

Attachment 'A'

THE PROCTER & GAMBLE MANUFACTURING CO.

TV2008-02-03

**SMAQMD PERMITS TO OPERATE &
AUTHORITY TO CONSTRUCT**

- PERMIT NO. 22033 BOILER
- PERMIT NO. 22270 METHYL ESTER & GLYCERINE MFG PROCESS
- PERMIT NO. 22483 APC THERMAL OXIDIZER (NTO)
- PERMIT NO. 22484 APC THERMAL OXIDIZER (STO)
- PERMIT NO. 22485 APC METHANOL ABSORBER
- PERMIT NO. 22486 APC SCRUBBER
- PERMIT NO. 22794 IC ENGINE STANDBY

SACRAMENTO METROPOLITAN



PERMIT TO OPERATE

ISSUED TO: THE PROCTER & GAMBLE MANUFACTURING CO.

EQUIPMENT LOCATION: 8201 FRUITRIDGE RD., SACRAMENTO, CA 95826

PERMIT NO.	EQUIPMENT DESCRIPTION
22033	BOILER, GTS ENERGY, MODEL NUK600, SERIAL NO. G-4952, 3.75 MMBTU/HR HEAT INPUT RATING, NATURAL GAS-FIRED [SERVING THE PHYSICALLY REFINED OIL PROCESS]

SUBJECT TO THE FOLLOWING CONDITIONS:

GENERAL

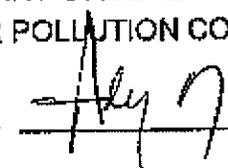
1. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED.
2. THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE PRESENTATION OF CREDENTIALS, SHALL BE PERMITTED:
 - A. TO ENTER UPON THE PREMISES WHERE THE SOURCE IS LOCATED OR IN WHICH ANY RECORDS ARE REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT 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.
4. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSIONS LIMITATIONS

5. THE BOILER 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.

DATE ISSUED: 11-05-2008
DATE EXPIRES: 04-04-2010 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: 

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

6. EMISSIONS FROM THE BOILER, WHEN FIRING ON NATURAL GAS AND IN CONCENTRATION OF SPECIFIC POLLUTANTS, SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	MAXIMUM ALLOWABLE CONCENTRATION (A) PPMVD @ 3% O ₂
NO _x	30
CO	400

(A) EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN AS DEFINED IN RULE 411 - BOILER NO_x AND MEASURED AS REQUIRED IN CONDITION NO. 9.

7. EMISSIONS FROM THE BOILER, WHEN FIRING ON NATURAL GAS, SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (A) LB/MMCF	MAXIMUM ALLOWABLE EMISSION (B) LB/QUARTER
ROC	6.5	46
NO _x	36.4	301
SO _x	0.6	5
PM10	7.6	63
CO	296	2,451

(A) EMISSION FACTORS ARE FROM AP-42, TABLE 1.4-1 - 1.4-2, EMISSION FACTORS FROM NATURAL GAS COMBUSTION, PG 1.4-5 - 1.4-6 (7/98), EXCEPT FOR NO_x AND CO WHICH ARE BASED ON 30 PPMVD @ 3% O₂ AND 400 PPMVD @ 3% O₂, RESPECTIVELY.

(B) EMISSIONS ARE BASED ON A MAXIMUM FUEL USAGE OF 3,750 CF/HOUR, 24 HOURS/DAY, 92 DAYS/QUARTER AND THE EMISSION FACTORS LISTED IN THIS TABLE.

EQUIPMENT OPERATION

8. THE BOILER SHALL BE FIRED ON NATURAL GAS ONLY.

EMISSIONS TESTING

9. AN INITIAL SOURCE TEST FOR NO_x AND CO WAS PERFORMED ON THE BOILER ON SEPT. 30, 2009 WITH A PORTABLE ANALYZER. THE SOURCE TEST RESULTS DEMONSTRATED COMPLIANCE WITH THE EMISSION LIMITS IN CONDITION NO. 6.

RECORDKEEPING

10. NO RECORDKEEPING SHALL BE REQUIRED BECAUSE EMISSIONS WERE BASED ON THE MAXIMUM HEAT INPUT CAPACITY, 24 HOURS/DAY AND 92 DAYS/QUARTER.

**SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT**

YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE 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	PERMIT FEES - STATIONARY SOURCE
401	RINGELMANN CHART
406	SPECIFIC CONTAMINANTS
411	NOx FROM BOILERS, PROCESS HEATERS AND STEAM GENERATORS
420	SULFUR CONTENT OF FUELS

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE 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.

SACRAMENTO METROPOLITAN



AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: **THE PROCTER & GAMBLE MANUFACTURING CO.**

EQUIPMENT LOCATION: **8201 FRUITRIDGE RD., SACRAMENTO, CA 95826**

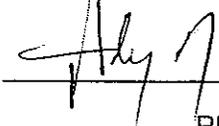
PERMIT NO.	EQUIPMENT DESCRIPTION
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| 22270 | <p>METHYL ESTER AND GLYCERINE MFG. PROCESS CONSISTING OF THE FOLLOWING:</p> <ol style="list-style-type: none">1. SODIUM METHOXIDE CATALYST MAKING PROCESS<ol style="list-style-type: none">A. METHANOL ANALYSIS TANKB. SODIUM METHOXIDE INTERCHANGEC. SODIUM METHOXIDE ANALYSIS TANKD. SODIUM METHOXIDE PUMPE. SODIUM METHOXIDE COLUMNF. SODIUM METHOXIDE REBOILERG. DRY METHANOL FINAL CONDENSER2. ESTER MAKING, FLASHING, WASHING AND DRYING PROCESS<ol style="list-style-type: none">A. ESTERIFICATION 1ST, 2ND AND 3RD SETTLER MIXERSB. ESTERIFICATION REACTORC. ESTERIFICATION 1ST, 2ND AND 3RD SETTLERSD. ESTER PUMPE. ESTER FLASH INTERCHANGERSF. ESTER FLASH PREHEATERG. ESTER FLASH TANKH. ESTER FLASH COOLERI. ESTER FLASH PUMPJ. ESTER WASH WATER COOLERK. FOUR (4) ESTER WASH COLUMNSL. ESTER DRYERM. ESTER DRYER PUMPN. ESTER DRYER CONDENSERO. ESTER DRYER VACUUM SYSTEMP. ESTER DRYER METHANOL CONDENSERQ. ESTER DRYER CONDENSATE PUMP |
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DATE ISSUED: 09-08-2011
DATE EXPIRES: 04-04-2012 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: 

SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

PERMIT NO.	EQUIPMENT DESCRIPTION
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3. LIGHT CUT ESTER FRACTIONATION PROCESS
 - A. LIGHT CUT ESTER PREHEATER
 - B. LIGHT CUT ESTER STILL
 - C. LIGHT CUT ESTER CONDENSER
 - D. LIGHT CUT ESTER VENT CONDENSER
 - E. SINGLE STAGE EJECTOR
 - F. LIGHT CUT ESTER PUMPS
 - G. LIGHT CUT ESTER PRODUCT COOLER
 - H. LIGHT CUT ESTER REBOILER
 - I. LIGHT CUT ESTER POT PUMPS
4. INTERMEDIATE ESTER FRACTIONATION PROCESS
 - A. INTERMEDIATE ESTER STILL
 - B. INTERMEDIATE ESTER CONDENSER
 - C. INTERMEDIATE ESTER VENT CONDENSER
 - D. HEAVY CUT ESTER DISTILLATE PUMP
 - E. INTERMEDIATE ESTER DISTILLATE PUMP
 - F. INTERMEDIATE ESTER COOLER
 - G. INTERMEDIATE ESTER REBOILER
 - H. INTERMEDIATE ESTER POT PUMPS
 - I. THREE (S) ESTER BOTTOMS TANKS
 - J. ESTER BOTTOMS TO REFINERY TANKS
 - K. TWO (2) ESTER FEED TO REFINERY TANKS
 - L. ESTER SCALE TANK
 - M. TWO (2) ESTER SWING TANKS
 - N. WCE BOTTOMS TANKS
5. ESTER FRACTIONATION PROCESS
 - A. ESTER STILL
 - B. ESTER CONDENSER
 - C. ESTER VENT CONDENSER
 - D. ESTER DISTILLATE RECEIVER
 - E. ESTER DISTILLATE PUMP
 - F. ESTER COOLER
 - G. ESTER REBOILER
 - H. ESTER POT PUMPS
 - I. FIVE (5) ESTER TO SCALE TANKS
 - J. THREE (3) ESTERS TO HFA
 - K. ESTER TO HFA TANK
 - L. TWO (2) ESTERS TO LCFA TANKS
 - M. FOUR (4) ESTERS TO LCFA/SCALES TANKS
6. METHANOL CONCENTRATOR PROCESS
 - A. METHANOL CONCENTRATOR FEE/BOTTOMS INTERCHANGER
 - B. METHANOL CONCENTRATOR

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SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

PERMIT NO.	EQUIPMENT DESCRIPTION
	C. METHANOL CONCENTRATOR BOTTOM PUMP
	D. METHANOL CONCENTRATOR REBOILER
7.	METHANOL RECOVERY/DRYING PROCESS
	A. ESTER VENT SEAL TANK
	B. METHANOL DRYER FEED TANK
	C. METHANOL DRYER FEED PUMP
	D. METHANOL DRYER INTERCHANGER
	E. METHANOL DRYER PUMP
	F. METHANOL DRYER
	G. WEST VENT CONDENSER
	H. WEST VENT FINAL STORAGE
	I. METHANOL STORAGE TANK
	J. METHANOL CONDENSER
	K. METHANOL DISTILLATE TANK
	L. METHANOL DISTILLATE PUMP
8.	GLYCERINE COLUMN PROCESS
	A. DRY GLYCERINE TANK
	B. DRY GLYCERINE FEED PUMP
	C. GLYCERINE COLUMN
	D. GLYCERINE COLUMN PUMP
	E. GLYCERINE COLUMN REBOILER
	F. GLYCERINE INTERCHANGER
	G. GLYCERINE BOTTOMS COOLER
9.	GLYCERINE ACIDULATION AND NEUTRALIZATION PROCESS
	A. GLYCERINE ACIDULATION MIXER
	B. GLYCERINE ACIDULATION REACTOR/SETTLER
	C. ACIDULATED GLYCERINE PUMP
	D. DILUTE CAUSTIC PUMP
	E. GLYCERINE NEUTRALIZATION MIXER
	F. ACIDULATED SOAPSTONE SURGE TANK
	G. ACIDULATED SOAPSTONE SURGE PUMP
10.	GLYCERINE CONCENTRATION FEED TANK
	A. GLYCERINE EVAPORATOR FEED TANK
	B. GLYCERINE EVAPORATOR
	C. GLYCERINE EVAPORATOR REBOILER
	D. GLYCERINE EVAPORATOR PUMP
	E. GLYCERINE PRODUCT PUMP
	F. GLYCERINE EVAPORATOR CONDENSER
	G. GLYCERINE EVAPORATOR CONDENSER PUMP
	H. 3-STAGE EJECTOR
	I. GLYCERINE TO SHIPMENT TANK

