 6:00 P

Hours per day 8 Days per year 146

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 128,480 tons per year

g. Requested operating rate (tons per year)* 128,480 tons per year

f. Type of material processed Asphalt

g. Minimum moisture content

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	See 519 hp diesel engine form gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED – No stack, chimney or vent	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	WATER SPRAYS	
Pollutant(s) Controlled	TSP, PM-10, PM-2.5	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	75%	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THIS EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	1.11E-02	6.48E-03	See Attached
Particulates as PM_{10}	5.28E-03	3.08E-03	See Attached
Particulates as $PM_{2.5}$	1.51E-03	8.81E-04	See Attached
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Other Regulated Pollutants (Specify[2])			
Mercury (total)			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION SOURCE ESTIMATES FROM ASPHALT GRINDING CIRCUIT
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Operation	Maximum Processed (a) (ton/hour)	Maximum Operation (a) (hours/day)	Maximum Operation (a) (hours/year)	Emission Factor (b) (lb/ton material)	Maximum Emissions (lb/hour)	Maximum Emissions (ton/year)
Excavator/Loader to Coleman Power Unit (SCC 3-05-020-32)						
PM-2.5 (c)	110	8	1,168	2.86E-05	3.14E-03	1.84E-03
PM-10	110	8	1,168	1.00E-04	1.10E-02	6.42E-03
TSP (d)	110	8	1,168	2.10E-04	2.31E-02	1.35E-02
Conveyor to grinder (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Asphalt grinding (water spray) (SCC 3-05-020-01 -controlled)						
PM-2.5 (c)	110	8	1,168	ND	0	0
PM-10	110	8	1,168	ND	0	0
TSP (d)	110	8	1,168	ND	0	0
Fines conveyor to stockpile (SCC 3-05-020-06)						
PM-2.5 (c)	110	8	1,168	4.00E-04	4.40E-02	2.57E-02
PM-10	110	8	1,168	1.40E-03	1.54E-01	8.99E-02
TSP (d)	110	8	1,168	2.94E-03	3.23E-01	1.89E-01
Grinder conveyor to stockpile (water spray) (SCC 3-05-020-06 - controlled)						
PM-2.5 (c)	110	8	1,168	1.37E-05	1.51E-03	8.81E-04
PM-10	110	8	1,168	4.80E-05	5.28E-03	3.08E-03
TSP (d)	110	8	1,168	1.01E-04	1.11E-02	6.48E-03
Total PM2.5 Emissions					**0.15**	**0.16**
Total PM10 Emissions					**0.53**	**0.56**
Total TSP Emissions					**1.11**	**1.18**

Notes:

PM2.5 = Particulate Matter less than 2.5 microns

PM10 = Particulate Matter less than 10 microns

TSP = Total Suspended Particulate

SCC = Source Classification Code (AP-42 Section 11.19.2, Table 11.19.2-2).

(a) Values based on current Class I Air Quality Permit No. AP4953-1148; no change requested.

(b) Emission factors for grinding operations are from AP-42 Section 11.19.2 for Crushed Stone Processing Operations. SCC represents the Source Classification Code that best represents the specific activity.

(c) Emission factors for grinding operations ND for PM2.5 for most categories. Applied ratio of PM10 to PM2.5 emission factor of Controlled Conveyor Transfer Point as worst -case for all emission points.

(d) From AP-42 Table 11.19.2-2, note c, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER ASPHALT MATERIALS TO STOCKPILE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit reflects just the transfer of asphalt. The equipment which operates the grinder is listed separately. Therefore, since this emission unit is not under this category, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not this source category; therefore this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER ASPHALT MATERIALS TO STOCKPILE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM-10 is 0.53 pounds per hour or 0.56 tons per year which is more stringent than emissions allowed by NAC. In Compliance
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	The facility is permitted to process more than 60,000 pounds per hour; therefore this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.		Recordkeeping of process amounts.	Current permitted maximum emissions allowed for PM is 1.11 pounds per hour or 1.18 tons per year which is more stringent than emissions allowed by NAC. In Compliance
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)*	This Emission Unit is not this		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER ASPHALT MATERIALS TO STOCKPILE) APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	source category; therefore this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not this source category; therefore this rule does not apply.		
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not this source category; therefore this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (CONVEYOR [PHASE 2 BELT] AND TRANSFER ASPHALT MATERIALS TO STOCKPILE)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.			
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	This Emission Unit is not expected to emit sulfur compounds; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

INDUSTRIAL PROCESS
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment Petroleum Contaminated Soil Storage and Disposal

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment N/A

d. Model number N/A Serial number N/A *Equip. number N/A

e. Date equipment manufactured: N/A

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. For crushers: size output setting, check one: ☐ Primary (∃ 4")
☐ Secondary (< 4" but ∃ 1")
☐ Tertiary (< 1")

h. Please check if portable: ☐ Portable (transportable or movable within the confines of the stationary source)

i. UTM Coordinates 4374.863 kilometers N; 275.368 kilometers E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

j. Basic equipment dimensions (feet): L W H

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. Maximum design capacity (tons per hour) 16,000 tons/yr

b. Requested operating rate (tons per hour)*

c. Requested operating time: (time of day)* to

Hours per day 24 Days per year 365

d. Batch load or charge weight (tons) (if applicable) N/A

e. Total hours required to process batch or charge (if applicable) N/A

f. Maximum operating rate (tons per year) 16,000

g. Requested operating rate (tons per year)* 16,000

f. Type of material processed Petroleum Contaminated Soil

g. Minimum moisture content N/A

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)	N/A				
	gallons				
	gallons				
Gasoline	N/A gallons				
Propane	N/A cubic feet				
Natural Gas	N/A cubic feet				
*Waste Oil	N/A gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)	N/A							

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section *must* be completed)

-Complete for emissions **exhausting through a stack, chimney or vent**: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 2)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: Actual cubic feet per minute	N/A	
Gas volume flow rate: Dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g. raincap, horizontal discharge)	N/A	

-Complete for emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

RECORDKEEPING

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM_{10}			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds	4.57E-01	2.00E+00	See Attached
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Benzene	1.37E-07	6.02E-07	See Attached
Carbon Tetrachloride	1.35E-07	5.93E-07	See Attached
Chlorobenzene	1.98E-07	8.68E-07	See Attached
Chloroform	2.10E-07	9.21E-07	See Attached
1,4-Dichlorobenzene	6.47E-07	2.83E-06	See Attached
1,2-Dichloroethane	4.35E-07	1.91E-06	See Attached
1,1-Dichloroethene	4.26E-07	1.87E-06	See Attached
Methyl Ethyl Ketone	3.17E-07	1.39E-06	See Attached
Tetrachloroethylene	7.30E-07	3.20E-06	See Attached
Trichloroethylene	5.78E-07	2.53E-06	See Attached
Vinyl chloride	2.75E-07	1.21E-06	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

EMISSION CALCULATION FOR PCS
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Per NAC 445B.288 (m), the following has been approved by the director as an insignificant activity:

Land-farming of not more than 270,000 tons per year of diesel-based hydrocarbon with a concentration of less than 50,000 PPM Total Petroleum Hydrocarbons is considered an insignificant activity of which emissions must be calculated.

Landfarming of not more than 338 tons per year of gasoline-based hydrocarbon contaminated soil, with a concentration of less than 50,000 PPM Total petroleum hydrocarbons is considered an insignificant activity of which emissions must be calculated.

The site accepts soils contaminated with diesel fuel, waste oil, and gasoline. The site is permitted to receive gasoline contaminated soils, however, in the year 2000, they did not receive any. For purposes of estimating emissions, will assume 20% of contaminated soil accepted is gasoline-based hydrocarbon contaminated soil.

Maximum amount:	11,000	cubic yards
Assumed Breakdown:		
Percent diesel:	40%	
Percent waste oil:	40%	
Percent gasoline:	20%	
Total PCS (diesel):	4,400	cubic yards
Total PCS (waste oil):	4,400	cubic yards
Total PCS (gasoline):	2,200	cubic yards

CAS Number	Regulated Pollutant	Molecular Weight (g/Mol)	Ave. Concentration of Compounds Found In PCS (PPMV)[a]	Emissions (ton/yr)[b][c]	Emissions (lb/hr)
71432	Benzene	78.11	0.020	3.61E-07	8.25E-08
56235	Carbon Tetrachloride	153.84	0.010	3.56E-07	8.12E-08
108907	Chlorobenzene	112.56	0.020	5.21E-07	1.19E-07
67663	Chloroform	119.39	0.020	5.52E-07	1.26E-07
106467	1,4-Dichlorobenzene	147.00	0.050	1.70E-06	3.88E-07
107062	1,2-Dichloroethane	98.96	0.050	1.14E-06	2.61E-07
75354	1,1-Dichloroethene	96.94	0.050	1.12E-06	2.56E-07
78933	Methyl Ethyl Ketone	72.11	0.050	8.34E-07	1.90E-07
127184	Tetrachloroethylene	165.83	0.050	1.92E-06	4.38E-07
79016	Trichloroethylene	131.40	0.050	1.52E-06	3.47E-07
75014	Vinyl chloride	62.50	0.050	7.23E-07	1.65E-07
Total VOCs				2.00E+00	4.57E-01
Total HAPs:				1.08E-05	2.45E-06

NOTES:

(a) Based on laboratory analysis performed by Great Basin Laboratories on May 7, 2001. Analyses submitted results as mg/L. 1 mg/L is equivalent to 1 PPM. If the results indicate concentrations less than the detection limit, then the detection limit was used to estimate emissions.

(b) Total PCS Emissions = (Molecular Weight of Compound[g/mol])
*(Concentration of Compound[ppm]/1,000,000)
*(Total PCS used [cubic yards/year])
(1ton/907,184.74 g)(764.55 L/1 yd^3)*(1mol/24.04L @ STP)

(c) Per RI's Addendum dated 8/3/07, RI accepted a 2 ton/yr limit for VOCs and reflected on NDEP emission spreadsheet dated 7/21/08.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8 (PCS STORAGE AND DISPOSAL)
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	This Emission Unit has the potential to emit hazardous air pollutants and volatile organic compounds from PCS soils. Therefore, this rule does not apply since no emissions of particulate matter are anticipated from this process.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ ($4.10P^{0.67}$) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	This Emission Unit has the potential to emit hazardous air pollutants and volatile organic compounds from PCS soils. Therefore, this rule does not apply since no emissions of particulate matter are anticipated from this process.		

SECTION 8 (PCS STORAGE AND DISPOSAL)
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}-18.14 (55P^{0.11}- 40)$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	This Emission Unit has the potential to emit hazardous air pollutants and volatile organic compounds from PCS soils. Therefore, this rule does not apply since no emissions of particulate matter are anticipated from this process.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	This Emission Unit is not under this category (fuel burning equipment); therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	No material containing sulfur is processed; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When □E□ is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	No material containing sulfur is processed; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being	No material containing sulfur is processed; therefore, this rule does not apply.		

