# Part B, Section 1 - SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **594294**

Equipment Category: **I.C. Engine**

Equipment Subcategory: **Portable, Compression Ignition**

Date: **February 1, 2019**

## 1. EQUIPMENT INFORMATION

| | |
|---|---|
| A. MANUFACTURER: Caterpillar | B. MODEL: C4.4 |
| C. DESCRIPTION: Portable, compression ignition naturally aspirated with SCR, oxidation catalyst, and ammonia oxidation catalyst. | |
| D. FUNCTION: Engine drives landfill refuse truck tipper which powers a hydraulic pump that raises and lowers two hydraulic cylinders and tipper platform. | |
| E. SIZE/DIMENSIONS/CAPACITY: 123.4 BHP, four cycle, rich burn, 8 cylinders | |
| **COMBUSTION SOURCES** | |
| F. MAXIMUM HEAT INPUT: | |
| G. BURNER INFORMATION: | |

| TYPE | INDIVIDUAL HEAT INPUT | NUMBER |
|---|---|---|
| Enter additional burner types, as needed, add extra rows | Rated heat input of single burner, in btu/hr | Number of burners |
| | | |

| | |
|---|---|
| H. PRIMARY FUEL: DIESEL | I. OTHER FUEL: Supplementary or standby fuels |
| J. OPERATING SCHEDULE: 310 HOURS/MONTH & 3,720 HOURS/YEAR | |
| K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines | |
| L. EQUIPMENT INFORMATION COMMENTS: THE TIPPER CAN BE MOVED DAILY WITHIN THE LANDFILL TO ACCOMMODATE CHANGES IN THE LOCATION OF THE ACTIVE AREA. | |

## 2. COMPANY INFORMATION

| | |
|---|---|
| A. COMPANY: Sunshine Canyon Landfill | B. FAC ID: 49111 |
| C. ADDRESS: 14747 San Fernando Road<br>CITY: Sylmar STATE: CA ZIP: 91342 | D. NAICS CODE: 562212 |
| E. CONTACT PERSON: The company's contact person who is most familiar with the equipment | F. TITLE: |
| G. PHONE NO.: | H. EMAIL: |

## 3. PERMIT INFORMATION

| | |
|---|---|
| A. AGENCY: SCAQMD | B. APPLICATION TYPE: NEW CONSTRUCTION |
| C. SCAQMD ENGINEER: Christopher Gill | |
| D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date.<br>P/O NO.: G48118 PO ISSUANCE DATE: 8/31/2017 | |
| E. START-UP DATE: 9/1/2017 | |
| F. OPERATIONAL TIME: 1 year | |

## 4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

| | VOC | NOX | SOX | CO | PM OR $PM_{10}$ | INORGANIC |
|---|---|---|---|---|---|---|
| BACT Limit | 0.14 G/BHP-HR | 2.5 G/BHP-HR | | 3.7 G/BHP-HR | 0.01 G/BHP-HR | |
| Averaging Time | | | | | | |
| Correction | | | | | | |

B. OTHER BACT REQUIREMENTS: Tier 4 Final limits

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

## 5. CONTROL TECHNOLOGY

| | |
|---|---|
| A. MANUFACTURER: Manufacturer of the equipment | B. MODEL: C4.4 |

C. DESCRIPTION: equipped with SCR catalyst, oxidation catalyst and ammonia oxidation catalyst.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Tier 4 Final standards

| CONTAMINANT | OVERALL CONTROL EFFICIENCY | CONTROL DEVICE EFFICIENCY | COLLECTION EFFICIENCY |
|---|---|---|---|
| VOC | ___% | ___% | ___% |
| NOx | ___% | ___% | ___% |
| SOx | ___% | ___% | ___% |
| CO | ___% | ___% | ___% |
| PM | ___% | ___% | ___% |
| $PM_{10}$ | ___% | ___% | ___% |
| INORGANIC | ___% | ___% | ___% |

G. CONTROL TECHNOLOGY COMMENTS )

## 6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Manufacturer's certification to Tier 4 emission standards.

B. DATE(S) OF SOURCE TEST: 2/10/15

C. COLLECTION EFFICIENCY METHOD: N/A

D. COLLECTION EFFICIENCY PARAMETERS: N/A

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

| |
|---|
| G. TEST METHODS (SPECIFY AGENCY): Identify the primary source test methods used and identify the agency (e.g., CARB Method 425). |
| H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination. |
| I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance. |

## 7. ADDITIONAL SCAQMD REFERENCE DATA

| | | |
|---|---|---|
| A. BCAT: 036906 | B. CCAT: Click here to enter text. | C. APPLICATION TYPE CODE: 10 |
| D. RECLAIM FAC?<br>YES ☐ NO ☒ | E. TITLE V FAC:<br>YES ☒ NO ☐ | F. SOURCE TEST ID(S): |
| G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text. | | |
| H. HEALTH RISK FOR PERMIT UNIT | | |

| | | | |
|---|---|---|---|
| H1. MICR: Click here to enter text. | H2. MICR DATE: Click here to enter a date. | H3. CANCER BURDEN: Click here to enter text. | H4. CB DATE: Click here to enter a date. |
| H5: HIA: Click here to enter text. | H6. HIA DATE: Click here to enter a date. | H7. HIC: Click here to enter text. | H8. HIC DATE: Click here to enter a date. |