

**AIR QUALITY**

MANAGEMENT DISTRICT

**AUTHORITY TO CONSTRUCT**

A/C NO.: 23105

ISSUED BY:

  
FELIX TRUJILLO, JR.

DATE ISSUED: SEPTEMBER 23, 2011

DATE EXPIRES: SEPTEMBER 23, 2013

ISSUED TO: KIEFER LANDFILL, DEPARTMENT OF WASTE MANAGEMENT AND RECYCLING,  
COUNTY OF SACRAMENTO

LOCATION: 12701 KIEFER BLVD., SLOUGHOUSE, CA 95683

DESCRIPTION: MODIFICATION OF IC ENGINE UNDER PERMIT TO OPERATE 19363 TO  
REPLACE EXPIRING ERCS. IC ENGINE (AUXILIARY ON STREET SWEEPER  
(SS1)), NON-ROAD, PRIME POWER USE, MAKE: JOHN DEERE, MODEL:  
4045TF270, SERIAL NO.: PE4045T533975, 99 HP @ 2500 RPM, DIESEL FUELED,  
DRIVING A VACUUM SYSTEM AND BRUSHES ON A STREET SWEEPER.**AUTHORITY TO CONSTRUCT CONDITIONS****START-UP REQUIREMENTS**

- S1. THIS AUTHORITY TO CONSTRUCT HAS BEEN REVIEWED THROUGH AN ENHANCED NEW SOURCE REVIEW PROCESS IN ACCORDANCE WITH THE PROCEDURAL REQUIREMENTS OF SECTION 401 THROUGH 408 OF RULE 207 TITLE V – FEDERAL OPERATING PERMIT PROGRAM.
- S2. THE OWNER OR OPERATOR OF A STATIONARY SOURCE SHALL SUBMIT TO THE AIR POLLUTION CONTROL OFFICER AN APPLICATION TO MODIFY THE TITLE V PERMIT WITH AN ADMINISTRATIVE TITLE V PERMIT AMENDMENT PRIOR TO COMMENCING OPERATION WITH MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.

**GENERAL**

1. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AT ALL TIMES.
2. THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE PRESENTATION OF CREDENTIALS SHALL BE PERMITTED:
  - A. TO ENTER UPON THE PREMISES WHERE THE SOURCE IS LOCATED OR IN WHICH ANY RECORDS ARE REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS AUTHORITY TO CONSTRUCT, AND
  - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER TERMS AND CONDITIONS OF THIS AUTHORITY TO CONSTRUCT, AND
  - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS AUTHORITY TO CONSTRUCT, AND
  - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS AUTHORITY TO CONSTRUCT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26, PART 4, CHAPTER 3, OF THE CALIFORNIA HEALTH AND SAFETY CODE OR THE RULES AND REGULATIONS OF THE AIR QUALITY MANAGEMENT DISTRICT.

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- 4. THE EQUIPMENT SHALL NOT DISCHARGE SUCH QUANTITIES OF AIR CONTAMINANTS OR OTHER MATERIALS WHICH CAUSE INJURY, DETRIMENT, NUISANCE OR ANNOYANCE TO ANY CONSIDERABLE NUMBER OF PERSONS OR TO THE PUBLIC, OR WHICH ENDANGER THE COMFORT, REPOSE, HEALTH, OR SAFETY OF ANY SUCH PERSONS OR THE PUBLIC, OR WHICH CAUSE, OR HAVE A NATURAL TENDENCY TO CAUSE, INJURY OR DAMAGE TO BUSINESS OR PROPERTY.
- 5. A LEGIBLE COPY OF THIS AUTHORITY TO CONSTRUCT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

**EMISSION LIMITATIONS**

- 6. THE IC ENGINE (AUXILIARY ON STREET SWEEPER) SHALL NOT DISCHARGE INTO THE ATMOSPHERE ANY VISIBLE AIR CONTAMINANTS OTHER THAN UNCOMBINED WATER VAPOR, FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR, WHICH ARE AS DARK OR DARKER THAN RINGELMANN NO. 1 OR EQUIVALENT TO OR GREATER THAN 20% OPACITY.
- 7. EMISSIONS FROM THE IC ENGINE (AUXILIARY ON STREET SWEEPER) SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (A) GRAMS/HP-HR	MAXIMUM ALLOWABLE EMISSIONS (B)		
		DAILY LB/DAY	QUARTERLY LB/QUARTER	YEARLY LB/YEAR
ROC	0.34	1.8	39	156
NOX	3.98	20.9	452	1,808
SOX	0.005	0.0	1	4
PM10	0.18	0.9	20	80
CO	1.04	5.5	118	472
GHG	511.75	1.3 TONS/DAY	29 TONS/QUARTER	116 TONS/YEAR