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.			
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 130 HP Diesel Engine Tipper

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Columbia

d. Model number 3116 Serial number 993020 *Equip. number

e. Date equipment manufactured: 1999

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒ Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,963 meters N; 275,508 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 100 W 40 H 21.5

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 130 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.35
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 24 Days per year 365 Hours per year 4,600

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	2.5 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.5	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	60.1	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.109	0.250	See Attached
Particulates as PM_{10}	0.109	0.250	See Attached
Particulates as $PM_{2.5}$	0.109	0.250	See Attached
Sulfur Dioxide	0.102	0.233	See Attached
Carbon Monoxide	0.333	0.765	See Attached
Oxides of Nitrogen	1.544	3.550	See Attached
Volatile Organic Compounds	0.126	0.290	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	2.68E-04	6.17E-04	See Attached
Acrolein	3.24E-05	7.45E-05	See Attached
Benzene	3.27E-04	7.51E-04	See Attached
1,3-Butadiene	1.37E-05	3.15E-05	See Attached
Formaldehyde	4.13E-04	9.50E-04	See Attached
Naphthalene	2.97E-05	6.83E-05	See Attached
Toluene	1.43E-04	3.29E-04	See Attached
Xylenes	9.98E-05	2.29E-04	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM THREE DIESEL ENGINE TIPPERS (130 HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Tippers) Maximum Emissions (lb/hr)	Total (3 Tippers) Maximum Emissions (tpy)	Single Tipper Maximum Emissions (lb/hr)	Single Tipper Maximum Emissions (tpy)
VOCs	1.050	4,830	4,600	3.60E-01	0.378	0.869	0.126	0.290
NO_x	1.050	4,830	4,600	4.41E+00	4.631	10.650	1.544	3.550
SO_x	1.050	4,830	4,600	2.90E-01	0.305	0.700	0.102	0.233
CO	1.050	4,830	4,600	9.50E-01	0.998	2.294	0.333	0.765
TSP (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
PM_{10}	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
$PM_{2.5}$ (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	1.050	4,830	4,600	7.67E-04	8.05E-04	1.85E-03	2.68E-04	6.17E-04
Acrolein	1.050	4,830	4,600	9.25E-05	9.71E-05	2.23E-04	3.24E-05	7.45E-05
Benzene	1.050	4,830	4,600	9.33E-04	9.80E-04	2.25E-03	3.27E-04	7.51E-04
1,3-Butadiene	1.050	4,830	4,600	3.91E-05	4.11E-05	9.44E-05	1.37E-05	3.15E-05
Formaldehyde	1.050	4,830	4,600	1.18E-03	1.24E-03	2.85E-03	4.13E-04	9.50E-04
Napthalene	1.050	4,830	4,600	8.48E-05	8.90E-05	2.05E-04	2.97E-05	6.83E-05
Toluene	1.050	4,830	4,600	4.09E-04	4.29E-04	9.88E-04	1.43E-04	3.29E-04
Xylenes	1.050	4,830	4,600	2.85E-04	2.99E-04	6.88E-04	9.98E-05	2.29E-04
Total HAPs					3.98E-03	9.15E-03	1.33E-03	3.05E-03

Notes:

(a) Engine rating based on 2.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Emissions in lbs/hr will be 0.11 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.25 pounds/hr based on 0.35 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.25 pounds/hr based on 0.35 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 130 HP Diesel Engine Tipper

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Columbia

d. Model number 3116 Serial number 2WG03616 *Equip. number

e. Date equipment manufactured: 1995

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒ Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,940 meters N; 275,538 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 100 W 40 H 21.5

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 130 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.35
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 24 Days per year 365 Hours per year 4,600

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	2.5 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.5	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	60.1	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.109	0.250	See Attached
Particulates as PM_{10}	0.109	0.250	See Attached
Particulates as $PM_{2.5}$	0.109	0.250	See Attached
Sulfur Dioxide	0.102	0.233	See Attached
Carbon Monoxide	0.333	0.765	See Attached
Oxides of Nitrogen	1.544	3.550	See Attached
Volatile Organic Compounds	0.126	0.290	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	2.68E-04	6.17E-04	See Attached
Acrolein	3.24E-05	7.45E-05	See Attached
Benzene	3.27E-04	7.51E-04	See Attached
1,3-Butadiene	1.37E-05	3.15E-05	See Attached
Formaldehyde	4.13E-04	9.50E-04	See Attached
Naphthalene	2.97E-05	6.83E-05	See Attached
Toluene	1.43E-04	3.29E-04	See Attached
Xylenes	9.98E-05	2.29E-04	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM THREE DIESEL ENGINE TIPPERS (130 HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Tippers) Maximum Emissions (lb/hr)	Total (3 Tippers) Maximum Emissions (tpy)	Single Tipper Maximum Emissions (lb/hr)	Single Tipper Maximum Emissions (tpy)
VOCs	1.050	4,830	4,600	3.60E-01	0.378	0.869	0.126	0.290
NO_x	1.050	4,830	4,600	4.41E+00	4.631	10.650	1.544	3.550
SO_x	1.050	4,830	4,600	2.90E-01	0.305	0.700	0.102	0.233
CO	1.050	4,830	4,600	9.50E-01	0.998	2.294	0.333	0.765
TSP (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
PM_{10}	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
$PM_{2.5}$ (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	1.050	4,830	4,600	7.67E-04	8.05E-04	1.85E-03	2.68E-04	6.17E-04
Acrolein	1.050	4,830	4,600	9.25E-05	9.71E-05	2.23E-04	3.24E-05	7.45E-05
Benzene	1.050	4,830	4,600	9.33E-04	9.80E-04	2.25E-03	3.27E-04	7.51E-04
1,3-Butadiene	1.050	4,830	4,600	3.91E-05	4.11E-05	9.44E-05	1.37E-05	3.15E-05
Formaldehyde	1.050	4,830	4,600	1.18E-03	1.24E-03	2.85E-03	4.13E-04	9.50E-04
Napthalene	1.050	4,830	4,600	8.48E-05	8.90E-05	2.05E-04	2.97E-05	6.83E-05
Toluene	1.050	4,830	4,600	4.09E-04	4.29E-04	9.88E-04	1.43E-04	3.29E-04
Xylenes	1.050	4,830	4,600	2.85E-04	2.99E-04	6.88E-04	9.98E-05	2.29E-04
Total HAPs					3.98E-03	9.15E-03	1.33E-03	3.05E-03

Notes:

(a) Engine rating based on 2.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Emissions in lbs/hr will be 0.11 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.25 pounds/hr based on 0.35 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.25 pounds/hr based on 0.35 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 130 HP Diesel Engine Tipper

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Columbia

d. Model number 3116 Serial number 2WG03285 *Equip. number

e. Date equipment manufactured: 1994

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒ Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,917 meters N; 275,508 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 100 W 40 H 21.5

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 130 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.35
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 24 Days per year 365 Hours per year 4,600

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	2.5 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.5	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	60.1	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.109	0.250	See Attached
Particulates as PM_{10}	0.109	0.250	See Attached
Particulates as $PM_{2.5}$	0.109	0.250	See Attached
Sulfur Dioxide	0.102	0.233	See Attached
Carbon Monoxide	0.333	0.765	See Attached
Oxides of Nitrogen	1.544	3.550	See Attached
Volatile Organic Compounds	0.126	0.290	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	2.68E-04	6.17E-04	See Attached
Acrolein	3.24E-05	7.45E-05	See Attached
Benzene	3.27E-04	7.51E-04	See Attached
1,3-Butadiene	1.37E-05	3.15E-05	See Attached
Formaldehyde	4.13E-04	9.50E-04	See Attached
Naphthalene	2.97E-05	6.83E-05	See Attached
Toluene	1.43E-04	3.29E-04	See Attached
Xylenes	9.98E-05	2.29E-04	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM THREE DIESEL ENGINE TIPPERS (130 HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Tippers) Maximum Emissions (lb/hr)	Total (3 Tippers) Maximum Emissions (tpy)	Single Tipper Maximum Emissions (lb/hr)	Single Tipper Maximum Emissions (tpy)
VOCs	1.050	4,830	4,600	3.60E-01	0.378	0.869	0.126	0.290
NO_x	1.050	4,830	4,600	4.41E+00	4.631	10.650	1.544	3.550
SO_x	1.050	4,830	4,600	2.90E-01	0.305	0.700	0.102	0.233
CO	1.050	4,830	4,600	9.50E-01	0.998	2.294	0.333	0.765
TSP (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
PM_{10}	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
$PM_{2.5}$ (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	1.050	4,830	4,600	7.67E-04	8.05E-04	1.85E-03	2.68E-04	6.17E-04
Acrolein	1.050	4,830	4,600	9.25E-05	9.71E-05	2.23E-04	3.24E-05	7.45E-05
Benzene	1.050	4,830	4,600	9.33E-04	9.80E-04	2.25E-03	3.27E-04	7.51E-04
1,3-Butadiene	1.050	4,830	4,600	3.91E-05	4.11E-05	9.44E-05	1.37E-05	3.15E-05
Formaldehyde	1.050	4,830	4,600	1.18E-03	1.24E-03	2.85E-03	4.13E-04	9.50E-04
Napthalene	1.050	4,830	4,600	8.48E-05	8.90E-05	2.05E-04	2.97E-05	6.83E-05
Toluene	1.050	4,830	4,600	4.09E-04	4.29E-04	9.88E-04	1.43E-04	3.29E-04
Xylenes	1.050	4,830	4,600	2.85E-04	2.99E-04	6.88E-04	9.98E-05	2.29E-04
Total HAPs					3.98E-03	9.15E-03	1.33E-03	3.05E-03

Notes:

(a) Engine rating based on 2.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Emissions in lbs/hr will be 0.11 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.25 pounds/hr based on 0.35 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.25 pounds/hr based on 0.35 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (130 HP DIESEL ENGINE TIPPER)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

EMISSION SOURCE ESTIMATES FROM THREE DIESEL ENGINE TIPPERS (130 HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Tippers) Maximum Emissions (lb/hr)	Total (3 Tippers) Maximum Emissions (tpy)	Single Tipper Maximum Emissions (lb/hr)	Single Tipper Maximum Emissions (tpy)
VOCs	1.050	4,830	4,600	3.60E-01	0.378	0.869	0.126	0.290
NO_x	1.050	4,830	4,600	4.41E+00	4.631	10.650	1.544	3.550
SO_x	1.050	4,830	4,600	2.90E-01	0.305	0.700	0.102	0.233
CO	1.050	4,830	4,600	9.50E-01	0.998	2.294	0.333	0.765
TSP (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
PM_{10}	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
$PM_{2.5}$ (d)	1.050	4,830	4,600	3.10E-01	0.326	0.749	0.109	0.250
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	1.050	4,830	4,600	7.67E-04	8.05E-04	1.85E-03	2.68E-04	6.17E-04
Acrolein	1.050	4,830	4,600	9.25E-05	9.71E-05	2.23E-04	3.24E-05	7.45E-05
Benzene	1.050	4,830	4,600	9.33E-04	9.80E-04	2.25E-03	3.27E-04	7.51E-04
1,3-Butadiene	1.050	4,830	4,600	3.91E-05	4.11E-05	9.44E-05	1.37E-05	3.15E-05
Formaldehyde	1.050	4,830	4,600	1.18E-03	1.24E-03	2.85E-03	4.13E-04	9.50E-04
Napthalene	1.050	4,830	4,600	8.48E-05	8.90E-05	2.05E-04	2.97E-05	6.83E-05
Toluene	1.050	4,830	4,600	4.09E-04	4.29E-04	9.88E-04	1.43E-04	3.29E-04
Xylenes	1.050	4,830	4,600	2.85E-04	2.99E-04	6.88E-04	9.98E-05	2.29E-04
Total HAPs					3.98E-03	9.15E-03	1.33E-03	3.05E-03

Notes:

(a) Engine rating based on 2.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 10.5 HP Light Plant