**SACRAMENTO METROPOLITAN
 AIR QUALITY MANAGEMENT DISTRICT**

SUBJECT TO THE FOLLOWING CONDITIONS:

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 PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT 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.
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 PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSIONS LIMITATIONS

6. THE PROCESS 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 PROCESS AND EMISSIONS UNITS SHALL NOT EXCEED THE FOLLOWING LIMITS:

PROCESS	POLLUTANT	MAXIMUM ALLOWABLE EMISSION (A) LB/QUARTER
METHYL ESTER AND GLYCERINE MANUFACTURING PROCESS	ROC	5,142

EMISSIONS UNIT	POLLUTANT	MAXIMUM ALLOWABLE EMISSIONS (A) LB/QUARTER
ESTER DRYER (EMISSION SOURCE ID 1012)	ROC	1,400 (B)
GLYCERINE EVAPORATOR CONDENSER (EMISSION SOURCE ID 1020)		1,104

(A) REFER TO APPENDIX 'A', TABLE 3 – METHYL ESTER AND GLYCERINE MFG. PROCESS EMISSIONS.
 (B) EMISSION IS BASED ON THE EMISSION FACTOR OF 0.0144 LB/10³ LB ESTER AND THE APPLICABLE PRODUCT PROCESS RATE SPECIFIED IN CONDITION NO. 14.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

8. COMPLIANCE WITH THE EMISSIONS LIMITATIONS IN CONDITION NO. 7 SHALL BE DETERMINED AS FOLLOWS:

ESTER DRYER

$$\text{ROC EMISSIONS} = [(\text{PROCESS RATE, } 10^3 \text{ LB ESTER/QTR}) \times (\text{EMISSION FACTOR, } 0.0144 \text{ LB}/10^3 \text{ LB ESTER})] \times [1 - 0.98]$$

(LB/QUARTER)

9. FUGITIVE ROC EMISSIONS FROM EQUIPMENT LEAKS SHALL NOT EXCEED THE FOLLOWING LIMITS:

EQUIPMENT TYPE	QUANTITY	SERVICE	EMISSION FACTOR (A) KG/HR/SOURCE	MAXIMUM ALLOWABLE ROC EMISSIONS (B) LB/QUARTER
VALVES	382	GAS	0.000131	242
VALVES	3,101	LIGHT LIQUID	0.000165	2,470
VALVES	3,306	HEAVY LIQUID	0.00023	3,671
PUMP SEALS	79	LIGHT LIQUID	0.00187	713
PUMP SEALS	147	HEAVY LIQUID	0.00210	1,490
AGITATOR SEALS	15	LIGHT LIQUID	0.00187	135
AGITATOR SEALS	65	HEAVY LIQUID	0.00187	587
COMPRESSOR SEALS	0	GAS	0.0894	0
PRESSURE RELIEF VALVES	17	GAS	0.0447	3,669
CONNECTORS	20,768 (C)	ALL	0.0000810	8,122
OPEN-ENDED LINES	901	ALL	0.00150	6,525
TOTAL				27,624

(A) EMISSION FACTORS ARE FROM *PROTOCOL FOR EQUIPMENT LEAK EMISSION ESTIMATES*, EPA-453/R-95-017, NOVEMBER 1995, TABLE 2-5, SOCFI SCREENING RANGES EMISSION FACTORS, <10,000 PPMV (ASSUMING ALL TOC IS ROC).

(B) POTENTIAL TO EMIT IS BASED ON 2,190 HOURS/QUARTER OF OPERATION.

(C) INCLUDES ESTIMATED CONNECTORS IN HEAVY LIQUID SERVICE.

10. THE CONTENTS OR PRODUCTS ASSOCIATED WITH EACH DEVICE SHALL NOT DEVIATE FROM THOSE IDENTIFIED IN THE PERMIT APPLICATION INCLUDING CHANGES IN CONSTITUENT MASS FRACTIONS OR OPERATING TEMPERATURES THAT WOULD RESULT IN AN INCREASE IN THE VOC COMPOSITE PARTIAL VAPOR PRESSURE AT THE ACTUAL OPERATING CONDITIONS OF THE EMISSIONS UNIT.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EMISSION OFFSETS

11. PROCTER & GAMBLE SHALL PROVIDE SUFFICIENT EMISSION REDUCTION CREDITS (ERC) TO FULLY OFFSET THE FOLLOWING ROC EMISSIONS INCREASE:

PERMIT NO. – PROCESS	EMISSION OFFSETS LB/QUARTER			
	1 ST QUARTER	2 ND QUARTER	3 RD QUARTER	4 TH QUARTER
P/O 22270 – METHYL ESTER & GLYCERINE MFG. PROCESS	497	497	497	497

12. EMISSION REDUCTION CREDITS HAVE BEEN PROVIDED BY PROCTER & GAMBLE TO FULLY OFFSET THE AMOUNTS SPECIFIED IN CONDITION NO. 11:

PERMIT NO.	EMISSION REDUCTION CREDITS (ROC)				
	CERTIFICATE NO.	1 ST QUARTER	2 ND QUARTER	3 RD QUARTER	4 TH QUARTER
P/O 22270 (A)	09-01055	497	497	497	497

(A) ERC CERTIFICATES WERE SURRENDERED BY PROCTER & GAMBLE IN THE PRECEDING PERMIT ACTION IN P/O 22006.

EQUIPMENT STANDARDS

13. EMISSIONS FROM ALL EQUIPMENT SPECIFIED IN THE TABLE BELOW SHALL COMPLY WITH EITHER THE MAXIMUM UNCONTROLLED EMISSION LIMITS OR THE CONTROL SYSTEM REQUIREMENTS:

EQUIPMENT	MAXIMUM UNCONTROLLED ROC EMISSIONS OR CONTROL SYSTEM REQUIREMENT
REACTOR, DISTILLATION COLUMN, CRYSTALLIZER, EVAPORATOR OR ENCLOSED CENTRIFUGE	≤ 15 LB/DAY OR VOC CAPTURE AND CONTROL SYSTEM WITH A COMBINED SYSTEM EFFICIENCY ≥ 85% BY WEIGHT AND A CONTROL EFFICIENCY ≥ 90% BY WEIGHT
IF A VOC CAPTURE AND CONTROL SYSTEM CONTROLS <u>MORE THAN TWO PROCESS VENTS</u> FROM REACTORS, DISTILLATION COLUMNS, CRYSTALLIZERS, EVAPORATORS OR ENCLOSED CENTRIFUGES	COMBINED ROC EMISSIONS FROM ALL PROCESS VENTS REDUCED TO < 33 LB/DAY OR OVERALL COMBINED SYSTEM EFFICIENCY ≥ 85% BY WEIGHT AND AN OVERALL CONTROL EFFICIENCY ≥ 90% BY WEIGHT
CENTRIFUGE, ROTARY VACUUM FILTER OR OTHER DEVICE HAVING AN EXPOSED LIQUID SURFACE WHERE THE LIQUID CONTAINS VOC WITH A VOC COMPOSITE PARTIAL VAPOR PRESSURE ≥ 26 MM HG @ 20°C	≤ 15 LB/DAY OR A VOC CAPTURE AND CONTROL SYSTEM WITH A COMBINED SYSTEM EFFICIENCY ≥ 85% BY WEIGHT AND A CONTROL EFFICIENCY ≥ 90% BY WEIGHT

**SACRAMENTO METROPOLITAN
 AIR QUALITY MANAGEMENT DISTRICT**

EQUIPMENT	MAXIMUM UNCONTROLLED ROC EMISSIONS OR CONTROL SYSTEM REQUIREMENT
<p>DRYER OR OTHER PRODUCTION EQUIPMENT EXHAUST SYSTEM</p>	<p>(A) IF MAXIMUM UNCONTROLLED ROC EMISSIONS IS \geq 330 LB/DAY, A VOC CAPTURE AND CONTROL SYSTEM WITH A COMBINED SYSTEM EFFICIENCY \geq 85% BY WEIGHT AND A CONTROL EFFICIENCY \geq 90% BY WEIGHT (B) IF MAXIMUM UNCONTROLLED ROC EMISSIONS IS $<$ 330 LB/DAY, REDUCE ROC EMISSIONS TO $<$ 33 LB/DAY</p>
<p>PROCESS TANK CONTAINING MATERIAL WITH A VOC COMPOSITE PARTIAL VAPOR PRESSURE $>$ 26 MM HG @ 20°C</p>	<p>(A) A CLOSED CONTAINER, WHICH IS KEPT TIGHTLY COVERED AT ALL TIMES EXCEPT WHEN ACCESSING THE CONTAINER (B) MAXIMUM UNCONTROLLED ROC EMISSIONS \leq 15 LB/DAY OR VOC CAPTURE AND CONTROL SYSTEM WITH A COMBINED SYSTEM EFFICIENCY \geq 85% BY WEIGHT AND A CONTROL EFFICIENCY \geq 90% BY WEIGHT</p>
<p>EQUIPMENT TRANSFERRING LIQUID WITH A VOC COMPOSITE VAPOR PRESSURE $>$ 26 MM HG @ 20°C INTO ANY TRUCK, TRAILER, RAILROAD TANK CAR OR STORAGE TANK OF 2,000 GALLONS CAPACITY OR GREATER</p>	<p>VAPOR BALANCE SYSTEM WITH ALL OF THE FOLLOWING COMPONENTS: (A) A PERMANENT SUBMERGED FILL PIPE WHICH DISCHARGES AT NOT MORE THAN SIX INCHES FROM THE BOTTOM OF THE TANK; AND (B) A SUBMERGED FILL PIPE WHICH DISCHARGES AT NOT MORE THAN SIX INCHES FROM THE BOTTOM OF THE TANKER TRUCK OR RAIL CAR; AND (C) A VAPOR RETURN LINE WHICH TRANSFERS AT LEAST 90% BY WEIGHT OF THE DISPLACED VOC VAPOR FROM THE STATIONARY STORAGE TANK BEING FILLED BACK TO THE MOBILE OR STATIONARY SUPPLY TANK; AND (D) A PRESSURE/VACUUM RELIEF VALVE WITH RELIEF SETTINGS OF NOT LESS THEN \pm 0.03 PSIG. OR VOC CAPTURE AND CONTROL SYSTEM WITH A COMBINED SYSTEM EFFICIENCY OF \geq 85% BY WEIGHT AND A CONTROL EFFICIENCY OF \geq 90% BY WEIGHT OR AN INTERNAL OR EXTERNAL FLOATING ROOF WHICH COMPLIES WITH THE PROCEDURES DESCRIBED IN 40 CFR 63, SECTIONS 119(b), (c), (d) AND 63.120.</p>
<p>STORAGE TANKS WITH CAPACITIES $>$ 40,000 GALLONS</p>	<p>COMPLIANCE WITH SMAQMD RULE 446 – STORAGE OF PETROLEUM PRODUCTS.</p>
<p>STORAGE TANK WITH A CAPACITY $>$ 55 GALLONS AND \leq 40,000 GALLONS CONTAINING MATERIAL WITH A VOC COMPOSITE PARTIAL VAPOR PRESSURE OF $>$ 78 MM HG @ 20°C</p>	<p>A PRESSURE/VACUUM RELIEF VALVE WITH A RELIEF SETTING OF NOT LESS THAN \pm 0.03 PSIG OR AN EQUIVALENT CONTROL METHOD PERMITTED UNDER SMAQMD RULE 201 – GENERAL PERMIT REQUIREMENTS, ON ALL VENTS OF ANY STORAGE TANK.</p>