- (A) EMISSION FACTORS FOR ROC AND NOX WERE SUPPLIED BY JOHN DEERE BECAUSE THE CARB OFF ROAD ENGINE CERTIFICATION ONLY LISTS THE EMISSION FACTOR FOR THE COMBINED NMHC+NOX. THE EMISSION FACTORS FOR PM10 AND CO ARE FROM THE CARB OFF ROAD ENGINE CERTIFICATION FOR THIS ENGINE MODEL AND FAMILY DATED 10-04-2004. THE EMISSION FACTOR FOR SOX IS BASED ON 0.0015% SULFUR BY WEIGHT IN THE DIESEL FUEL. GHG EMISSION FACTOR IS THE CO2E EMISSION FACTOR AS PER APPENDIX A OF CARB'S REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS (CCR, TITLE 17, SUBCHAPTER 10, ARTICLE 2, SECTIONS 95100 TO 95133). ALL EMISSION LIMITS ARE IN ENGLISH UNITS.
- (B) MAXIMUM ALLOWABLE EMISSIONS ARE BASED ON 99 HP 24 HOURS/DAY AND 520 HOURS/CALENDAR QUARTER. THE YEARLY EMISSIONS ARE BASED ON THE CUMULATIVE QUARTERLY EMISSIONS.

**EQUIPMENT OPERATION**

- 8. THE IC ENGINE (AUXILIARY ON STREET SWEEPER) SHALL NOT REMAIN AT THE SAME LOCATION FOR MORE THAN 12 CONSECUTIVE MONTHS.
- 9. THE IC ENGINE (AUXILIARY ON STREET SWEEPER) SHALL NOT OPERATE MORE THAN THE FOLLOWING HOURS:

EQUIPMENT	MAXIMUM ALLOWABLE OPERATING HOURS HOURS/QUARTER
IC ENGINE (AUXILIARY ON STREET SWEEPER)	520

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10. THE IC ENGINE (AUXILIARY ON STREET SWEEPER) SHALL BE EQUIPPED WITH A NON-RESETTING TOTALIZING HOUR METER.
11. THE IC ENGINE (AUXILIARY ON STREET SWEEPER) SHALL BE FUELED WITH:
- CARB DIESEL FUEL, OR
  - ALTERNATIVE DIESEL FUEL THAT HAS BEEN VERIFIED THROUGH THE CARB VERIFICATION PROCEDURE FOR IN-USE STRATEGIES TO CONTROL EMISSIONS FROM DIESEL ENGINES, OR
  - CARB DIESEL FUEL UTILIZING FUEL ADDITIVES THAT HAVE BEEN VERIFIED THROUGH THE CARB VERIFICATION PROCEDURE FOR IN-USE STRATEGIES TO CONTROL EMISSIONS FROM DIESEL ENGINES.

**RECORDKEEPING AND REPORTING**

12. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ONSITE FOR THE MOST RECENT FIVE YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. QUARTERLY RECORDS SHALL BE MADE AVAILABLE FOR INSPECTION WITHIN 30 DAYS OF THE END OF THE PREVIOUS QUARTER.

FREQUENCY	INFORMATION TO BE RECORDED
QUARTERLY	A. THE NUMBER OF HOURS THAT THE IC ENGINE OPERATED. (HOURS/QUARTER)

**EMISSION REDUCTION CREDITS**

13. THE PERMITTEE SHALL SURRENDER ERCS TO THE AIR POLLUTION CONTROL OFFICER TO OFFSET THE FOLLOWING AMOUNT OF PROJECT EMISSIONS:

POLLUTANT	AMOUNT OF PROJECT EMISSIONS FOR WHICH ERCS ARE TO BE PROVIDED LB/QUARTER			
	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
ROC	39	39	39	39
NOX	452	452	452	452
SOX	19	19	19	19
PM10	20	20	20	20

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14. THE FOLLOWING ERCS HAVE BEEN PROPOSED TO BE LEASED/SURRENDERED TO THE AIR POLLUTION CONTROL OFFICER AS REQUIRED IN CONDITION NO. 15:

**THE ERCS SHALL BE LEASED/SURRENDERED PRIOR TO THE PERMIT TO OPERATE BEING ISSUED.**

EMISSION REDUCTION CREDIT CERTIFICATE NO.	FACE VALUE OF ERC CERTIFICATES SURRENDERED LB/QUARTER				OFFSET RATIO	VALUE APPLIED TO THE PROJECT EMISSION LIABILITY LB/QUARTER			
	QTR 1	QTR 2	QTR 3	QTR 4		QTR 1	QTR 2	QTR 3	QTR 4
ESSENTIAL PUBLIC SERVICES ACCOUNT SMAQMD COMMUNITY BANK P11XXXX (A) LEASE EXPIRES ON: 10-01-2014									
ROC	39	39	39	39	1:1	39	39	39	39
NOX	452	452	452	452	1:1	452	452	452	452
SOX	19	19	19	19	1:1	19	19	19	19
PM10	20	20	20	20	1:1	20	20	20	20