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Kubota

d. Model number 6330 Serial number 0001NL03 *Equip. number _____

e. Date equipment manufactured: 1999

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒ Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,963 meters N; 275,538 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 10 W 5 H 4

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 10.5 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.07
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 24 Days per year 365 Hours per year 3,000

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	0.5 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.17	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	52.0	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.022	0.033	See Attached
Particulates as PM_{10}	0.022	0.033	See Attached
Particulates as $PM_{2.5}$	0.022	0.033	See Attached
Sulfur Dioxide	0.020	0.030	See Attached
Carbon Monoxide	0.067	0.100	See Attached
Oxides of Nitrogen	0.309	0.463	See Attached
Volatile Organic Compounds	0.025	0.038	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	5.37E-05	8.05E-05	See Attached
Acrolein	6.48E-06	9.71E-06	See Attached
Benzene	6.53E-05	9.80E-05	See Attached
1,3-Butadiene	2.74E-06	4.11E-06	See Attached
Formaldehyde	8.26E-05	1.24E-04	See Attached
Naphthalene	5.94E-06	8.90E-06	See Attached
Toluene	2.86E-05	4.29E-05	See Attached
Xylenes	2.00E-05	2.99E-05	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM
THREE DIESEL POWERED LIGHT PLANTS (10.5-HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Light Plants) Maximum Emissions (lb/hr)	Total (3 Light Plants) Maximum Emissions (tpy)	Single Light Plant Maximum Emissions (lb/hr)	Single Light Plant Maximum Emissions (tpy)
VOCs	0.2100	630	3,000	3.60E-01	0.076	0.113	0.025	0.038
NO_x	0.2100	630	3,000	4.41E+00	0.926	1.389	0.309	0.463
SO_x	0.2100	630	3,000	2.90E-01	0.061	0.091	0.020	0.030
CO	0.2100	630	3,000	9.50E-01	0.200	0.299	0.067	0.100
TSP (d)	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
PM_{10}	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
$PM_{2.5}$ (d)	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	0.2100	630	3,000	7.67E-04	1.61E-04	2.42E-04	5.37E-05	8.05E-05
Acrolein	0.2100	630	3,000	9.25E-05	1.94E-05	2.91E-05	6.48E-06	9.71E-06
Benzene	0.2100	630	3,000	9.33E-04	1.96E-04	2.94E-04	6.53E-05	9.80E-05
1,3-Butadiene	0.2100	630	3,000	3.91E-05	8.21E-06	1.23E-05	2.74E-06	4.11E-06
Formaldehyde	0.2100	630	3,000	1.18E-03	2.48E-04	3.72E-04	8.26E-05	1.24E-04
Napthalene	0.2100	630	3,000	8.48E-05	1.78E-05	2.67E-05	5.94E-06	8.90E-06
Toluene	0.2100	630	3,000	4.09E-04	8.59E-05	1.29E-04	2.86E-05	4.29E-05
Xylenes	0.2100	630	3,000	2.85E-04	5.99E-05	8.98E-05	2.00E-05	2.99E-05
Total HAPs					7.96E-04	1.19E-03	2.65E-04	3.98E-04

Notes:

(a) Engine rating based on 0.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Emissions in lbs/hr will be 0.02 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.05 pounds/hr based on 0.07 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E E=0.05 pounds/hr based on 0.07 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 10.5 HP Light Plant

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Allmand

d. Model number 6330 Serial number 00081N102 *Equip. number _____

e. Date equipment manufactured: 1990

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒ Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,940 meters N; 275,508 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 10 W 5 H 4

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 10.5 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.07
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 24 Days per year 365 Hours per year 3,000

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	0.5 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.17	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	52.0	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.022	0.033	See Attached
Particulates as PM_{10}	0.022	0.033	See Attached
Particulates as $PM_{2.5}$	0.022	0.033	See Attached
Sulfur Dioxide	0.020	0.030	See Attached
Carbon Monoxide	0.067	0.100	See Attached
Oxides of Nitrogen	0.309	0.463	See Attached
Volatile Organic Compounds	0.025	0.038	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	5.37E-05	8.05E-05	See Attached
Acrolein	6.48E-06	9.71E-06	See Attached
Benzene	6.53E-05	9.80E-05	See Attached
1,3-Butadiene	2.74E-06	4.11E-06	See Attached
Formaldehyde	8.26E-05	1.24E-04	See Attached
Naphthalene	5.94E-06	8.90E-06	See Attached
Toluene	2.86E-05	4.29E-05	See Attached
Xylenes	2.00E-05	2.99E-05	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM
THREE DIESEL POWERED LIGHT PLANTS (10.5-HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Light Plants) Maximum Emissions (lb/hr)	Total (3 Light Plants) Maximum Emissions (tpy)	Single Light Plant Maximum Emissions (lb/hr)	Single Light Plant Maximum Emissions (tpy)
VOCs	0.2100	630	3,000	3.60E-01	0.076	0.113	0.025	0.038
NO_x	0.2100	630	3,000	4.41E+00	0.926	1.389	0.309	0.463
SO_x	0.2100	630	3,000	2.90E-01	0.061	0.091	0.020	0.030
CO	0.2100	630	3,000	9.50E-01	0.200	0.299	0.067	0.100
TSP (d)	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
PM_{10}	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
$PM_{2.5}$ (d)	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	0.2100	630	3,000	7.67E-04	1.61E-04	2.42E-04	5.37E-05	8.05E-05
Acrolein	0.2100	630	3,000	9.25E-05	1.94E-05	2.91E-05	6.48E-06	9.71E-06
Benzene	0.2100	630	3,000	9.33E-04	1.96E-04	2.94E-04	6.53E-05	9.80E-05
1,3-Butadiene	0.2100	630	3,000	3.91E-05	8.21E-06	1.23E-05	2.74E-06	4.11E-06
Formaldehyde	0.2100	630	3,000	1.18E-03	2.48E-04	3.72E-04	8.26E-05	1.24E-04
Napthalene	0.2100	630	3,000	8.48E-05	1.78E-05	2.67E-05	5.94E-06	8.90E-06
Toluene	0.2100	630	3,000	4.09E-04	8.59E-05	1.29E-04	2.86E-05	4.29E-05
Xylenes	0.2100	630	3,000	2.85E-04	5.99E-05	8.98E-05	2.00E-05	2.99E-05
Total HAPs					7.96E-04	1.19E-03	2.65E-04	3.98E-04

Notes:

(a) Engine rating based on 0.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Emissions in lbs/hr will be 0.02 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.05 pounds/hr based on 0.07 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E E=0.05 pounds/hr based on 0.07 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Type of equipment 10.5 HP Light Plant

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Allmand

d. Model number 4C Serial number 9806BN4C37 *Equip. number

e. Date equipment manufactured: 1997

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒ Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4374,917 meters N; 275,538 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 10 W 5 H 4

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 10.5 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.07
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 24 Days per year 365 Hours per year 3,000

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	0.5 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.17	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	52.0	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.022	0.033	See Attached
Particulates as PM_{10}	0.022	0.033	See Attached
Particulates as $PM_{2.5}$	0.022	0.033	See Attached
Sulfur Dioxide	0.020	0.030	See Attached
Carbon Monoxide	0.067	0.100	See Attached
Oxides of Nitrogen	0.309	0.463	See Attached
Volatile Organic Compounds	0.025	0.038	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	5.37E-05	8.05E-05	See Attached
Acrolein	6.48E-06	9.71E-06	See Attached
Benzene	6.53E-05	9.80E-05	See Attached
1,3-Butadiene	2.74E-06	4.11E-06	See Attached
Formaldehyde	8.26E-05	1.24E-04	See Attached
Naphthalene	5.94E-06	8.90E-06	See Attached
Toluene	2.86E-05	4.29E-05	See Attached
Xylenes	2.00E-05	2.99E-05	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM
THREE DIESEL POWERED LIGHT PLANTS (10.5-HP EACH)
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Total (3 Light Plants) Maximum Emissions (lb/hr)	Total (3 Light Plants) Maximum Emissions (tpy)	Single Light Plant Maximum Emissions (lb/hr)	Single Light Plant Maximum Emissions (tpy)
VOCs	0.2100	630	3,000	3.60E-01	0.076	0.113	0.025	0.038
NO_x	0.2100	630	3,000	4.41E+00	0.926	1.389	0.309	0.463
SO_x	0.2100	630	3,000	2.90E-01	0.061	0.091	0.020	0.030
CO	0.2100	630	3,000	9.50E-01	0.200	0.299	0.067	0.100
TSP (d)	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
PM_{10}	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
$PM_{2.5}$ (d)	0.2100	630	3,000	3.10E-01	0.065	0.098	0.022	0.033
HAZARDOUS AIR POLLUTANTS (HAPs)								
Acetaldehyde	0.2100	630	3,000	7.67E-04	1.61E-04	2.42E-04	5.37E-05	8.05E-05
Acrolein	0.2100	630	3,000	9.25E-05	1.94E-05	2.91E-05	6.48E-06	9.71E-06
Benzene	0.2100	630	3,000	9.33E-04	1.96E-04	2.94E-04	6.53E-05	9.80E-05
1,3-Butadiene	0.2100	630	3,000	3.91E-05	8.21E-06	1.23E-05	2.74E-06	4.11E-06
Formaldehyde	0.2100	630	3,000	1.18E-03	2.48E-04	3.72E-04	8.26E-05	1.24E-04
Napthalene	0.2100	630	3,000	8.48E-05	1.78E-05	2.67E-05	5.94E-06	8.90E-06
Toluene	0.2100	630	3,000	4.09E-04	8.59E-05	1.29E-04	2.86E-05	4.29E-05
Xylenes	0.2100	630	3,000	2.85E-04	5.99E-05	8.98E-05	2.00E-05	2.99E-05
Total HAPs					7.96E-04	1.19E-03	2.65E-04	3.98E-04

Notes:

(a) Engine rating based on 0.5 gal/hr diesel fuel * 3 * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Emissions in lbs/hr will be 0.02 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ $(4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 $(55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.05 pounds/hr based on 0.07 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E E=0.05 pounds/hr based on 0.07 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (10.5 HP DIESEL LIGHT PLANT)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ ($0.292P^{0.904}$) When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-B

9Check here if this is an alternative operating scenario

Section 1 - Equipment Description

a. Type of equipment 96 HP Diesel Generator

b. Standard Industrial Classification (SIC) Code 4953

c. Manufacturer of equipment Caterpillar

d. Model number CT60 Serial number 2014702 *Equip. number

e. Date equipment manufactured: 1995

f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☒ Stationary (At the same location for more than 12 months)

g. Please check if portable: ☒Portable (transportable or movable within the confines of the stationary source)

h. UTM Coordinates 4375,199 meters N; 274,776 meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☒)

i. Basic equipment dimensions (feet): L 14 W 6 H 6

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) 96 HP
(Please provide for internal combustion engines only)

b. **Maximum** design heat **INPUT** (million Btu per hour) 0.56
(Please provide for all combustion units except for internal combustion engines)

c. *Requested operating time: time of day _____ to _____

Hours per day 10 Days per year 300 Hours per year 3,000

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Diesel	4 gallons	140,000 Btu/gal	0.01%	0.5%	
	gallons				
Gasoline	gallons				
Propane	gallons/cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section *must* be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	UNCONTROLLED	
Pollutant(s) Controlled	N/A	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	6	
Stack inside diameter (feet)	0.33	
Temperature (°F) at design capacity	864	
Stack exit velocity (feet per second)	99.8	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

EMISSIONS FROM THIS UNIT IS/WILL BE MONITORED USING RECORKEEPING ACTIVITIES. FUEL CONSUMPTION AND OPERATING HOURS ARE RECORDED TO INSURE COMPLIANCE.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

THE EMISSION UNIT IS AND WILL CONTINUE TO BE OPERATED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES.

COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)	0.174	0.260	See Attached
Particulates as PM_{10}	0.174	0.260	See Attached
Particulates as $PM_{2.5}$	0.174	0.260	See Attached
Sulfur Dioxide	0.162	0.244	See Attached
Carbon Monoxide	0.532	0.798	See Attached
Oxides of Nitrogen	2.470	3.704	See Attached
Volatile Organic Compounds	0.202	0.302	See Attached
Lead	NONE	NONE	N/A
Hydrogen Sulfide	NONE	NONE	N/A
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Acetaldehyde	4.30E-04	6.44E-04	See Attached
Acrolein	5.18E-05	7.77E-05	See Attached
Benzene	5.22E-04	7.84E-04	See Attached
1,3-Butadiene	2.19E-05	3.28E-05	See Attached
Formaldehyde	6.61E-04	9.91E-04	See Attached
Naphthalene	4.75E-05	7.12E-05	See Attached
Toluene	2.29E-04	3.44E-04	See Attached
Xylenes	1.60E-04	2.39E-04	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Attachment 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

EMISSION SOURCE ESTIMATES FROM 96 HP DIESEL GENERATOR
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Regulated Pollutant	Engine Rating (MMBtu/hr) (a)	Engine Rating (MMBtu/yr) (a)	Operating Hours (b)	Emissions Factor (c) (lb/MMBtu)	Maximum Emissions (lb/hr)	Maximum Emissions (tpy)
VOCs	0.560	1,680	3,000	3.60E-01	0.202	0.302
NO_x	0.560	1,680	3,000	4.41E+00	2.470	3.704
SO_x	0.560	1,680	3,000	2.90E-01	0.162	0.244
CO	0.560	1,680	3,000	9.50E-01	0.532	0.798
TSP (d)	0.560	1,680	3,000	3.10E-01	0.174	0.260
PM_{10}	0.560	1,680	3,000	3.10E-01	0.174	0.260
$PM_{2.5}$ (d)	0.560	1,680	3,000	3.10E-01	0.174	0.260
HAZARDOUS AIR POLLUTANTS (HAPs)						
Acetaldehyde	0.560	1,680	3,000	7.67E-04	4.30E-04	6.44E-04
Acrolein	0.560	1,680	3,000	9.25E-05	5.18E-05	7.77E-05
Benzene	0.560	1,680	3,000	9.33E-04	5.22E-04	7.84E-04
1,3-Butadiene	0.560	1,680	3,000	3.91E-05	2.19E-05	3.28E-05
Formaldehyde	0.560	1,680	3,000	1.18E-03	6.61E-04	9.91E-04
Napthalene	0.560	1,680	3,000	8.48E-05	4.75E-05	7.12E-05
Toluene	0.560	1,680	3,000	4.09E-04	2.29E-04	3.44E-04
Xylenes	0.560	1,680	3,000	2.85E-04	1.60E-04	2.39E-04
Total HAPs					2.12E-03	3.18E-03

Notes:

(a) Engine rating based on 4 gal/hr diesel fuel * 140,000 Btu/gal

(b) Operating hours based on estimation from Lockwood staff.

(c) Emissions factors for criteria pollutants and HAPs for diesel engines are from AP-42 (10/96) Tables 3.3-1 and 3.3-2.

(d) Emission Factor Source: AP-42 Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1
According to note 'b' on Table 3.3-1, all particulate matter from fuel combustion is assumed to be less than 1 micron in aerodynamic diameter. Therefore, the emission factor will be used for PM-10, PM-2.5 and TSP.

SECTION 8
EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

SECTION 8
EMISSION UNIT SPECIFIC (96 HP DIESEL GENERATOR)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
NAC 445B.2203 *(State Only Requirement)* **Emissions of Particulate Matter - Fuel Burning Equipment** 1. Source may not cause or permit the emission of PM_{10} resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas: a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat. b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$ c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$ 2. For the purposes of paragraphs b and c of subsection 1: a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(a) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table: Heat input in millions of — Maximum allowable emission of particulate matter in pounds per hour per million Up to and including 10 . . . . . 0.600 100. . . . . .0.352 1,000. . . . . 0.206 10,000. . . . . 0.091 100,000. . . . . 0.025		Recordkeeping	Estimated emissions are 0.174 lbs/hr of PM so 0.6 lb/hr will be met. In Compliance
SIP 445.731(1)(b) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$ Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
SIP 445.731(1)(c) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$ where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (96 HP DIESEL GENERATOR)
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Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.731(3) - *(Federally Enforceable SIP Requirement)* **Particulate Matter - Fuel Burning Equipment** Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.	Emission unit has a heat input less than 4 million Btu/hr; therefore, this rule does not apply.		
NAC 445B.22033, 445B.22027 *(State Only Requirement)* **Emissions of Particulate Matter - Sources Not Otherwise Limited** 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM_{10} to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section. SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67}$ ($4.10P^{0.67}$) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.732 (3) - *(Federally Enforceable SIP Requirement)* Particulate Matter - Industrial Sources When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11}$-18.14 ($55P^{0.11}$- 40) "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.22047 *(State Only Requirement)* Sulfur Emissions - Fuel Burning Equipment 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation:		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.4 pounds/hr based on 0.56 MMbtu/hr.

SECTION 8
EMISSION UNIT SPECIFIC (96 HP DIESEL GENERATOR)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Y = 0.7X 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, Y = 0.4X Solid Fuel, Y = 0.6X Combination, Y = (L(0.4) - S(0.6))/(L + S) 4. For the purposes of subsections 2 and 3: (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel.			In Compliance
SIP Article 8.1 and 8.2 *(Federally Enforceable SIP Requirement)* Sulfur Emissions - Fuel Burning Equipment 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: Y = 1.26X (Y = 0.7X) "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.		Recordkeeping of fuel amounts.	Resultant sulfur max allowed: E=0.4 pounds/hr based on 0.56 MMbtu/hr. In Compliance
SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations: Liquid Fuel: Y = 0.7X (Y = 0.4X) Solid Fuels: Y = 1.1X (Y = 0.6X) Combination Fuel: $Y = \frac{L(0.7) + S(1.1)}{L + S}$ "X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel. 8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.2204, 445B.22043, 445B.2205 *(State Only Requirement)* Other Processes Which Emit Sulfur 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.	Emission unit is not under this category; therefore, this rule does not apply.		

SECTION 8
EMISSION UNIT SPECIFIC (96 HP DIESEL GENERATOR)
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904}$ $(0.292P^{0.904})$ When "E" is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.	Emission unit is not under this category; therefore, this rule does not apply.		
SIP 445.746 - *(Federally Enforceable SIP Requirement)* Other Sulfur Emitting Processes SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.	Emission unit is not under this category; therefore, this rule does not apply.		
NAC 445B.22017 *(State Only Requirement)* Maximum Opacity of Emissions 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.		No Specific Requirements	In Compliance
SIP 445.721 *(Federally Enforceable SIP Requirement)* Visible Emissions from Stationary Sources These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.		No Specific Requirements	In Compliance

APPENDIX C

MANUFACTURER'S GUARANTEES

Equipment Data Sheet

Spec #: **P0801**
Sheet #: **1 of 1**
By: **BA**
Date: **8-May-2008**

10" Candlestick Flare

Reference Designator or Item #: FLR-301 **Lockwood**

Quantity	1	
Manufacturer or Approved EqualModel #	**Perennial Energy, Inc.**	**West Plains, MO 65775 USA**
Capacity	**63.0 MMBtu/hr**	
Turndown Ratio	**10 : 1**	
Design LFG Energy Density	**500 Btu/ft^3**	
Design Criteria	**EPA-- 40CFR, Section 60.18**	
Theoretical NMOC Destruction Efficiency	**≥98%**	**Per EPA-CICA Fact Sheet**
Theoretical Maximum Emissions (NOx / CO)	**0.07 lb/MMBtu / 0.37 lb/MMBtu**	
Design Heat Flux	**600 Btu/hr-ft^2**	
Flame Presence Monitoring	**Yes**	**Thermocouple, Type "K"**
Burner Tip O.D. / I.D. (Inches)	**10.75 / 10.42**	
Overall Flare Height	**29 Feet**	
Inlet Pipe Size (IPS)	**10 Inch**	
Flare Mast Pipe Size (IPS)	**10 Inch**	
Burner Nozzle Size (IPS / Schedule)	**10 " Sch 10**	
Burner Nozzle Size, O.D./I.D. (inches)	**10.75 / 10.42**	
Max Nozzle Velocity	**3546 std. ft/min**	
Fuel Gas Nozzle Adjustment	**Yes**	**Manual**
Wind Shroud Air Inlet Adjustment	**Yes**	**Manual**
Wind Shroud Diameter, O.D./I.D. (inches)	**46 / 44.125**	**Height = 60 Inches**
Wind Shrould Insulation	**2 " of Ceramic Fiber Blanket**	**8 lb/ft^3 Density**
Insulation Attachment	**Inconel Studs & Retainers**	
Insulations Layers	**2**	
Wind Shroud -- Construction Material	**304L Stainless Steel**	**ASTM A240 / ASME SA240**
Flare Burner -- Construction Material	**304L Stainless Steel**	**ASTM A312**
Flare Mast -- Construction Material	**Carbon Steel Pipe**	**ASTM A53**
Self Supporting Base	**Integrated into system skid**	**ASTM A36**
Other Flare Equipment		
Flame Arrester	**Groth 10 Inch**	**All Aluminum**
Safety Shutdown Valve (SSV)	**Pneumatic 10 Inch**	**SS Disc & Trim w/ Viton Elastomer**
SSV Power Source	**Compressed Air**	**By Others**
Supplied with Additional Equipment ?	**Yes**	**See notes**
Structural Design Criteria	UBC 100 mph & Seismic Zone 4 *	

System includes 2100 SCFM Gas Handling System inluding PEI inlet demister, HSI Blower, inlet flow control valve, flow meter, and Controls.