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EQUIPMENT	MAXIMUM UNCONTROLLED ROC EMISSIONS OR CONTROL SYSTEM REQUIREMENT
STORAGE TANK WITH A CAPACITY \leq 55 GALLONS CONTAINING MATERIAL WITH A VOC COMPOSITE PARTIAL VAPOR PRESSURE OF $>$ 78 MM HG @ 20°C	CLOSED CONTAINER, WHICH IS KEPT TIGHTLY COVERED AT ALL TIMES EXCEPT WHEN ACCESSING THE CONTAINER.

EQUIPMENT OPERATION

14. THE FACILITY SHALL NOT EXCEED THE FOLLOWING RAW MATERIAL AND PRODUCT PROCESS RATE LIMITATIONS WHEREIN THE ESTER DRYER EMISSIONS ARE VENTED TO THE APC THERMAL OXIDIZER [NORTH THERMAL OXIDIZER (NTO)]:

MATERIAL	MAXIMUM ALLOWABLE PROCESSING RATE POUNDS/QUARTER
CRUDE VEGETABLE OIL	147,500,000

PRODUCT	MAXIMUM ALLOWABLE PROCESSING RATE (A) POUNDS/QUARTER
ESTERS	138,230,000

(A) PRODUCT THROUGHPUT IS MONITORED FROM THE OIL FLOW TO ESTER REACTOR FLOWMETER PLUS THE BOTTOMS FLOW TO ESTER REACTOR FLOWMETER.

15. THE FACILITY SHALL USE CLOSED CONTAINERS FOR THE STORAGE AND DISPOSAL OF CLOTH, PAPER, OR SPONGES USED FOR SOLVENT CLEANUP.
16. THE FACILITY SHALL STORE FRESH AND SPENT CLEANUP SOLVENT MATERIALS IN CLOSED CONTAINERS.
17. THE FACILITY SHALL NOT USE A CLEANUP MATERIAL TO PERFORM IN-LINE SOLVENT CLEANING OF PROCESS UNITS AND PIPINGS UNLESS EITHER:
- A. THE EMISSIONS ARE VENTED TO A VOC CAPTURE AND CONTROL SYSTEM WHICH HAS A COMBINED SYSTEM EFFICIENCY OF AT LEAST 85% BY WEIGHT AND A CONTROL EFFICIENCY OF AT LEAST 90% BY WEIGHT; OR
 - B. THE SOLVENT COMPLIES WITH A VOC CONTENT LIMIT OF 200 GRAMS/LITER AND A VAPOR PRESSURE LIMIT OF LESS THAN 45 MM HG @ 20°C.
18. EXCEPT FOR LABORATORY EQUIPMENT CLEANING EXEMPT PURSUANT TO RULE 464, SECTION 115, THE FACILITY SHALL NOT USE A SOLVENT TO PERFORM MAINTENANCE SOLVENT CLEANING, INCLUDING BUT NOT LIMITED TO MECHANICAL PARTS AND WORK AREAS, UNLESS THE SOLVENT COMPLIES WITH A VOC CONTENT LIMIT OF 25 GRAMS/LITER (0.21 POUNDS/GALLON).

FUGITIVE EMISSIONS MONITORING REQUIREMENTS

19. THE FACILITY SHALL NOT USE ANY AFFECTED DEVICE OR FLANGE, AS DEFINED IN RULE 443, SECTIONS 201 AND 208, IN THE PROCESS FOR HANDLING VOLATILE ORGANIC COMPOUNDS UNLESS SUCH AFFECTED DEVICE OR FLANGE DOES NOT ALLOW THE VOLATILE ORGANIC COMPOUND BEING HANDLED TO LEAK INTO THE ATMOSPHERE.
20. EACH AFFECTED DEVICE LOCATED AT THE END OF A PIPE OR LINE CONTAINING VOLATILE ORGANIC COMPOUNDS SHALL BE SEALED WITH A BLIND FLANGE, PLUG, OR CAP WHEN NOT IN USE, EXCEPT FOR ANY OF THE FOLLOWING:
- A. VALVES ON PRODUCT SAMPLING LINES
 - B. SAFETY PRESSURE RELIEF VALVES

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- C. BLEEDER VALVES IN DOUBLE BLOCK AND BLEEDER VALVE SYSTEMS
- D. WATER DRAIN VALVES
- E. LOADING SPOUTS

21. EACH AFFECTED DEVICE OR FLANGE WHICH HAS BEEN DISCOVERED TO BE LEAKING SHALL BE AFFIXED WITH A WEATHERPROOF, BRIGHTLY COLORED, READILY VISIBLE TAG BEARING THE DATE THE LEAK WAS DISCOVERED. THE TAG SHALL REMAIN IN PLACE UNTIL THE LEAKING AFFECTED DEVICE OR FLANGE IS REPAIRED OR REPLACED, REINSPECTED, AND FOUND TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF RULE 443.
22. EACH AFFECTED DEVICE OR FLANGE HANDLING VOLATILE ORGANIC COMPOUNDS SHALL BE INSPECTED FOR LEAKS ACCORDING TO THE FOLLOWING SCHEDULE:

AFFECTED DEVICE	SERVICE	LEAK DEFINITION	INSPECTION FREQUENCY	INSPECTION METHOD
PRESSURE RELIEF DEVICES	GAS	IMPROPER RESEAT	WITHIN 24 HOURS AFTER EVERY OVER-PRESSURE RELIEF	VISUAL OR MANUAL
PUMPS	LIGHT LIQUID	VISIBLE LEAK	WEEKLY	VISUAL
PUMPS	ALL	500 PPMV	QUARTERLY	PORTABLE HYDROCARBON DETECTION INSTRUMENT MEASURED 1 CM FROM THE SOURCE
COMPRESSORS	ALL	500 PPMV	QUARTERLY	PORTABLE HYDROCARBON DETECTION INSTRUMENT MEASURED 1 CM FROM THE SOURCE
VALVES, FLANGES, PRESSURE RELIEF DEVICES, CONNECTIONS, AND MISCELLANEOUS DEVICES	ALL	100 PPMV	QUARTERLY (A)	PORTABLE HYDROCARBON DETECTION INSTRUMENT MEASURED 1 CM FROM THE SOURCE

(A) QUARTERLY INSPECTIONS OF VALVES MAY BE REDUCED TO ANNUAL INSPECTIONS IF LESS THAN 2% OF ALL VALVES ASSOCIATED WITH A PROCESS UNIT ARE FOUND TO BE LEAKING FOR FIVE CONSECUTIVE QUARTERLY INSPECTIONS. QUARTERLY INSPECTIONS MUST BE RESUMED IF DURING THE ANNUAL INSPECTION, MORE THAN 2% OF THE VALVES ARE FOUND TO BE LEAKING

23. EACH LEAKING AFFECTED DEVICE OR FLANGE SHALL BE REPAIRED WITHIN TWO WORKING DAYS AFTER DETECTION OF SUCH LEAK, EXCEPT AS PROVIDED IN RULE 443, SECTION 303.2. THE REPAIRS SHALL BE SUCH THAT THERE WILL BE A NO LEAK CONDITION.
24. FOR EACH ESSENTIAL AFFECTED DEVICE OR FLANGE FOUND TO BE LEAKING THAT CANNOT BE BROUGHT INTO COMPLIANCE WITH RULE 443, SECTION 303.1, THE FOLLOWING ACTIONS SHALL BE TAKEN:
- A. IF, AFTER EFFORTS TO REPAIR IN ACCORDANCE WITH RULE 443, SECTION 303.1 WITHOUT SHUTTING DOWN ARE COMPLETED AND THE LEAK RATE IS LESS THAN 10 DROPS PER MINUTE, OR THE DETECTABLE HYDROCARBON CONCENTRATION IS LESS THAN 10,000 PPM (EXPRESSED AS METHANE), BUT MORE THAN THE LEAK DEFINITION VALUE AS MEASURED WITHIN 1 CENTIMETER OF THE SOURCE, ALL OF THE FOLLOWING ACTIONS SHALL BE TAKEN;