- (A) LEASED EMISSION REDUCTION CREDITS IN THE AMOUNT SPECIFIED IN CONDITION NO. 13 SHALL BE PROVIDED AT ALL TIMES THAT THE PERMITTED EQUIPMENT IS ALLOWED TO OPERATE:
1. THE PERMIT TO OPERATE, AFTER ISSUANCE, SHALL EXPIRE ON THE DATE THE ERCS EXPIRE UNLESS REPLACEMENT ERCS HAVE BEEN PROVIDED AS SPECIFIED IN (2) BELOW.
  2. WHEN ERCS ARE PROVIDED THAT HAVE AN EXPIRATION DATE, AND PRIOR TO THEIR EXPIRATION ONLY, THE PERMITTEE CAN PROVIDE REPLACEMENT ERCS. THE PERMITTEE SHALL SUBMIT A VALID PERMIT APPLICATION TO MODIFY THE CURRENT PERMIT TO OPERATE AND SHALL PAY THE REQUIRED PERMIT FEES. THE APPLICATION SHALL BE FILED PRIOR TO THE ERC EXPIRATION DATE SUCH THAT SUFFICIENT TIME IS AVAILABLE TO SMAQMD STAFF TO PROCESS THE APPLICATION.
    - (A) THE APPLICATION SHALL BE EVALUATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT SMAQMD RULE 202 - NEW SOURCE REVIEW AND SMAQMD RULE 204 - EMISSION REDUCTION CREDITS.
    - (B) ERCS SHALL BE REQUIRED IN AN AMOUNT WHICH IS THE LARGER OF:
      - (1) THE ORIGINALLY SPECIFIED AMOUNT, OR
      - (2) THE AMOUNT SPECIFIED BY THE CURRENT SMAQMD RULE 202 - NEW SOURCE REVIEW AT THE TIME OF REPLACEMENT.
  3. FAILURE TO PROVIDE REPLACEMENT ERCS PRIOR TO THE EXPIRATION DATE OF THE CURRENT ERCS ASSOCIATED WITH THE PERMIT TO OPERATE SHALL REQUIRE THAT THE PERMITTEE REAPPLY FOR AN AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE FOR THE SUBJECT EQUIPMENT IF CONTINUED OPERATION OF THE EQUIPMENT IS DESIRED. THE EQUIPMENT WILL BE SUBJECT TO BEST AVAILABLE CONTROL TECHNOLOGY REQUIREMENTS AND OFFSETTING REQUIREMENTS OF SMAQMD RULE 202 - NEW SOURCE REVIEW AT THE TIME OF REPERMITTING.

**EMISSION TESTING REQUIREMENTS**

NO PERIODIC EMISSION TESTING REQUIREMENTS.

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YOUR APPLICATION FOR THIS AIR QUALITY AUTHORITY TO CONSTRUCT WAS EVALUATED FOR COMPLIANCE WITH SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT (AQMD), STATE AND FEDERAL AIR QUALITY RULES. THE FOLLOWING LISTED RULES ARE THOSE THAT ARE MOST APPLICABLE TO THE OPERATION OF YOUR EQUIPMENT. OTHER RULES MAY ALSO BE APPLICABLE.

<u>AQMD RULE NO.</u>	<u>RULE TITLE</u>
201	GENERAL PERMIT REQUIREMENTS
202	NEW SOURCE REVIEW
301	STATIONARY SOURCE PERMIT FEES
401	RINGELMANN CHART
402	NUISANCE
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
904	AIRBORNE TOXIC CONTROL MEASURE FOR DIESEL PARTICULATE MATTER FROM PORTABLE ENGINES RATED AT 50 HORSEPOWER AND GREATER

IN ADDITION, THE CONDITIONS ON THIS AUTHORITY TO CONSTRUCT MAY REFLECT SOME, BUT NOT ALL, REQUIREMENTS OF THESE RULES. THERE MAY BE OTHER CONDITIONS THAT ARE APPLICABLE TO THE OPERATION OF YOUR EQUIPMENT. FUTURE CHANGES IN PROHIBITORY RULES MAY ESTABLISH MORE STRINGENT REQUIREMENTS WHICH MAY SUPERSEDE THE CONDITIONS LISTED HERE.

FOR FURTHER INFORMATION PLEASE CONSULT YOUR AQMD RULEBOOK OR CONTACT THE AQMD FOR ASSISTANCE.