* When properly attached to an appropriately designed and constructed concrete equipment pad

APPENDIX D

LIQUID STORAGE TANK APPLICATION FORM

LIQUID STORAGE TANK
APPLICATION FORM
CLASS I-B

9 **Check here if this is an alternative operating scenario**

Section 1 - Equipment Description

a. Manufacturer of tank Joor

b. SIC Code 4953 c. Liquid Stored 2,000 gal

d. Date of installation 1992

e. Tank Dimensions:

Shell height (feet) 7.66 Shell diameter (feet) 7.75

Liquid height (feet) _____ Average liquid height (feet) _____

Volume (gallons) 2,000

f. Paint characteristics:
Shell color/shade (please check one) ☐White/white ☐Aluminum/specular ☐Aluminum/diffuse ☐Gray/light ☒Gray/medium ☐Red/primer

Shell condition Underground Storage Tank

g. Roof color/shade (please check one) ☐White/white ☐Aluminum/specular ☐Aluminum/diffuse ☐Gray/light ☐Gray/medium ☐Red/primer

Roof condition N/A – Underground Storage Tank

h. Roof characteristics: Type (please check one)_:

☐Cone ☐Dome ☐External floating roof ☐Internal floating roof

For cone or dome roof, specify height (feet)_____

For cone roof, specify slope (ft/ft)_____

For dome roof, specify radius (feet)_____

Tank construction: ☒welded ☐riveted

Primary rim seal: ☐vapor-mounted ☐liquid-mounted ☐mechanical shoe

Secondary seal: ☐weather shield ☐rim-mounted ☐none

Roof type: ☐pontoon ☐double deck

Roof fittings: ☐access hatch ☐gauge-float well ☐gauge-hatch/sample well ☐rim vent ☐roof drains ☐roof leg ☐unslotted guide pole wells ☐slotted guidepole/sample wells ☐vacuum breaker

j. For internal floating roof, please complete the following:

Primary seal: ☐resilient foam-filled ☐wiper seals ☐other (please specify) _____

Secondary seal: ☐resilient foam-filled ☐wiper seals ☐other (please specify)_____

Roof fittings: ☐access hatch ☐gauge-float well ☐gauge-hatch/sample well ☐rim vent ☐roof drains ☐roof leg ☐unslotted guide pole wells ☐slotted guidepole/sample wells ☐vacuum breaker ☐column wells (# of columns _____) ☐Ladder wells ☐stub drains

k. True vapor pressure of liquid (psia) ~8.8 l. Reid vapor pressure of liquid (psi) 9.0

m. UTM Coordinates 4375197 meters N; 274839 meters E; Zone 11
(Please specify NAD 27☒or NAD 83 ☐)

LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED

Section 2 - Operating Parameters

a. Maximum throughput (gallons per year) 7,000

b. Method of filling (submerged fill) fill bucket

Section 3 - Reserved

Section 4 - Pollution Control Equipment (this section *must* be completed)
-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, internal floating roof, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)	Uncontrolled	
Pollutant(s) Controlled	None	
Manufacturer	N/A	
Manufacturer's Guarantee (see Note 1)	N/A	
Stack height (feet from ground level)	N/A	
Stack inside diameter (feet)	N/A	
Temperature (°F) at design capacity	N/A	
Stack exit velocity (feet per second)	N/A	
Gas volume flow rate: actual cubic feet per minute	N/A	
Gas volume flow rate: dry standard cubic feet per minute	N/A	
Unusual stack characteristics (e.g., raincap, horizontal discharge)	N/A	

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

There are no required compliance monitoring devices for the 2,000 gallon gasoline underground storage tank.

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

During fueling operations, the operator conducts a visual inspection while material is pumped into the tank. Care is taken to avoid spills caused by overtopping and the operator is responsible for ensuring that all valves are working properly. Any spills are cleaned up using sorbent materials. During tank loading and unloading operations, drivers are required to be out of the trucks monitoring operations. Drivers and all personnel are also involved in connecting and disconnecting the fuel transfer lines, so an interlocked warning system is not necessary to prevent departure before complete disconnection of transfer lines. Before drivers or affected personnel leave the site, they are required to examine the lower-most drain in addition to other outlets for any sign of leakage. When necessary, outlets are adjusted to prevent leakage while in transit. Product in the underground storage tanks is monitored with a “Veeder-Root ILS 350” Veeder Root that would produce an audible and visual alarm.

LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM_{10}			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds	0.046	0.011	See Attached
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant[1])			
Hexane	6.21E-04	2.72E-03	See Attached
1,1,2-Trichloroethane	2.11E-06	9.24E-06	See Attached
Benzene	1.67E-04	7.30E-04	See Attached
Toluene	2.22E-04	9.75E-04	See Attached
Ethylbenzene	2.32E-05	1.02E-04	See Attached
Xylene	1.13E-04	4.94E-04	See Attached
Cumene	1.05E-06	4.62E-06	See Attached
Chlorobenzene	2.11E-06	9.24E-06	See Attached
Napthalene	1.05E-06	4.62E-06	See Attached
Other Regulated Pollutants (Specify[2])			

*Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

[1]A list of Hazardous Air Pollutants is contained in Appendix 4.

[2]Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

INSIGNIFICANT ACTIVITY
EMISSION SOURCE ESTIMATES FROM FUEL STORAGE AND DISPENSING
LOCKWOOD LANDFILL
STOREY COUNTY, NEVADA

Fuel Amounts	VOC Emissions Factor[(a)] (lb/1000 gal)	Amount Dispensed (gal/yr)[(b)]	Total VOC Emissions (tpy)	Total VOC Emissions (lb/hr)
Tank Losses	8.2	7,000	0.0287	6.55E-03
Vapor Control Unit Losses	5.0	7,000	0.0175	3.99E-03
Total Losses			0.0462	0.0105
HAPs from Gasoline[(c)]	**Composition Percent (% of total)**	**Gasoline VOC Emissions (tpy)**	**Compound Emissions (tpy)**	**Compound Emissions (lb/hr)**
Hexane (Isomers + n-Hexane)	5.89%	0.0462	2.72E-03	6.21E-04
1,1,2-Trichloroethane	0.02%	0.0462	9.24E-06	2.11E-06
Benzene	1.58%	0.0462	7.30E-04	1.67E-04
Toluene	2.11%	0.0462	9.75E-04	2.22E-04
Ethylbenzene	0.22%	0.0462	1.02E-04	2.32E-05
Xylene (Isomers + o-Xylene)	1.07%	0.0462	4.94E-04	1.13E-04
Cumene	0.01%	0.0462	4.62E-06	1.05E-06
Chlorobenzene	0.02%	0.0462	9.24E-06	2.11E-06
Napthalene	0.01%	0.0462	4.62E-06	1.05E-06
TOTAL HAPs			5.05E-03	1.15E-03

Notes:

This emission unit qualifies as an insignificant activity per NAC 445B.288 (f) for storage containers for petroleum liquids having a capacity of less than 40,000 gallons.

The site has one 10,000 gallon underground diesel fuel storage tank, one 2,000 gallon UST gasoline tank, one less than 1,000-gallon aboveground diesel tank and multiple oil tanks.

Emissions from the oil tanks and diesel fuel tank are negligible.

(a) Emissions factors (amount of fuel volatilized) are from EPA's FIRE (Factor Information and Retrieval System) database and from AP-42 Section 4-4-5.

(b) Average amount of unleaded gasoline dispensed provided by the landfill staff.

(c) Composition percent for volatilized HAPs from gasoline are from EPA's SPECIATE database v. 3.1 (Profile #1015).

APPENDIX E

DUST CONTROL PLAN

ndep
NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
protecting the future for generations

SURFACE AREA DISTURBANCE PERMIT
FUGITIVE DUST CONTROL
AND
PROCESS EQUIPMENT EMISSION CONTROL PLAN
EXISTING STATIONARY SOURCE

I. COMPANY INFORMATION				
COMPANY NAME:	Refuse Inc.	PERMIT NUMBER: AP		4953-1148.01
BUSINESS ADDRESS:	1390 East Commercial Row	Reno	Nevada	Washoe
	(STREET)	(CITY/TOWN)	(STATE)	(COUNTY)
MAILING ADDRESS:	1390 East Commercial Row	Reno	Nevada	89520
	(STREET/P.O BOX)	(CITY/TOWN)	(STATE)	(ZIP CODE)
PHONE NUMBER:	(775) 326-2449	FAX NUMBER:	(775) 788-7863	

II. RESPONSIBLE OFFICIAL (R.O.)				
R.O. NAME	Joseph Prary	TITLE	District Manager	
BUSINESS ADDRESS:	2401 Canyon Way	Sparks	Nevada	Washoe
	(STREET)	(CITY/TOWN)	(STATE)	(COUNTY)
MAILING ADDRESS:	2401 Canyon Way	Sparks	Nevada	89434
	(STREET/P.O BOX)	(CITY/TOWN)	(STATE)	(ZIP CODE)
PHONE NUMBER:	(775) 343-7372	FAX NUMBER:	(775) 342-2328	

III. PHYSICAL PLANT					
FACILITY ADDRESS:	2401 Canyon Way	Sparks	Nevada	Storey	
	(STREET)	(CITY/TOWN)	(STATE)	(COUNTY)	
MAILING ADDRESS:	2401 Canyon Way	Sparks	Nevada	89434	
	(STREET/P.O BOX)	(CITY/TOWN)	(STATE)	(ZIP CODE)	
PHONE NUMBER:	(775) 342-0401	FAX NUMBER:	(775) 342-2328		
MAJOR X- STREETS:					
SECTION:	22,23,26,27	TOWNSHIP:	19N	RANGE:	21E
UTM:	4360.225 km North, 275.407 km East				
PROJECT MAPS: (MARK TYPE OF MAP ATTACHED)	☐ (TRACT)	☐ (SITE)	☐ (TOPOGRAPHIC)	☐ (OTHER -)	

IV. ACKNOWLEGEMENT OF ENVIRONMENTAL CONTROL REQUIREMENTS BY R.O.

I, Joseph Prary (R.O. Name), the Responsible Official for Refuse Inc., Lockwood Regional Landfill (Company Name), have:
(1) read and understand the provisions of Nevada Administrative Code (NAC) Section 445B.22037 "Emissions of Particulate Matter: Fugitive Dust" which requires that we prevent controllable fugitive dust to become airborne on a 7-day/24-hour /day basis at our facility's site; and, (2) read and understand the terms and conditions of our facility's Nevada Division of Environmental Quality Bureau of Air Pollution Control Permit AP 4953-1148.01 (Permit Number).

Signed _____ (R.O. Signature) Date 7-26-12

Nevada Division of Environmental Protection - Bureau of Air Pollution Control
901 South Stewart Street, Suite 4001, Carson City, NV 89701
(775) 687-9350 FAX (775) 687-6396

ndep
NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
protecting the future for generations

SURFACE AREA DISTURBANCE PERMIT
FUGITIVE DUST CONTROL
AND
PROCESS EQUIPMENT EMISSION CONTROL PLAN
EXISTING STATIONARY SOURCE

V. FACILITY OPERATIONS

Description of Facility Operations: See Attached Dust Plan from Site Operating Plan

VI. FUGITIVE DUST CONTROL - BEST PRACTICAL METHODS

Best Practical Methods for controlling fugitive dust (Facility Site): The best practical methods (BPMs) to be used for controlling fugitive dust generated at this facility's disturbed areas are as follows. . This is not an all inclusive list, other BPMs may also be appropriate for this section (check appropriate BPMs):

- ☑ Use of water trucks to spray water on disturbed areas on a regular basis
- ☑ Pre-watering of areas to be disturbed (including all unpaved onsite roads and staging areas)
- ☑ Graveling of roadways, storage areas and staging areas
- ☑ Posting and limiting vehicle speeds to 10-15 miles per hour
- ☑ Use of wind fences to reduce wind impacts
- ☐ Cessation of all operations when winds make fugitive dust control difficult
- ☑ Fencing or berming to prevent unauthorized access to disturbed areas.
- ☑ Application of water sprays on material storage piles on a regular basis
- ☐ Covering material storage piles with tarpaulin or geo-textiles; tenting
- ☐ Use of overhead water spray rack or water hoses to water down uncovered trucks transporting processed materials prior to leaving facility boundaries.
- ☑ Track-out controls
  - ☐ Graveled entrance and exit areas
  - ☐ Street Sweeping
  - ☑ Other
- ☑ Subcontractors: Any and all subcontractors (including truck drivers) informed of their responsibilities for the control of fugitive dust while they are on the facility site (including haul roads to and from the site). In addition, they will be advised of the best practical methods for controlling their fugitive dust as well as keeping off adjacent areas not covered by the facility's permit.
- ☑ Equipment Operator and/or Responsible Official has read and understands the requirements in the facility's Surface Area Disturbance Permit and Plan
- ☐ Other Applicable BPM: _____
- ☐ Other Applicable BPM: _____
- ☐ Other Applicable BPM: _____