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- (1) WITHIN TWO WORKING DAYS OF DISCOVERY OF NON-REPAIRABILITY, THE AIR POLLUTION CONTROL OFFICER SHALL BE GIVEN NOTICE OF THE DATE THE ESSENTIAL AFFECTED DEVICE OR FLANGE WILL BE REPAIRED; AND
 - (2) WITHIN TWO WORKING DAYS OF REPAIR, THE AIR POLLUTION CONTROL OFFICER SHALL BE NOTIFIED OF THE DATE OF REPAIR; AND
 - (3) INSPECTION OF SUCH ESSENTIAL AFFECTED DEVICE OR FLANGE SHALL BE MADE MONTHLY UNTIL SUCH ESSENTIAL AFFECTED DEVICE OR FLANGE IS RETURNED TO A NO LEAK CONDITION; AND
 - (4) REPAIRS TO BRING SUCH ESSENTIAL AFFECTED DEVICE OR FLANGE TO A NO LEAK CONDITION SHALL BE COMPLETED AT THE NEXT PROCESS TURNAROUND OR PLANT SHUTDOWN OR WITHIN SIX MONTHS, WHICHEVER IS THE SHORTER LENGTH OF TIME.
- B. IF, AFTER EFFORTS TO REPAIR IN ACCORDANCE WITH RULE 443, SECTION 303.1 WITHOUT SHUTTING DOWN ARE COMPLETED AND THE LEAK RATE IS 10 DROPS PER MINUTE OR GREATER, OR APPEARANCE OF A VISIBLE MIST CONTINUES, OR THE DETECTABLE HYDROCARBON EMISSIONS ARE 10,000 PPM (EXPRESSED AS METHANE) OR GREATER, MEASURED WITHIN 1 CENTIMETER OF THE SOURCE, ONE OF THE FOLLOWING ACTIONS SHALL BE TAKEN:
- (1) LEAK MINIMIZATION REPAIRS SHALL BE MADE WITHIN TWO DAYS WHICH REDUCES THE LEAKAGE RATE TO THE RATE STATED IN RULE 443, SUBSECTION 303.2.A AND SUCH ESSENTIAL AFFECTED DEVICE SHALL BE SUBJECT TO THE PROVISIONS OF RULE 443, SUBSECTION 303.2.A; OR
 - (2) THE EMISSIONS FROM THE LEAK SHALL BE REDUCED BY 90% WITHIN TWO WORKING DAYS BY THE USE OF AN EMISSION CONTROL DEVICE, AS DETERMINED BY THE METHODS SPECIFIED IN RULE 443, SECTION 501.3 AND 501.4; OR
 - (3) A PETITION FOR A VARIANCE SHALL BE FILED IN ACCORDANCE WITH RULE 602, *BREAKDOWN CONDITIONS: EMERGENCY VARIANCE*.
25. IF COMPLYING WITH RULE 443, SECTIONS 303.1, 303.2.A, 303.2.B.1, AND 303.2.B.2, THE FACILITY SHALL BE EXEMPT FROM THE PROVISIONS OF RULE 602, *BREAKDOWN CONDITIONS: EMERGENCY VARIANCES*.
26. INACCESSIBLE AFFECTED DEVICES AND FLANGES SHALL BE EXEMPT FROM THE PROVISIONS OF RULE 443, SECTION 302, PROVIDED:
- A. THE NUMBER OF INACCESSIBLE AFFECTED DEVICES AND FLANGES SUBJECT TO THIS SECTION DOES NOT EXCEED 5% OF THE TOTAL NUMBER OF AFFECTED DEVICES OR FLANGES ASSOCIATED WITH A PROCESS UNIT SUBJECT TO RULE 443, SECTION 302; AND
 - B. A LIST OF THE INACCESSIBLE AFFECTED DEVICES AND FLANGES, INCLUDING LOCATION, SUBJECT TO THIS SECTION IS MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST; AND
 - C. THE REASON WHY THE AFFECTED DEVICE OR FLANGE IS INACCESSIBLE IS PROVIDED WITH THE LIST PREPARED PURSUANT TO RULE 443, SECTION 304.2; AND
 - D. THE INACCESSIBLE AFFECTED DEVICES OR FLANGES ARE INSPECTED ANNUALLY.
27. ANY LEAK ORIGINALLY IDENTIFIED BY THE AIR POLLUTION CONTROL OFFICER SHALL CONSTITUTE A VIOLATION OF RULE 443.
28. UNLESS OTHERWISE STATED, THE PERFORMANCE TESTS FOR DEMONSTRATING COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT TO OPERATE SHALL BE THE FOLLOWING:
- A. **VOC MASS EMISSION RATE AND CONTROL EFFICIENCY:** EXCEPT WHERE OTHERWISE SPECIFIED, THE VOC MASS EMISSION RATE AND CONTROL EFFICIENCY SHALL BE DETERMINED IN ACCORDANCE WITH EPA METHOD 18, 25 OR 25A; EPA METHOD 1 OR 1A; EPA METHOD 2, 2A, 2B OR 2C; EPA METHOD 3; AND EPA METHOD 4 (WHICHEVER COMBINATION IS MOST APPLICABLE).
 - B. **CAPTURE/COLLECTION EFFICIENCY:** CAPTURE/COLLECTION SHALL BE DETERMINED BY USING EPA *GUIDELINES FOR DEVELOPING COLLECTION EFFICIENCY PROTOCOLS*, 55 FEDERAL REGISTER 26865, JUNE 29, 1990. INDIVIDUAL COLLECTION EFFICIENCY TEST RUNS SUBJECT TO THE EPA TECHNICAL GUIDELINES SHALL BE DETERMINED BY:
 - (1) EPA METHODS 204, 204A, 204B, 204C, 204E AND/OR 204F; OR
 - (2) THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT "PROTOCOL FOR DETERMINING VOLATILE ORGANIC COMPOUND (VOC) CAPTURE EFFICIENCY"; OR
 - (3) ANY OTHER METHOD APPROVED IN WRITING BY THE U.S. EPA, THE CALIFORNIA AIR RESOURCES BOARD, AND THE AIR POLLUTION CONTROL OFFICER.
 - C. **VOC CONCENTRATION IN WASTEWATER:** THE TOTAL VOC CONCENTRATION IN WASTEWATER SHALL BE DETERMINED IN ACCORDANCE WITH EPA METHOD 305 OR METHOD 25D.

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- D. **VAPOR PRESSURE:** VAPOR PRESSURE OF A VOC SHALL BE DETERMINED IN ACCORDANCE WITH ASTM METHOD D2879-86 OR MAY BE OBTAINED FROM THE MOST CURRENT EDITION OF STANDARD REFERENCE TEXTS, INCLUDING, BUT NOT LIMITED TO:
- (1) *THE VAPOR PRESSURE OF PURE SUBSTANCES*, BOUBLIK, FRIED AND HALA; ELSEVIER SCIENTIFIC PUBLISHING COMPANY, NEW YORK;
 - (2) *PERRY'S CHEMICAL ENGINEER'S HANDBOOK*, MCGRAW-HILL BOOK COMPANY;
 - (3) *CRC HANDBOOK OF CHEMISTRY AND PHYSICS*, CHEMICAL RUBBER PUBLISHING COMPANY; OR
 - (4) *LANGE'S HANDBOOK OF CHEMISTRY*, JOHN DEAN, EDITOR, MCGRAW-HILL BOOK COMPANY.
- E. **VOC CONTENT:** VOC WEIGHT PERCENT OF PROCESS FLUIDS SHALL BE DETERMINED BY ASTM METHOD E-168, E-169, E-260 OR EPA METHOD 24.
- F. **LEAK DETECTION:** EPA METHOD 21 SHALL BE USED TO DETERMINE THE EXISTENCE OF A LEAK.
- G. **DETERMINATION OF EXEMPT PERFLUOROCARBON COMPOUNDS:** IF ANY OF THE PERFLUOROCARBONS ARE BEING CLAIMED AS EXEMPT COMPOUNDS, THE PERSON MAKING THE CLAIM MUST STATE IN ADVANCE WHICH COMPOUNDS ARE PRESENT, AND THE EPA-APPROVED TEST METHOD USED TO MAKE THE DETERMINATION OF THESE COMPOUNDS.
29. THE FACILITY SHALL NOTIFY THE AIR POLLUTION CONTROL OFFICER AT LEAST ONE WEEK IN ADVANCE OF THE DATE AND TIME OF ANY FUGITIVE EMISSIONS MONITORING PERFORMED FOR THE PURPOSES OF SATISFYING CONDITIONS IN SMAQMD RULE 443.

EMISSION TESTING

30. THE FACILITY SHALL PERFORM THE FOLLOWING SOURCE TESTS AT LEAST ONCE DURING EACH CALENDAR YEAR, UNDER THE FOLLOWING CONDITIONS:
- A. VOC MASS EMISSIONS SHALL BE DETERMINED FOR THE FOLLOWING EMISSION POINT:

EMISSION SOURCE ID	EMISSION POINT	TEST METHODS
1020	GLYCERINE EVAPORATOR	EPA METHODS 1 - 4 & EPA METHOD 18 OR METHOD 25

- B. IF EPA METHOD 25 IS PERFORMED TO DETERMINE VOC MASS EMISSIONS FOR STREAMS KNOWN TO CONTAIN METHANOL, METHANOL SHALL ALSO BE MEASURED USING EITHER EPA METHOD 18 OR EPA METHOD 308. A MOLECULAR WEIGHT OF 32 SHALL BE USED FOR METHANOL AND A MOLECULAR WEIGHT OF 16 SHALL BE USED FOR NON-METHANOL VOC IN ALL CALCULATIONS.
- C. IF EPA METHOD 18 IS PERFORMED TO DETERMINE VOC MASS EMISSIONS, THE INDIVIDUAL MOLECULAR WEIGHTS OF EACH VOC PRESENT IN THE EXHAUST SHALL BE ACCOUNTED FOR IN ALL CALCULATIONS.
- D. A SOURCE TEST PLAN SHALL BE SUBMITTED TO THE AIR POLLUTION CONTROL OFFICER FOR WRITTEN APPROVAL AT LEAST 30 DAYS BEFORE THE SCHEDULED DATE OF THE SOURCE TEST. THE SOURCE TESTING REQUIRED BY THIS CONDITION SHALL NOT BE PERFORMED WITHOUT PRIOR APPROVAL OF THE SMAQMD. THE SOURCE TEST PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO, THE PROPOSED OPERATING CONDITIONS DURING THE SOURCE TEST, THE SPECIFIC PROTOCOL BEING USED, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES TO BE USED.
- E. ALL SOURCE TEST RUNS SHALL BE CONDUCTED WHILE THE OUTSIDE AMBIENT TEMPERATURE IS 80°F OR GREATER. EXTENDED SOURCE TEST RUNS (GREATER THAN 8 HOURS IN LENGTH) MAY BE PERFORMED ON CALENDAR DAYS WHEN THE DAILY HIGH TEMPERATURE IS 90°F OR GREATER.
- F. SOURCE TEST RUNS SHALL COINCIDE WITH THE WORST CASE OPERATING SCENARIO APPROVED BY THE DISTRICT. FOR BATCH PROCESSES OR EQUIPMENT VENTING BATCH PROCESSES, THE DURATION OF TEST RUNS SHALL BE THE TIME FROM THE START TO THE COMPLETION OF THE BATCH CYCLE, UNLESS THE TEST RUN IS CONDUCTED UNDER AN ABSOLUTE OR HYPOTHETICAL WORST CASE SCENARIO AS DESCRIBED IN SMAQMD RULE 464, SECTION 412.3. FOR A BATCH CYCLE OR TEST PERIOD GREATER THAN 3 HOURS, A SINGLE TEST RUN CONDUCTED OVER THE DURATION OF THE BATCH CYCLE OR TEST PERIOD USED FOR THE EMISSION DETERMINATION. FOR BATCH CYCLES OR TEST PERIODS LESS THAN OR EQUAL TO 3 HOURS, TESTING SHALL INCLUDE AT A MINIMUM 3 ONE-HOUR RUNS.
- G. THE AIR POLLUTION CONTROL OFFICER SHALL BE NOTIFIED AT LEAST 7 DAYS PRIOR TO THE ACTUAL SOURCE TEST DATE AND START TIME.