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SURFACE AREA DISTURBANCE PERMIT
FUGITIVE DUST CONTROL
AND
PROCESS EQUIPMENT EMISSION CONTROL PLAN
EXISTING STATIONARY SOURCE

VII. FUGITIVE EMISSIONS CONTROL - BEST PRACTICAL METHODS

Best Practical Methods for controlling fugitive emissions (Process Equipment): The best practical methods for controlling fugitive emissions from process equipment used at this facility are as follows (check appropriate BPMs):

- ☑ Air Quality Operating Permit posted onsite in area easily accessible by employees (Permit requirement)
- ☑ Equipment Operator and/or Responsible Official has read and understands the requirements in the facility's Air Quality Operating Permit
- ☑ Proper use of emission control equipment as specified in the facility's Air Quality Operating Permit terms and conditions
- ☐ Daily pre-operational check of emission control equipment by Equipment Operator to assure proper operation of the emission control equipment (Attach copy of operator daily checklist to this plan). The daily checklist must be signed by equipment operator and kept with the operational log required in Section VIII)
- ☐ Visual emission training of equipment operator to recognize excess emissions and authority to shut down operations if excess emission occurs (If certified, attach a copy of the Equipment Operator's current VE certificate)
- ☐ Other Applicable BPM: _____
- ☐ Other Applicable BPM: _____
- ☐ Other Applicable BPM: _____

VIII. FACILITY FUGITIVE DUST/EMISSIONS RESOURCES INFORMATION

Water Trucks: Water trucks may be owned or rented. In the event that one or more water truck(s) necessary for control of fugitive dust (owned, rented or leased) becomes inoperable, additional water truck(s) will be rented or leased for until such time the water truck(s) are operable. Operable water truck (s) must be available on 7-day/week, 24-hour/day basis.

Number of Water Trucks:

Water Truck # 1	1996 Caterpillar	**Capacity Gallons:**	5,000
Water Truck # 2	2004 Freightliner	**Capacity Gallons:**	3,750
Water Truck # 3	2000 Sterling	**Capacity Gallons:**	3,750

Location of water supply for control of fugitive dust:

There is on-site production well that is located next to the lined holding pond on the west side of the facility beyond the bioremediation facility. Water used for dust control is stored in the following locations: (1) a lined 400,000 gallon capacity pond. (2) A series of 5 horizontal above ground tanks, total capacity of 80,000 gallons and, (3) 3-20,000 gallon tanks, 2-10,000 gallon tanks, and 1-10,000 gallon horizontal above ground steel tank located in the landfill. They facility to also permitted to accept effluent water from the Canyon GID located in Lockwood, NV which can be used for dust control. Effluent water is stored on-site in a 20,000 gallon water holding tank and/or the lined 400,000 gallon capacity pond. All of the water trucks can fill up at any of these locations.

Water Truck and Construction Equipment Operational Log: the daily operations log book for recording the operation of the water truck and construction equipment is maintained on the facility site. The log contains the following information:

- Hours of operation for each water truck and construction equipment (front loader, scraper, etc.) used onsite.
- The daily quantity of water used for fugitive dust control purposes.
- Starting and ending times for the workday.
- Record of water truck (including rental water truck) and construction equipment maintenance, malfunctions and repairs.

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EXISTING STATIONARY SOURCE

Location of water supply for control of fugitive emissions:

There is on on-site production well that is located next to the lined holding pond on the west side of the facility beyond the bioremediation facility. Water used for dust control is stored in the following locations: (1) a lined 400,000 gallon capacity pond. (2) A series of 5 horizontal above ground tanks, total capacity of 80,000 gallons and, (3) 3-20,000 gallon tanks, 2-10,000 gallon tanks, and 1-10,000 gallon horizontal above ground steel tank located in the landfill. They facility to also permitted to accept effluent water from the Canyon GID located in Lockwood, NV which can be used for dust control. Effluent water is stored on-site in a 20,000 gallon water holding tank and/or the lined 400,000 gallon capacity pond. All of the water trucks can fill up at any of these locations.

VIII. FACILITY FUGITIVE DUST/EMISSIONS RESOURCES INFORMATION (CONTINUED)

Process and Emission Control Equipment Operational Log: the daily operations log book for recording the operation of the permitted process equipment is maintained on the facility site. The log contains the following information and attachments:

- Hours of operation for each System shown on the Air Quality Operating Permit
- Starting and ending times for the workday
- Daily pre-operational check of emission control equipment checklists (signed and dated)
- Record of all emission control equipment malfunctions, repairs and servicing. Record down times and when equipment was returned to service.
- Record of process equipment malfunctions, servicing and down times and when equipment was returned to service

IX. NOTIFICATION

Excess Emissions: The following training requirements are recommended as an aid maintaining compliance with permit terms and conditions and are not mandatory. It is recommended that the R.O. and/or selected equipment operators be given USEPA Method 9 visual emission training (or equivalent, as determined by NDEP) to recognize when the facility's permit's opacity limits are being exceeded and procedures to follow to bring systems back into compliance. It is recommended that all training records be kept with the facility's Process and Emission Control Equipment Operational Log.

X. TRAINING

Training Requirements: The following training requirements are recommended as an aid in maintaining compliance with permit terms and conditions and are not mandatory. It is recommended that the R.O. and/or selected equipment operators be given USEPA Method 9 visual emission training (or equivalent, as determined by NDEP) to recognize when the facility's permit's opacity limits are being exceeded and procedures to follow to bring systems back into compliance. It is recommended that all training records be kept with the facility's Process and Emission Control Equipment Operational Log.

XI. PLAN REVISION

Plan Revision Requirements: In the event there are changes in the operation of the facility, modifications made to the facility's Air Quality Operating Permit or changes to the Nevada Administrative Code affecting this plan, the plan shall be revised to reflect those changes and modifications and resubmitted to the Nevada Division of Environmental Protection for review and evaluation.

Plan Date:	July 25, 2012

Nevada Division of Environmental Protection - Bureau of Air Pollution Control
901 South Stewart Street, Suite 4001, Carson City, NV 89701
(775) 687-9350 FAX (775) 687-6396

SECTION 7

FUGITIVE DUST AND WINDBLOWN DEBRIS MANAGEMENT

7.1 INTRODUCTION

Fugitive dust emissions are generated from a number of activities and areas at the Landfill. These include emissions from traffic on the haul roads, dumping of refuse at the working face of the Landfill, and the collection and spreading of the soil cover. In addition, fugitive dust emissions are generated from wind blowing dust from inactive Landfill cover areas, woodgrinding and asphalt grinding operations.

Windblown debris at the Landfill results from the release of paper, plastic and other light materials during refuse disposal.

Fugitive dust and windblown debris are considered nuisances at the Landfill and are controlled in compliance with air permit No. 9999-0180, see Appendix 4-5.

7.2 CLIMATOLOGICAL CONDITIONS AFFECTING DUST AND DEBRIS CONTROL

Climatological conditions at the Landfill can affect dust and debris control in a number of ways. Excessive wind speeds promote the generation of windblown dust and debris emissions, and the dispersion of these emissions once they become airborne. The arid conditions present at the Landfill site also impact air quality by promoting the drying of soils and refuse making the area more susceptible to dust generation.

7.3 PROCEDURES TO CONTROL FUGITIVE DUST AND WINDBLOWN DEBRIS

Presented in the following sections are procedures to control fugitive dust in accordance with NAC 445.734(1) which states that, "No person may cause or permit the handling, transporting or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne." Additional fugitive dust control measures will be evaluated in the event air quality monitoring studies indicate that particulate ambient air quality standards are being exceeded.

7.3.1 Dust from Haul Roads and Equipment Travel

Fugitive dust emissions from haul roads and equipment travel are affected by the moisture and silt content of the road surface, the number of trips, and the speed of travel.

Where practical, haul roads are constructed with soil materials having a low silt content. The diatomaceous earth prevalent in the Landfill area is not used for road construction because of its high silt content, as long as other suitable materials are available.

The haul road and areas adjacent to the working face of the Landfill are watered throughout the day during dry weather using a water wagon equipped with a spraying mechanism. Increasing the moisture content of the road surface allows agglomeration

of soil particles to control their release. In addition, asphalt grindings are placed during dry conditions to help minimize dust emissions.

Administrative controls implemented at the Landfill for dust control include the limitation of vehicle speeds to 15 miles per hour on all roads within the Landfill, prohibition of vehicle travel off of established roads where practical, and minimization of equipment travel between the maintenance yard and the working face of the Landfill.

7.3.2 Dust from Solid Waste Handling

Fugitive dust emissions from solid waste handling are affected by the moisture and dust content of the refuse, the refuse fall distance, the rate of refuse disposal at the working face of the Landfill, and the wind speed. It is not desirable to significantly increase the moisture content of the refuse because of the potential for enhancing Landfill leachate and gas generation.

7.3.3 Dust from Soil Cover Collection and Spreading

Fugitive dust emissions from soil cover collection and spreading activities are affected by the moisture and silt content of the soil, the area involved, the soil drop distance and the wind speed. The soil used for cover must be collected within the Landfill area to minimize the area disturbed and to minimize fugitive dust emissions from soil hauling. Soil containing liquid waste material, which has a relatively high moisture content, may be transported from the borrow area to be utilized as soil cover. In addition, water sprays are used to minimize fugitive dust emissions from the soil cover surface.

7.3.4 Dust from Inactive Landfill Cover Areas

Inactive Landfill cover areas are those portions of the Landfill that have been previously filled with refuse and have been covered with soil. They are characterized by large flat areas with surface soils that contain a high silt content.

Administrative measures used to control fugitive dust emissions from inactive cover areas include limiting equipment and vehicle travel to established roads where practical.

7.3.5 Windblown Debris from Solid Waste Handling

The same measures discussed in Section 7.3.2 for control of fugitive dust emissions from solid waste handling activities are also employed to control windblown debris from solid waste handling. Portable fencing, used to control windblown debris, is transported to various areas of the Landfill area as needed. Windblown debris collected by stationary fence, netting and land areas surrounding the Landfill is collected on a daily basis in accordance with NAC 444.702(3) and disposed in the Landfill.

7.3.6 Dust from Woodgrinding Operation

When the woodgrinder is in operation water is fogged in the tub and phase II belt of the woodgrinder to control the dust. (Reference controls, AP4953-1148, See Appendix 4-5).

7.3.7 Dust from Asphalt Grinding Operation

The pile is normally sprayed prior to grinding. If necessary, spray bars are in place and turned onto the feed conveyor. Another set of spray bars are in place at the grinder hopper. This is sufficient to abate dust during grinding operations. (Reference controls, AP4953-1148, See Appendix 4-5).

7.4 METEOROLOGICAL & AIR QUALITY MONITORING PROCEDURE AND FREQUENCY

7.4.1 Introduction

An air quality monitoring program is being conducted at the Landfill to monitor fugitive dust, also termed particulate (PM-10, PM-2.5) emissions, and meteorological conditions in order to satisfy conditions incorporated in the 23 July 1990 Special Use Permit issued by Storey County and comply with Subtitle D requirements. This program is discussed in the Facility Monitoring Plan (K/J 1995).