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H. A WRITTEN SOURCE TEST REPORT SHALL BE SUBMITTED TO THE AIR POLLUTION CONTROL OFFICER WITHIN 60 DAYS AFTER COMPLETION OF THE SOURCE TEST. THE SOURCE TEST REPORT SHALL INCLUDE ANY TOTAL RESOURCE EFFECTIVENESS (TRE) CALCULATIONS USED TO SHOW COMPLIANCE WITH THE 40 CFR 60, SUBPARTS NNN AND RRR.

RECORDKEEPING

31. THE FACILITY SHALL RECALCULATE THE TOTAL RESOURCE EFFECTIVENESS (TRE) INDEX VALUE FOR ANY UNIT SUBJECT TO THE 40 CFR 60 SUBPART NNN AND SUBPART RRR WHENEVER PROCESS CHANGES ARE MADE ACCORDINGLY. EXAMPLES OF PROCESS CHANGES INCLUDE: CHANGES IN PRODUCTION CAPACITY, FEEDSTOCK-TYPE OR CATALYST-TYPE, OR WHENEVER THERE IS A REPLACEMENT, REMOVAL OR ADDITION OF RECOVERY EQUIPMENT. THE TRE SHALL BE RECALCULATED BASED ON TEST DATA OR ON BEST ENGINEERING ESTIMATE OF THE EFFECTS OF THE CHANGE TO THE RECOVERY SYSTEM.
32. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ON-SITE FOR THE MOST RECENT FIVE-YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. QUARTERLY RECORDS AS SPECIFIED IN THE TABLE BELOW SHALL BE MADE AVAILABLE FOR INSPECTION WITHIN 30 DAYS FOLLOWING THE END OF THE PRECEDING QUARTER.

FREQUENCY	INFORMATION TO BE RECORDED
AT ALL TIMES	A. CHANGES IN PRODUCTION CAPACITY, FEEDSTOCK TYPE, OR CATALYST TYPE, OR ANY REPLACEMENT, REMOVAL OR ADDITION OF RECOVERY EQUIPMENT FOR A DISTILLATION UNIT OR REACTOR SUBJECT TO 40 CFR 60 SUBPART NNN OR SUBPART RRR. B. ANY RECALCULATION OF THE TRE INDEX VALUE REQUIRED BY 40 CFR 60 SUBPART NNN OR SUBPART RRR. C. SOURCE TEST REPORTS. D. FUGITIVE EMISSION MONITORING REPORTS INCLUDING: 1) IDENTITY OF EACH AFFECTED DEVICE OR FLANGE 2) DATE OF INSPECTION 3) LEAK RATE
DAILY	E. TYPES AND AMOUNTS OF ORGANIC COMPOUNDS USED AND PRODUCED BY EACH ORGANIC CHEMICAL MANUFACTURING PROCESS UNIT.
WHEN LEAK IS DETECTED DURING AN INSPECTION REQUIRED BY CONDITION NO. 21.	F. IDENTITY OF EACH AFFECTED DEVICE OR FLANGE. G. DATE OF DETECTION OF LEAK. H. LEAK RATE. I. DATE OF REPAIR. J. LEAK RATE AFTER REPAIR. K. DATE WHEN LEAK FREE. L. DATE WHEN DEVICE OR FLANGE RETURNS TO REGULAR INSPECTION SCHEDULE. M. DATE AND TIME LEAK REPORTED TO THE AIR POLLUTION CONTROL OFFICER (FOR WASTEWATER INDIVIDUAL DRAIN COVERS AND WASTEWATER OIL-WATER SEPARATORS ONLY).
QUARTERLY	N. THROUGHPUT OF EACH DEVICE LISTED IN THE TABLE REFERENCED IN CONDITION NO. 7. FOR PROCESS TANKS CONTAINING MATERIALS WITH A VOC COMPOSITE VAPOR PRESSURE GREATER THAN OR EQUAL TO 26 MMHG @ 20°C, THE THROUGHPUT SHALL BE MEASURED BY INSTRUMENTATION. THE INSTRUMENTATION MAY BE LOCATED AT THE PROCESS TANK OR ANOTHER UPSTREAM OR DOWNSTREAM LOCATION THAT IS IN SERIES WITH THE PROCESS TANK. O. CALCULATION OF ROC EMISSIONS FROM THE ESTER DRYER (EMISSION SOURCE ID 1012) BY THE METHOD SPECIFIED IN CONDITION NO. 8.

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YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE 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	PERMIT FEES – STATIONARY SOURCE
401	RINGELMANN CHART
402	NUISANCE
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
443	LEAKS FROM SYNTHETIC ORGANIC CHEMICALS AND POLYMER MANUFACTURING
464	ORGANIC CHEMICAL MANUFACTURING OPERATIONS
40 CFR 60 SUBPART VV	STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY
40 CFR 60 SUBPART NNN	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY DISTILLATION OPERATIONS
40 CFR 60 SUBPART RRR	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY REACTOR PROCESSES
40 CFR 63 SUBPART FFFF	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE 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.

Appendix 'A'

TABLE 3
METHYL ESTER & GLYCERINE MFG PROCESS EMISSIONS

P/O 22270
THE PROCTER & GAMBLE MANUFACTURING CO.

TABLE 3 – METHYL ESTER & GLYCERINE MFG PROCESS EMISSIONS

[UPDATED 08-23-11]

EMISSION SOURCE ID	EQUIPMENT ID	EMISSIONS UNIT NAME	CAPACITY (GAL)	SOCMI DEVICE TYPE	CONTENTS OR PRODUCTS	VENT	MAXIMUM ALLOWABLE THROUGHPUT OR PRODUCTION (LB/QUARTER)	MAXIMUM ALLOWABLE ROC EMISSIONS	
								LB/DAY	LB/QUARTER
0300	70-E-8604 70-E-8506A 70-E-8506B	OVERHEAD (FIN FAN) CONDENSER	NA	CONDENSER	VAPOR	TO FIRE PIT VIA RELIEF DEVICE	NO LIMIT	NO LIMIT	0
0301	25-C-8800	GLYCERINE EVAPORATOR	470	EVAPORATOR	GLYCERINE	TO DEVICE 1020	22,727,070	NO LIMIT	0
0302	40-E-7762	ESTERS BOILING WATER CONDENSER	125	PROCESS TANK	WATER	NO VENT	NO LIMIT	NO LIMIT	0
0303	73-C-1211	ESTERS BOILING WATER CONDENSER CONDENSATE TANK	411	PROCESS TANK	WATER	NO VENT	NO LIMIT	NO LIMIT	0
0304	40-E-7763	ESTERS COLDWATER CONDENSER		PROCESS TANK	WATER	NO VENT	NO LIMIT	NO LIMIT	0
1002	40-D-7821	TANK 671	10,842	PROCESS TANK	ESTERS	6" PVVV	5,000,000	NO LIMIT	136
1004	40-D-338	TANK 672	34,595	PROCESS TANK	ESTERS	8" PVVV	120,200,000	NO LIMIT	104
1005	40-D-339	TANK 673	34,595	PROCESS TANK	ESTERS	8" PVVV	120,000,000	NO LIMIT	105
1006	40-D-8909	TANK 607	385,437	PROCESS TANK	ESTERS	4" PVVV	138,750,000	NO LIMIT	202
1007	90-G-8908	TANK 724	454,334	PROCESS TANK	ESTERS	4" PVVV	138,750,000	NO LIMIT	762
1007.1	40-D-8904	TANK 726	454,334	PROCESS TANK	ESTERS	4" PVVV	120,200,000	NO LIMIT	202
1008	90-D-7406	TANK 725 AKA TANK 605	455,557	PROCESS TANK	ESTERS	6" PVVV	120,200,000	NO LIMIT	732
1010	20-D-817	TANK 595	8,122	PROCESS TANK	ESTERS	3" VENT	145,000,000	NO LIMIT	177
1010.1	20-D-818	TANK 596	7,638	PROCESS TANK	ESTERS	3" VENT	145,000,000	NO LIMIT	169
1012	20-D-7538	ESTER DRYER	1,946	DRYER	ESTERS	APC THERMAL OXIDIZER (NTO)	138,230,000	NO LIMIT	1,400
1019	71-D-305	TANK 532	5,076	REACTOR	GLYCERINE	4" VENT	26,250,000	NO LIMIT	12
1020	25-E-8820	GLYCERINE EVAPORATOR CONDENSER	423	PROCESS VENT	WATER/ VAPOR	2" DRAIN	6,750,000	NO LIMIT	1,104
1021	65-D-312	TANK 554	2,879	PROCESS TANK	GLYCERINE	4" VENT	23,000,000	NO LIMIT	21
1022	30-C-4029	TANK 567	1,625	PROCESS TANK	ESTERS	2.5" VENT	4,500,000	NO LIMIT	0.3
1041	40-D-7357	ESTER EJECTOR CONDENSATE TANK	3,069	PROCESS TANK & PROCESS VENT	ESTERS/ WATER	4" VENT	6,000,000	NO LIMIT	7.9
1067	71-D-521	TANK 521	16,076	PROCESS TANK	VEGETABLE OIL	4" VENT	10,000,000	NO LIMIT	1

TABLE 3 – METHYL ESTER & GLYCERINE MFG PROCESS EMISSIONS (continued)

EMISSION SOURCE ID	EQUIPMENT ID	EMISSIONS UNIT NAME	CAPACITY (GAL.)	SOCMI DEVICE TYPE	CONTENTS OR PRODUCTS	VENT	MAXIMUM ALLOWABLE THROUGHPUT OR PRODUCTION (LB/QUARTER)	MAXIMUM ALLOWABLE ROC EMISSIONS	
								LB/DAY	LB/QUARTER
1070	71-D-306	TANK 531	1,028	PROCESS TANK	WATER/ GLYCERINE	4" VENT	5,000,000	NO LIMIT	0
1071	71-D-319	TANK 544	21,152	PROCESS TANK	GLYCERINE	4" VENT	26,250,000	NO LIMIT	0
1072	71-D-318	TANK 545	21,152	PROCESS TANK	GLYCERINE	4" VENT	26,250,000	NO LIMIT	0
1077	15-D-7559	BOTTOMS FROM CENTRIFUGE	20	PROCESS TANK	ESTERS	12" OPEN TOP	500,000	NO LIMIT	0
1093	90-D-7409	TANK 609	108,403	PROCESS TANK	ESTERS	8" PVVV	10,000,000	NO LIMIT	2.9
1304	15-D-301	TANK 542	3,948	PROCESS TANK	NaOH SOLUTION	VENT	NO LIMIT	NO LIMIT	0
1310	30-C-4016	TANK 606	24,690	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	40,000,000	NO LIMIT	0
1311	30-C-7833	ESTER FLASH TANK	1,128	PROCESS TANK	ESTERS	TO APC THERMAL OXIDIZER (NTO)	15,000,000	NO LIMIT	0
1313	40-C-1208	ESTERS DISTILLATE RECEIVER	47	PROCESS TANK	ESTERS	TO DEVICE 1041	20,000,000	NO LIMIT	0
1314	40-C-1210	ESTERS STILL DISTILLATE RECEIVER	202	PROCESS TANK	ESTERS	TO DEVICE 1041	6,000,000	NO LIMIT	0
1316	40-C-1215	ESTERS STILL DISTILLATE RECEIVER	212	PROCESS TANK	ESTERS	TO DEVICE 1041	120,200,000	NO LIMIT	0
1317	40-C-308	ESTERS STILL	4,791	DISTILLATION COLUMN	ESTERS	TO DEVICE 1041	30,000,000	NO LIMIT	0
1318	40-C-7315	ESTERS STILL AKA TANK 638	10,364	DISTILLATION COLUMN	ESTERS	TO DEVICE 1041	120,200,000	NO LIMIT	0
1319	40-C-7324	ESTERS STILL	11,685	DISTILLATION COLUMN	ESTERS	TO DEVICE 1041	105,000,000	NO LIMIT	0
1320	40-C-7766	ATMOSPHERIC FLASH TANK		PROCESS TANK	WATER	VENT	NO LIMIT	NO LIMIT	0
1375	60-C-4503	TANK 601	12,976 9,000	PROCESS TANK	METHANOL/ SODIUM METHOXIDE	TO APC THERMAL OXIDIZER (NTO)	5,000,000	NO LIMIT	0
1376	60-C-709	TANK 582	12,976	PROCESS TANK (OUT OF SERVICE)	OUT OF SERVICE	NO VENT	0	0	0
1377	60-C-8756	TANK 588	3,760	PROCESS TANK	METHANOL/ SODIUM METHOXIDE	TO APC THERMAL OXIDIZER (NTO)	7,000,000	NO LIMIT	0
1378	65-C-823	GLYCERINE COLUMN	1,904	DISTILLATION COLUMN	GLYCERINE	TO APC THERMAL OXIDIZER (NTO)	33,750,000	NO LIMIT	0
1380	70-C-4416	TANK 578	185	PROCESS TANK	METHANOL/ WATER	TO APC THERMAL OXIDIZER (NTO)	250,000	NO LIMIT	0

TABLE 3 – METHYL ESTER & GLYCERINE MFG PROCESS EMISSIONS (continued)

EMISSION SOURCE ID	EQUIPMENT ID	EMISSIONS UNIT NAME	CAPACITY (GAL)	SOCMI DEVICE TYPE	CONTENTS OR PRODUCTS	VENT	MAXIMUM ALLOWABLE THROUGHPUT OR PRODUCTION (LB/QUARTER)	MAXIMUM ALLOWABLE ROC EMISSIONS	
								LB/DAY	LB/QUARTER
1381	70-C-576	TANK 576	200	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	125,000	NO LIMIT	0
1382	70-C-701	TANK 572	8,367	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	14,625,000	NO LIMIT	0
1383	70-C-702	TANK 573	8,335	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	14,625,000	NO LIMIT	0
1384	70-C-705	TANK 592	6,639	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	30,000,000	NO LIMIT	0
1385	70-C-706	TANK 593	6,639	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	30,000,000	NO LIMIT	0
1386	70-C-707	TANK 594	6,639	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	30,000,000	NO LIMIT	0
1387	70-C-8044	TANK 584	5,711	PROCESS TANK	WATER/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	30,000,000	NO LIMIT	0
1388	70-C-851	TANK 597	7,950	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	15,000,000	NO LIMIT	0
1389	70-C-8701	TANK 577	288	PROCESS TANK	METHANOL	TO APC THERMAL OXIDIZER (NTO)	100,000,000	NO LIMIT	0
1390	70-D-714	TANK 583	4,512	PROCESS TANK	WATER/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	2,500,000	NO LIMIT	0
1391	71-D-303	TANK 547	7,615	PROCESS TANK	HCl SOLUTION	4" VENT	NO LIMIT	NO LIMIT	0
1392	71-D-512	TANK 512	15,280	PROCESS TANK	GLYCERINE	4" VENT	1,000,000	NO LIMIT	0.2
1393	71-D-522	TANK 522	16,076	PROCESS TANK (OUT OF SERVICE)	OUT OF SERVICE	NA	0	0	0
1396	73-D-500	TANK 500	10,156	PROCESS TANK	FATTY ACIDS, ESTERS, VEGETABLE OIL	2" VENT	1,000,000	NO LIMIT	1.8
1397	73-D-501	TANK 501	10,156	PROCESS TANK	FATTY ACIDS, ESTERS, VEGETABLE OIL	2" VENT	1,000,000	NO LIMIT	1.8
1400	73-D-8920	OIL SKIMS SURGE TANK – TANK 8920	22,000	PROCESS TANK	WATER, FATTY ACIDS	8" VENT, 8" OVERFLOW	373,750,000	NO LIMIT	0
1401	73-D-8927	OIL COALESCER	8,813	PROCESS TANK	WATER, FATTY ACIDS	8" VENT, 10" OVERFLOW	373,750,000	NO LIMIT	0.1
1402	73-D-8928	ACID WATER TANK	3,760	PROCESS TANK	WATER/ ESTERS	2" VENT, 6" OVERFLOW	12,500,000	NO LIMIT	0

TABLE 3 – METHYL ESTER & GLYCERINE MFG PROCESS EMISSIONS (continued)

EMISSION SOURCE ID	EQUIPMENT ID	EMISSIONS UNIT NAME	CAPACITY (GAL)	SOCMI DEVICE TYPE	CONTENTS OR PRODUCTS	VENT	MAXIMUM ALLOWABLE THROUGHPUT OR PRODUCTION (LB/QUARTER)	MAXIMUM ALLOWABLE ROC EMISSIONS	
								LB/DAY	LB/QUARTER
1408	90-D-626	TANK 548	22,474	PROCESS TANK	H ₂ SO ₄ SOLUTION	4" PVV	NO LIMIT	NO LIMIT	0
1409	60-C-8751	SODIUM METHYLATE COLUMN – TANK 587	1,880	DISTILLATION COLUMN	METHANOL/ SODIUM METHYLATE	TO APC THERMAL OXIDIZER (NTO)	7,000,000	NO LIMIT	0
1412	65-C-8084	TANK 568	4,848	PROCESS TANK	METHANOL/ GLYCERINE	TO APC THERMAL OXIDIZER (NTO)	14,500,000	NO LIMIT	0
1415	65-C-820	TANK 574	8,226	PROCESS TANK	GLYCERINE/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	14,500,000	NO LIMIT	0
1418	30-C-4506	TANK 602	17,768	PROCESS TANK	GLYCERINE/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	143,750,000	NO LIMIT	0
1421	20-C-4600	TANK 603	17,768	PROCESS TANK	GLYCERINE/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	143,750,000	NO LIMIT	0
1430	15-Y-4104	ESTER BOTTOMS CENTRIFUGE	15	CENTRIFUGE	ESTERS	TO DEVICE 1077	5,000,000	NO LIMIT	0
1430.1	15-Y-7544	ESTER BOTTOMS CENTRIFUGE	15	CENTRIFUGE	ESTERS	TO DEVICE 1077	5,000,000	NO LIMIT	0
1435	70-C-8700	METHANOL DRYER	19,735	DRYER	METHANOL	TO APC THERMAL OXIDIZER (NTO)	75,000,000	NO LIMIT	0
1436	70-C-8716	METHANOL CONDENSER	68	CONDENSER	WATER/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	90,000,000	NO LIMIT	0
1437	20-C-7513	ESTER WASH COLUMN (EAST)	1,214	PROCESS TANK	GLYCERINE/ METHANOL	NO VENT	50,000,000	NO LIMIT	0
1437.1	20-C-4602	ESTER WASH COLUMN (NORTH)	1,214	PROCES TANK	GLYCERINE/ METHANOL	NO VENT	40,000,000	NO LIMIT	0
1437.2	20-C-804	ESTER WASH COLUMN (SOUTH)	850	PROCESS TANK	GLYCERINE/ METHANOL	NO VENT	30,000,000	NO LIMIT	0
1437.3	20-C-2326	NEW ESTER WASH COLUMN	6,205	PROCESS TANK	GLYCERINE/ METHANOL	NO VENT	120,000,000	NO LIMIT	0
1438	30-C-7534	ESTER REACTOR	44,842	REACTOR	VEGETABLE OIL/ METHANOL	TO APC THERMAL OXIDIZER (NTO)	143,750,000	NO LIMIT	0
1439	30-E-7840 & 30-E-7841	ESTER FLASH AIR-COOLED CONDENSER AND CONDENSATE RECEIVER	210	CONDENSER	METHANOL	TO APC THERMAL OXIDIZER (NTO)	15,000,000	NO LIMIT	0
TOTAL ROC EMISSIONS									5,142

Exhibit '1'