A semi-annual monitoring frequency for the Landfill has been established, and is consistent with existing regulatory requirements. A technician is currently provided by an independent firm under contract to perform both the dust and meteorological monitoring activities. Two half-days are required for each fugitive dust monitoring event. The technician performs calibrations, operates the dust and meteorological monitoring equipment, collects samples and sends them to a laboratory for analysis, collects and analyzes meteorological data, and reports the data to the Landfill management.

7.4.2 Meteorological Monitoring

The purpose of the site meteorological monitoring is to document wind conditions during the fugitive dust monitoring activities. Meteorological monitoring is conducted on site at the monitoring station as shown in Figure 7-1. The meteorological parameters measured are wind speed, direction, temperature and relative humidity.

7.4.3 Fugitive Dust Monitoring

Fugitive dust or particulate (PM-10) & (PM-2.5) monitoring is conducted concurrent with the meteorological monitoring, at the monitoring station (see Figure 7-1) to determine the impact on air quality caused by fugitive dust emissions from the Landfill. The dust monitoring analysis is conducted using two high volume air monitors designed to collect respirable dust particles with an aerodynamic diameter less than or equal to 10 or 2.5 micrometers (PM-10) or (PM-2.5).

7.5 RECORDKEEPING AND NOTIFICATION

Records resulting from the fugitive dust and meteorological monitoring program are retained for at least two years in a permanent form suitable for inspection, as required by NAC 445.692. These records include the date and time, the measured dust concentrations, the hourly average wind speed and direction data, the 24 hour average wind speed and direction data, supporting calculations, and the name and signature of the monitoring technician for each monitoring event. These records are maintained in the administrative offices by the Refuse, Inc. Landfill Manager.

In addition, documentation of fugitive dust control measure implementation that would have to be submitted to the Director of the Division of Environmental Protection after a standard exceedance as discussed below shall be kept by the Landfill Manager.

If fugitive dust emission concentrations (PM-10) exceed the Nevada and EPA ambient air quality standard of 150 mg/m3 or 65 ug/m3 for PM 2.5, the director of the Nevada State Division of Environmental Protection shall be notified within 24 hours of its occurrence and sufficient information to determine the seriousness of exceedance shall be provided in writing within 15 days of the occurrence as required by Section 445.667 (4 and 5) of the Nevada Administrative Code. The phone number and address for notification is:

Director, Bureau of Air Quality
Division of Environmental Protection
901 S. Stewart St, Suite 4001
Carson City, Nevada 89706
(775) 687-9337

The notification to the Director shall include the following information:

- The identity of the source.
- The measured magnitude of the excess emissions.
- The time and estimated duration of the excess emissions.
- The cause of the excess emissions.
- Steps taken to limit the excess emissions.
- Steps taken to prevent the recurrence of excess emissions.
- Documentation that the design, operations and administrative measures for the control of fugitive dust emissions were at all times implemented, to a maximum extent practicable (NAC 446.667, 5g), in a manner consistent with good practice for minimizing emissions.

APPENDIX F

SUPPLEMENTAL RICE INFORMATION FORM

Nevada Division of Environmental Protection, Bureau of Air Pollution Control - Major and Minor Source Permitting

Supplemental Information for Reciprocating Internal Combustion Engines (RICE) and Generators

The information provided on this table is necessary to supplement information provided in a Combustion Unit Application Form or Insignificant Activity Unit Information Form

Description	Date		Power		Type of RICE	Cylinder Displacement	Tier #	Subject to:
	Manufactured	Constructed*	(HP)	(KW)	(See Notes)	(Liter/Cylinder)		(NSPS Subpart IIII, Subpart JJJJ NESHAP Subpart ZZZZ)
Propane Emergency Generator	Aug-06		34	25	SI4SRB	3		NESHAP Subpart ZZZZ
Gasoline Pump	May-04		16		LU	0.588295		NESHAP Subpart ZZZZ

Construction (NSPS) means fabrication, erection, or installation of an affected facility.

Construction (NESHAP) means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Notes	
Code	Description
LU	Limited Use
LDG	Landfill/Digester Gas
NECI	Non-Emergency CI
ECI	Emergency CI
E-SI	Emergency Spark Ignition
SI4SRB	Spark Ignition 4-Stoke Rich Burn
SI4SLB	Spark Ignition 4-Stroke Lean Burn
SI2SLB	Spark Ignition 2-Stroke Lean Burn

APPENDIX G

FACILITY-WIDE APPLICABLE REQUIREMENTS TABLE 1

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Nevada Revised Statute (NRS) 445B.470 *(State Only Requirement)* Prohibited Acts Source shall not knowingly: 1. Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information; 2. Fail to pay any fee; 3. Falsify any material statement, representation or certification in any notice or report; or 4. Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions.		No Specific Requirement	In Compliance
NAC 445B.22013 *(State Only Requirement)* Prohibited Discharge Source shall not cause or permit the discharge into the atmosphere from any stationary source of any hazardous air pollutant or toxic regulated air pollutant that threatens the health and safety of the general public, as determined by the director.		No Specific Requirement	In Compliance
NAC 445B.225 *(State Only Requirement)* Prohibited Conduct: Concealment of Emissions Source shall not install, construct, or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.		No Specific Requirement	In Compliance
State Implementation Plan (SIP) Article 2.2 *(Federally Enforceable State Implementation Plan (SIP) Requirement)* Circumvention 2.2.1 - Except for the sole purpose of reducing the odor of an emission, Source shall not install, construct, or use any device which conceals any emission without resulting in a reduction in the total release of air contaminants to the atmosphere.		No Specific Requirement	In Compliance
NAC 445B.326.1 (445.7133.1) *Federally Enforceable Part 70 Program* Assertion of Emergency as Affirmative Defense to Action for Noncompliance Source may assert an affirmative defense to an action brought for noncompliance with a technology-based emission limitation contained in the Operating Permit if the holder of the Operating Permit demonstrates through signed, contemporaneous operating logs or other relevant evidence that: a. An emergency occurred as defined in 445B.056 and the holder of the Operating Permit can identify the cause of the emergency; b. The facility was being properly operated at the time of the emergency; c. During the emergency, the holder of the Operating Permit took all reasonable steps to minimize excess emissions; and d. The holder of the Operating Permit submitted notice of the emergency to the director within 2 working days after the emergency. The notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken to restore the normal operation of the		No Specific Requirement	In Compliance

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
facility.			
NAC 445B.315.2.h (445.7112.2.h) *Federally Enforceable Part 70 Program* Source shall provide the Bureau of Air Quality, within a reasonable time, with any information that the Bureau of Air Quality requests in writing to determine whether cause exists for modifying, revoking and reissuing, reopening and revising or terminating this Operating Permit or to determine compliance with the conditions of this Operating Permit.		No Specific Requirement	In Compliance
NAC 445B.315.i (445.7145, 445.7112.2.i) *Federally Enforceable Part 70 Program* Source shall pay fees to the Bureau of Air Quality in accordance with the provisions set forth in NAC 445B.327 and 445B.331.		No Specific Requirement	In Compliance
NAC 445B.315.2.k (445.7112.2.k) *Federally Enforceable Part 70 Program* A responsible official of Source shall certify that, based on information and belief formed after reasonable inquiry, the statements made in any document required to be submitted by any condition of an Operating Permit are true, accurate and complete.		No Specific Requirement	In Compliance
40 CFR 52.21(r)(4) *(Federally Enforceable PSD Program)* At such time that Source becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of 40 CFR Part 52.21 shall apply to the source or modification as though construction had not yet commenced on the source or modification.□		No Specific Requirement	In Compliance
(NAC 445B.252) *(State Only Requirement)* Testing and Sampling 1. To determine compliance with NAC 445B.001 (445.430) to 445B.395 (445.846), inclusive, before the approval or the continuance of an Operating Permit or similar class of permits, the director may either conduct or order the owner of any stationary source to conduct or have conducted such testing and sampling as the director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial startup of the facility and at such times as may be required by the director. 2. Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each applicable subsection of this section unless the director: a. Specifies or approves, in specific cases, the use of a method of reference with minor changes in methodology; b. Approves the use of an equivalent method; c. Approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific stationary source is in compliance; or d. Waives the requirement for tests of performance because the owner or operator of a stationary source has demonstrated by other means to the director□s satisfaction that the affected facility is in		Recordkeeping	In Compliance

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
compliance with the standard. 3. Tests of performance must be conducted under such conditions as the director specifies to the operator of the plant based on representative performance of the affected facility. The owner or operator shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of startup, shutdown, and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard. 4. The owner or operator of an affected facility shall give notice to the director 30 days before the test of performance to allow the director to have an observer present. A written testing procedure for the test of performance must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures. 5. Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions, or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the director's approval. 6. All testing and sampling will be performed in accordance with recognized methods as specified by the director. 7. The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power, and other pertinent allied facilities as may be required and specified in writing by the director must be provided and paid for by the owner of the stationary source. 8. All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with all provisions of these regulations, and copies of these results must be provided to the director no later than 60 days after the testing or sampling, or both.			
SIP Article 2.6 *(Federally Enforceable SIP Requirement)* <u>Testing and Sampling</u> 2.6.1 - To determine compliance with these regulations prior to approval of or prior to the continuance of an operating permit or similar class of permits, the Director may either conduct or order the owner of any source to conduct or have conducted such testing and sampling as the Director determines necessary. 2.6.2 - Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Director. 2.6.3 - Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, or (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Director□s satisfaction that the affected facility is in compliance with the standard.		Recordkeeping	In Compliance

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
2.6.4 - Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard. 2.6.5 - The owner or operator of an affected facility shall provide the Director 30 days prior notice of the performance test to afford the Director the opportunity to have an observer present. 2.6.6 - Each performance test shall consist of at least two separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs shall apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions, or other circumstances with less than two valid samples being obtained, an additional performance test(s) must be conducted. 2.6.7 - All testing and sampling will be performed in accordance with recognized methods as specified by the Director. 2.6.8 - The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power, and other pertinent allied facilities as may be required and specified in writing by the Director shall be provided and paid for by the owner of the source. 2.6.9 - All information and analytical results of testing and sampling shall be certified as to their truth and accuracy and as to their compliance with all provisions of these (SIP) regulations and copies of these results shall be provided to both the owner and Director.			
NAC 445B.22067 *(State Only Requirement)* Open Burning The open burning of any combustible refuse, waste, garbage, oil, or for any salvage operations, except as specifically exempted, is prohibited. Specific exemptions from open burning are described in NAC 445B.22067.2.		No Specific Requirement	In Compliance
SIP Article 5.1 *(Federally Enforceable SIP Requirement)* Open Burning The open burning of any combustible refuse, waste, garbage, oil fires, or for any salvage operations, except as specifically exempted, is prohibited. Specific exemptions from open burning are described in SIP Articles 5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4 and 5.2.5.		No Specific Requirement	In Compliance
NAC 445B.22087 *(State Only Requirement)* Odors Source may not discharge or cause to be discharged, from any stationary source, any material or regulated air		No Specific	In Compliance

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents comfortable enjoyment of life or property.		Requirement	
SIP Article 10 *(Federally Enforceable SIP Requirement)* Odors 10.1.1 - Source shall not discharge, or cause to be discharged from any source any material or air contaminant which is, or tends to be, offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property.		No Specific Requirement	In Compliance
NAC 445B.22093 *(State Only Requirement)* Organic Solvents and Other Volatile Compounds 1. Solvents or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizers, and manure must be processed, stored, used, and transported in such a manner and by such means as to minimize the tendency to evaporate, leak, escape, or be otherwise discharged into the ambient air causing or contributing to air pollution. If methods of control are available and feasible effectively to reduce the contribution to air pollution from evaporation, leakage, or discharge, as determined by the director, the installation and use of such methods, devices, or equipment for control is mandatory. 2. Source may not place, store, or hold in any new reservoir, stationary tank or other container with a capacity equal to or greater than 40,000 gallons any gasoline, petroleum distillate, or other volatile organic compound having a vapor pressure of 1.5 lb/square inch absolute or greater under actual storage conditions unless the tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent loss of vapor or gas to the atmosphere or is equipped with one of the following devices properly installed, in good working order, and in operation: a. A floating roof which consists of a pontoon type or double-deck roof which rests on the surface of the liquid contents and is equipped with a seal to close the space between the roof eave and tank wall or a vapor balloon or a vapor dome designed in accordance with accepted standards of the petroleum industry. This control equipment is not permitted if the gasoline or petroleum distillate has a vapor pressure of 11 lb/square inch absolute or greater under actual conditions. All gauging and sampling devices for tanks must be gas tight except when gauging or sampling is taking place. b. Other equipment proven to be of equal efficiency for preventing discharge of gases and vapors to the atmosphere. 3. Any tank for the storage of any other petroleum or volatile organic compound which is constructed or extensively remodeled on or after November 7, 1975, must be equipped with a submerged fill pipe or the equivalent, as approved by the director, for control of emissions. 4. All facilities for dock loading of products consisting of petroleum or other volatile organic compounds having a vapor pressure of 1.5 lb/square inch absolute or greater at loading pressure must have facilities for submerged filling by submerged fill pipe or an acceptable equivalent, for the control of emissions.		No Specific Requirement	In Compliance
SIP Article 9 *(Federally Enforceable SIP Requirement)* Organic Solvent, other Volatile Compounds 9.1 - Materials such as, but not limited to, solvents or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizers, and manure shall be processed, stored, used, and transported in such a manner and by		No Specific Requirement	In Compliance

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
such means as to minimize the tendency to evaporate, leak, escape, or be otherwise discharged into the ambient air causing or contributing to air pollution; and where control methods are available and feasible effectively to reduce the contribution to air pollution from evaporation, leakage, or discharge, as determined by the Director, the installation and use of such control methods, devices, or equipment shall be mandatory.			
SIP Article 9.2 *(Federally Enforceable SIP Requirement)* Storage Containers Equal to or Greater than 150 kiloliters (40,000 Gallons) 9.2.1 - Source shall not place, store, or hold in any new reservoir, stationary tank or other container any gasoline, petroleum distillate, or other volatile organic compound having a vapor pressure of 1,055 kilograms per square meter (1.5 lb/square inch absolute) or greater (under actual storage conditions) unless such tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent vapor or gas loss to the atmosphere or is equipped with one of the following vapor loss control devices (see 9.2.1, 9.2.1.2) properly installed, in good working order, and in operation. 9.2.1.1 - A floating roof which consists of a pontoon type or double-deck roof which rests on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof eave and tank wall; or a vapor balloon or a vapor dome, designed in accordance with accepted standards of the petroleum industry. This control equipment shall not be permitted if the gasoline or petroleum distillate has a vapor pressure of 7,734 kilograms (11 lb/square inch absolute) or greater under actual conditions. All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place. 9.2.1.2 - Other equipment proven to be of equal efficiency for preventing discharge of gases and vapors to the atmosphere.	The site does not have any storage containers greater than 40,000 gallons; therefore this regulation does not apply.		
SIP Article 9.2 *(Federally Enforceable SIP Requirement)* Storage Containers Equal to or Greater than 150 kiloliters (40,000 Gallons) (Continued) 9.2.2 - Any other petroleum or volatile organic compound storage tank which is constructed or extensively remodeled, on or after the effective date of these regulations, shall be equipped with submerged fill pipe or equivalent, as approved by the Director for control of emissions.	The site does not have any storage containers greater than 40,000 gallons; therefore this regulation does not apply.		
SIP Article 9.2 *(Federally Enforceable SIP Requirement)* Storage Containers Equal to or Greater than 150 kiloliters (40,000 Gallons) (Continued) 9.2.3 - All facilities for dock loading of petroleum or volatile organic compound products, having a vapor pressure of 1,055 kilograms per square meter (1.5 pounds per square inch absolute) or greater at loading pressure, shall provide for submerged filling by a submerged fill pipe or acceptable equivalent for the control of emissions	The site does not have any storage containers greater than 40,000 gallons; therefore this regulation does not apply.		
NAC 445B.22037 *(State Only Requirement)* Fugitive Dust 1. Source may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne. 2. Except as otherwise provided in subsection 4, Source may not cause or permit the construction, repair,		Site controls fugitive dust in accordance with the dust control plan entitled "Lockwood Regional	In Compliance Site maintains Title V permit for landfill, which through

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, □best practical methods□ includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation. 3. Except as provided in subsection 4, Source may not disturb or cover 5 acres or more of land or its topsoil until he has obtained an Operating Permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land. 4. The provisions of subsections 2 and 3 do not apply to: a. Agricultural activities occurring on agricultural land; or b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.		Landfill, November 2, 1999, Dust Control Plan" as part of approved Operating Plan by SW Management Authority. Site submitted updated Dust Control Plan per NDEP's request in September 2012.	applications and basic knowledge of what a landfill is, clearly defines the site as including such disturbance; therefore site has necessary permit noted in this provision.
SIP Article 7.3 *(Federally Enforceable SIP Requirement)* Fugitive Dust 7.3.1 - Source shall not cause or permit the handling, transporting, or storing of any material in a manner which allows, or may allow, controllable particulate matter to become airborne. 7.3.2 - In areas designated by the Director, Source shall not cause or permit the construction, repair, or demolition work, or the use of unpaved or untreated areas without applying all such measures as may be required by the Director to prevent particulate matter from becoming airborne. 7.3.3 - Source may not disturb or cover 8 hectares (20 acres) or more of land or its topsoil, except for agricultural land until Source obtains a registration certificate or operating permit for the purpose of clearing, excavating or leveling such land or any foreign material to fill or cover such land.		Site controls fugitive dust in accordance with the dust control plan entitled "Lockwood Regional Landfill, November 2, 1999, Dust Control Plan". Site submitted updated Dust Control Plan per NDEP's request in September 2012.	In Compliance
NAC 445B.227 (445.664) *Federally Enforceable Part 70 Program* Facilities Operation Source may not: 1. Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or conditions of this Operating Permit is installed and operating. 2. Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable requirement or condition of this Operating Permit.		No Specific Requirement	In Compliance

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
The following provisions are applicable requirements of this Operating Permit: 1. Source will comply with all applicable provisions of; a. 40 CFR Part 60.1 - 60.19 - Standards of Performance for New Stationary Sources - General Provisions; b. 40 CFR Part 61.01 - 61.19 - National Emission Standards for Hazardous Air Pollutants - General Provisions; c. 40 CFR Part 61.140 - 61.157 - National Emission Standards for Asbestos; d. 40 CFR Part 63.1 - 63.15 - National Emission Standards for Hazardous Air Pollutants for Source Categories - General Provisions; e. 40 CFR Part 70 - State Operating Permit Program.		Facility will comply with the testing and monitoring requirements of 40 CFR 60 Subpart WWW and CCCCCC as well as 40 CFR 63 Subpart ZZZZ.	In Compliance
Source is subject to 40 CFR Part 68 - Chemical Accident Prevention Provisions. Source shall submit a risk management plan (RMP) by June 21, 1999, or other dates specified in 40 CFR 68.10. Source shall certify compliance with these requirements as part of the annual compliance certification as required by 40 CFR Part 70.	The facility does not store or process the material as defined in the regulation.		
Source will comply with all provisions of 40 CFR Part 82. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156. Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158. Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.	Landfill personnel do not need to be certified; therefore 40 CFR 82.161 does not apply.	Recordkeeping and monitoring at the gate.	In Compliance
<u>Chemical Accident Prevention Provisions</u> Source shall: 1. Submit a compliance schedule for meeting the requirements of 40 CFR Part 68.215 by the date provided in 40 CFR Part 68.10(a) or; 2. Submit as part of the compliance certification submitted under 40 CFR Part 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68.215, including the registration and submission of the risk management plan.	The facility does not store or process the material as defined in the regulation.		
Source is not in compliance with NAC 445B.230 - □Plan for reduction of emissions.□ In order to achieve compliance Source shall submit a plan for reducing or eliminating emissions associated with the stationary source in accordance with the episode stages of alert, warning, and emergency as contained in the applicable State Implementation Plan for the State of Nevada. The plan must be submitted on or before July 1, 1998.			In Compliance

APPENDIX H

ENGINE NESHAP APPLICABILITY TABLE

ENGINE NESHAP APPLICABILITY
LOCKWOOD LANDFILL, STOREY COUNTY, NEVADA

Equipment	Fuel	Type	Mobile/Nonroad?	Rating (hp)	Manufactured Date	Existing or New?[1]	Subject to JJJJ?[2]	Subject to IIII?[3]	Subject to ZZZZ?	Reason
Tipper 1	Diesel	Compression Ignition	Yes	130	1999	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment
Tipper 2	Diesel	Compression Ignition	Yes	130	1995	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment
Tipper 3	Diesel	Compression Ignition	Yes	130	1994	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment
Light Plant 1	Diesel	Compression Ignition	Yes	10.5	1999	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment
Light Plant 2	Diesel	Compression Ignition	Yes	10.5	1997	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment
Light Plant 3	Diesel	Compression Ignition	Yes	10.5	1990	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment

ENGINE NESHAP APPLICABILITY
LOCKWOOD LANDFILL, STOREY COUNTY, NEVADA

Equipment	Fuel	Type	Mobile/Nonroad?	Rating (hp)	Manufactured Date	Existing or New?[1]	Subject to JJJJ?[2]	Subject to IIII?[3]	Subject to ZZZZ?	Reason
Generator	Diesel	Compression Ignition	Yes	96	1995	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; ZZZZ does not apply to mobile/nonroad equipment
Engine for Wood Chipping*	Diesel	Compression Ignition	Yes	750	1989	N/A	--	No	No	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; not subject to ZZZZ if brought back existing and used as nonroad
Engine for Asphalt Grinding	Diesel	Compression Ignition	No	519	1999	Existing	--	No	Yes	JJJJ only applies to spark ignition engines; not considered "new or modified" to be subject to IIII; subject to ZZZZ because considered existing stationary engine at an area source
Water pump	Gasoline	Spark Ignition 4-Stroke	No	16	May-04	Existing	No	--	Yes	Considered "existing" so not subject to JJJJ; IIII only applies to CI engines; subject to ZZZZ because existing stationary at area source
Emergency Generator	Propane	Spark Ignition 4-Stroke Rich Burn	No	34	Aug-06	New	No	--	Yes	Subject to ZZZZ since "new" at area source; Not subject to JJJJ

[1] Construction before June 12, 2006 for area source considered existing

[2] Subpart JJJJ applies to "new or modified" spark ignition engines

[3] Subpart IIII applies to "new or modified" compression ignition engines

*Note that there is no wood chipping activity currently onsite; considered placeholder in permit.