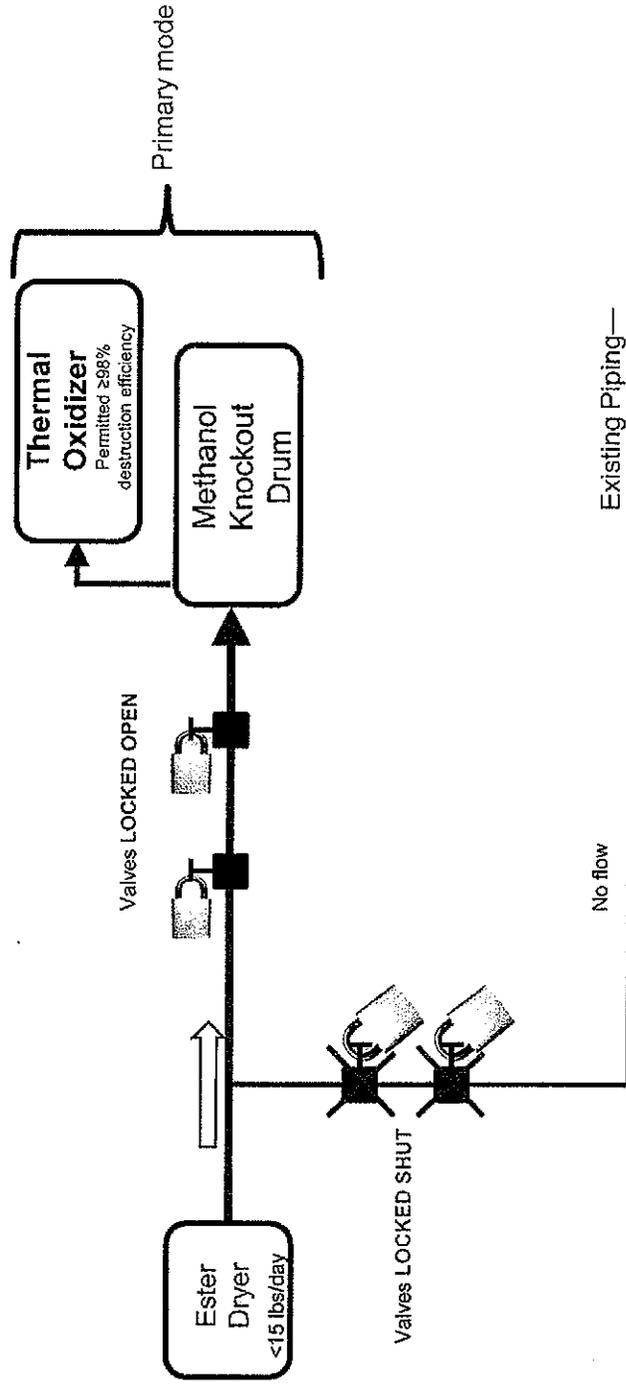
THE PROCTER & GAMBLE MANUFACTURING CO.

Ester Dryer Vent Stream Operating Mode

Scenarios During Process Definition

- Primary Mode – Venting to APC Thermal Oxidizer
- Backup Mode – Venting to Atmosphere
- Final Stage – Blind Flange on 4" Dryer Vent Pipe

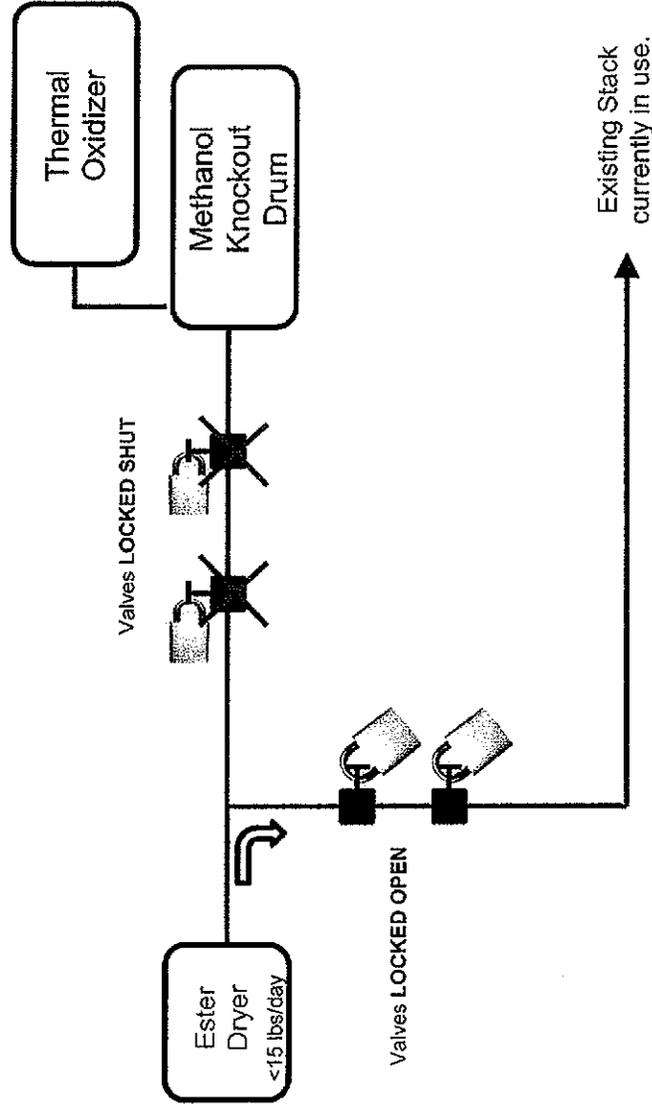
D.1 – Primary Mode – emissions control during process definition



- Throughput Limit = 138,250,000 lb/quarter (original permitted/design throughput)
- Emission Limit Unchanged

- Modeled on MON-MACT Long Term Lockout Program 40 CFR Section 63.998(d)(1)(ii), which is currently in use in several locations in the plant.
- Flow to methanol Knockout Drum/Thermal Oxidizer is ensured by valves locked open and shut, respectively. Valves would be inspected monthly.
- Higher throughput needed from the start to properly test configuration for long term reliability and safety

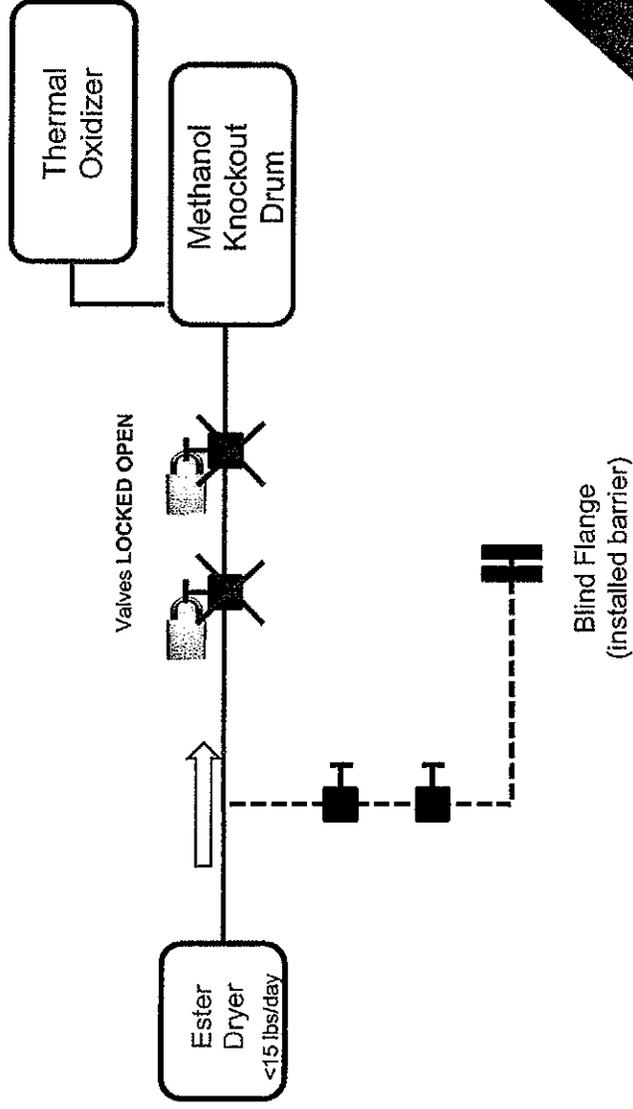
D.2 – Backup Mode – Option exists during process definition, for unforeseen engineering difficulties.



- Throughput Limit = 97,152,000 lb/quarter
- Emission Limit Unchanged

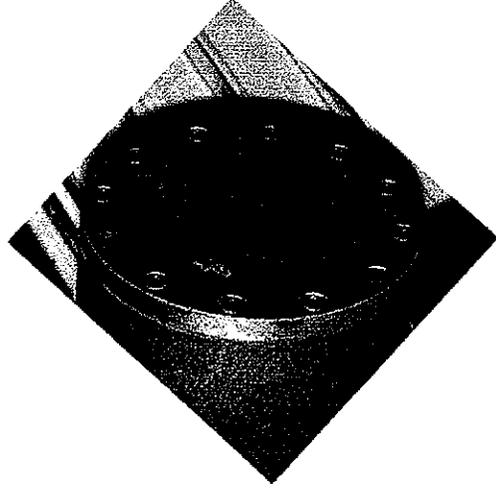
- Want to keep the option of going to atmosphere (current configuration) in case of unforeseen difficulties.
- Annual Source test completed as normally, unless process definition completed, then no source test required (because emissions are going to thermal oxidizer.)

**D.3 – Final Stage After Project Success– eliminate path to atmosphere.
Permanent fewer emissions!**



- Throughput Limit = 138,250,000 lb/quarter
- Emission Limit Unchanged
- No annual source test for ester dryer

- After "process definition" period, at next turnaround (planned shutdown):
- Seal off outlet with bolted blind flange
 - Remove locks on original path to piping



Example of Blind Flange

SACRAMENTO METROPOLITAN



AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: **THE PROCTER & GAMBLE MANUFACTURING CO.**

EQUIPMENT LOCATION: **8201 FRUITRIDGE RD., SACRAMENTO, CA 95826**

PERMIT NO.	EQUIPMENT DESCRIPTION
22483	APC THERMAL OXIDIZER [NORTH THERMAL OXIDIZER (NTO)], BAKER FURNACE, MODEL SX 2500 SCFM, 6 MMBTU/HR HEAT INPUT RATING, 7½ HP COMBUSTION BLOWER <i>[VENTING VARIOUS EMISSIONS UNITS IN THE METHYL ESTER & GLYCERINE MANUFACTURING PROCESS (P/O NO. 22270), WHICH INCLUDES THE METHANOL RECOVERY PROCESS AND THE FATTY ACIDS MANUFACTURING PROCESS (P/O NO. 20505)]</i>

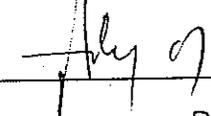
SUBJECT TO THE FOLLOWING CONDITIONS:

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 PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT 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.
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.

DATE ISSUED: 09-08-2011
DATE EXPIRES: 04-04-2012 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: 

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

5. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSIONS LIMITATIONS

6. THE PROCESS 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 APC THERMAL OXIDIZER [NORTH THERMAL OXIDIZER (NTO)] SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	MAXIMUM ALLOWABLE EMISSIONS (A)		
	LB/DAY (B)	LB/QUARTER (B)	LB/YEAR (B)
ROC	0.66	61	241

(A) CONTROLLED PROCESS EMISSIONS ARE BASED ON AN ORGANIC HAP CONTROL DEVICE EFFICIENCY OF 98% BY WEIGHT (40 CFR 63 SUBPART FFFF, SECTION 63.2455 & TABLE 1, SECTION 63.2460 & TABLE 2 AND SECTION 63.2470 & TABLE 4).

(B) QUARTERLY EMISSION IS BASED ON UNCONTROLLED PROCESS VENT STREAMS FROM SEVERAL STORAGE TANKS, CONTINUOUS AND BATCH PROCESS VENTS, CONDENSERS AND REACTORS OF 3,036 LB/QUARTER AND A CONTROL DEVICE EFFICIENCY OF 98%, EXCLUDING COMBUSTION EMISSIONS FROM THE THERMAL OXIDIZER BURNERS (REFER TO CONDITION NO. 8). EMISSIONS ARE BASED ON 92 DAYS/QUARTER AND 365 DAYS/YEAR.

8. COMBUSTION EMISSIONS FROM THE APC THERMAL OXIDIZER [NORTH THERMAL OXIDIZER (NTO)] SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (A) LB/MMCF	MAXIMUM ALLOWABLE EMISSIONS		
		LB/DAY	LB/QUARTER	LB/YEAR
ROC	5.5	0.8	73	289
NOx	36.4	5.2	482	1,913
SOx	0.6	0.09	8	32
PM10	7.6	1.1	101	400
CO	84	12.1	1,113	4,415
GHG	116.89 LB/MMBTU	8.4 TONS/DAY	774 TONS/QUARTER	3,072 TONS/YEAR

(A) EMISSION FACTORS ARE FROM AP-42, TABLE 1.4-1 ~ 1.4-2, *EMISSION FACTORS FROM NATURAL GAS COMBUSTION*, PG 1.4-5 ~ 1.4-6 (7/98), EXCEPT FOR NOx WHICH IS BASED ON 30 PPMVD @ 3% O₂. GHG EMISSION FACTOR IS THE CO_{2E} 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) EMISSIONS ARE BASED ON A MAXIMUM FUEL USAGE OF 6,000 CF/HOUR, 24 HOURS/DAY, 92 DAYS/QUARTER, 365 DAYS/YEAR AND THE EMISSION FACTORS LISTED IN THIS TABLE.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EQUIPMENT OPERATION

9. THE APC THERMAL OXIDIZER (NTO) SHALL DEMONSTRATE EITHER A CONTROL DEVICE EFFICIENCY FOR TOTAL ORGANIC HAZARDOUS AIR POLLUTANT (OHAP) OR A PROCESS OUTLET CONCENTRATION FOR TOTAL ORGANIC COMPOUND (TOC) OR ORGANIC HAP (OHAP) ACCORDING TO THE FOLLOWING LIMITS:

CONTROL EQUIPMENT	EMISSION STANDARDS (A)	
	OHAP CONTROL DEVICE EFFICIENCY % BY WEIGHT	TOC OR OHAP OUTLET CONCENTRATION PPMV
APC THERMAL OXIDIZER (NTO)	≥ 98 (B)	≤ 20

- (A) IN ACCORDANCE WITH 40 CFR 63 SUBPART FFFF, SECTION 63.2455 & TABLE 1, SECTION 63.2460 & TABLE 2 AND SECTION 63.2470 & TABLE 4, *NATURAL STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING*.
- (B) PROCTER & GAMBLE HAS DEMONSTRATED COMPLIANCE WITH THE CONTROL DEVICE EFFICIENCY FOR HAPS DURING THE SOURCE TEST CONDUCTED ON APRIL 3, 2008.
10. THE EMISSION LIMITS SPECIFIED IN CONDITION NO. 9 SHALL NOT APPLY TO SUBPART FFFF AFFECTED GROUP 1 STORAGE TANK(S) IN SERVICE DURING PERIOD OF PLANNED ROUTINE MAINTENANCE OF THE CONTROL DEVICE PROVIDED SUCH PERIOD DOES NOT EXCEED 240 HOURS PER YEAR. IF IT IS ANTICIPATED THAT THIS LIMIT WILL BE EXCEEDED, P&G MUST SUBMIT AN APPLICATION TO THE ADMINISTRATOR OF THE U.S. EPA 60 DAYS BEFORE THE LIMIT WILL BE EXCEEDED. [40 CFR 63.270(D)]
11. THE APC THERMAL OXIDIZER (NTO) SHALL OPERATE CONTINUOUSLY DURING PERIODS OF EMISSIONS-PRODUCING OPERATIONS, BUT MAY BE SHUT DOWN OR BYPASSED ONLY DURING START-UP, SHUTDOWN OR MALFUNCTION AS DEFINED IN THE STARTUP, SHUTDOWN AND MALFUNCTION PLAN (SSMP); OR WHEN THE APC METHANOL KNOCKOUT DRUM ABSORBER (P/O NO. 22485) VENTING TO THE FIRE PIT STACK (P/O NO. 16564) IS BEING USED AS THE CONTROL DEVICE. [ATTACHED AS APPENDIX 'B']
12. THE TEMPERATURE IN THE FIREBOX, AS INDICATED BY THE PRIMARY OR BACKUP TEMPERATURE GAUGE, SHALL BE MAINTAINED AT OR ABOVE 1300°F DURING PERIODS OF EMISSIONS-PRODUCING OPERATIONS.
13. ROUTINE MAINTENANCE OF THE APC THERMAL OXIDIZER (NTO) SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED OPERATION AND MAINTENANCE PLAN ENTITLED, *NORTH THERMAL OXIDIZER OPERATION & MAINTENANCE PLAN*. [ATTACHED AS APPENDIX 'A']

EMISSION TESTING

14. THE FACILITY SHALL PERFORM THE FOLLOWING SOURCE TEST ONCE EVERY CALENDAR YEAR, UNDER THE FOLLOWING CONDITIONS:
- A. VOC MASS EMISSIONS, MEASURED IN CONCENTRATION OF TOTAL ORGANIC COMPOUND AS SPECIFIED IN CONDITION NO. 9 SHALL BE DETERMINED FOR THE FOLLOWING EMISSION POINT:

EMISSION POINT NAME AND ID NO.	TEST METHOD
APC THERMAL OXIDIZER [NORTH THERMAL OXIDIZER (NTO)], ID NO. 5011	EPA METHODS 1 – 4 & EPA METHOD 18 OR EPA METHOD 25 AND EPA METHOD 308

- B. IF EPA METHOD 25 IS PERFORMED TO DETERMINE VOC MASS EMISSIONS FOR STREAMS KNOWN TO CONTAIN METHANOL, METHANOL SHALL ALSO BE MEASURED USING EITHER EPA METHOD 18 OR EPA METHOD 308. A MOLECULAR WEIGHT OF 32 SHALL BE USED FOR METHANOL AND A MOLECULAR WEIGHT OF 16 SHALL BE USED FOR NON-METHANOL VOC IN ALL CALCULATIONS.
- C. IF EPA METHOD 18 IS PERFORMED TO DETERMINE VOC MASS EMISSIONS, THE INDIVIDUAL MOLECULAR WEIGHTS OF EACH VOC PRESENT IN THE EXHAUST SHALL BE ACCOUNTED FOR IN ALL CALCULATIONS.

**SACRAMENTO METROPOLITAN
 AIR QUALITY MANAGEMENT DISTRICT**

- D. A SOURCE TEST PLAN SHALL BE SUBMITTED TO THE AIR POLLUTION CONTROL OFFICER FOR WRITTEN APPROVAL AT LEAST 30 DAYS BEFORE THE SCHEDULED DATE OF THE SOURCE TEST. THE SOURCE TESTING REQUIRED BY THIS CONDITION SHALL NOT BE PERFORMED WITHOUT PRIOR APPROVAL OF THE SMAQMD. THE SOURCE TEST PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO, THE PROPOSED OPERATING CONDITIONS DURING THE SOURCE TEST, THE SPECIFIC PROTOCOL BEING USED, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES TO BE USED.
- E. SOURCE TESTS SHALL BE PERFORMED BETWEEN MAY 15 AND SEPTEMBER 30. IF THE SOURCE TEST IS CONDUCTED BEFORE OR AFTER THIS TIME PERIOD, SOURCE TEST RUNS SHALL BE CONDUCTED WHILE THE OUTSIDE AMBIENT TEMPERATURE IS 80°F OR HIGHER.
- F. SOURCE TEST RUNS SHALL COINCIDE WITH THE WORST CASE OPERATING SCENARIO APPROVED BY THE DISTRICT. FOR BATCH PROCESSES OR EQUIPMENT VENTING BATCH PROCESSES, THE DURATION OF TEST RUNS SHALL BE THE TIME FROM THE START TO THE COMPLETION OF THE BATCH CYCLE, UNLESS THE TEST RUN IS CONDUCTED UNDER AN ABSOLUTE OR HYPOTHETICAL WORST CASE SCENARIO AS DESCRIBED IN SMAQMD RULE 464, SECTION 412.3. FOR A BATCH CYCLE OR TEST PERIOD GREATER THAN 3 HOURS, A SINGLE TEST RUN CONDUCTED OVER THE DURATION OF THE BATCH CYCLE OR TEST PERIOD SHALL BE USED FOR THE EMISSION DETERMINATION. FOR BATCH CYCLES OR TEST PERIODS LESS THAN OR EQUAL TO 3 HOURS, TESTING SHALL INCLUDE AT A MINIMUM 3 ONE-HOUR RUNS.
- G. THE AIR POLLUTION CONTROL OFFICER SHALL BE NOTIFIED AT LEAST 7 DAYS PRIOR TO THE ACTUAL SOURCE TEST DATE AND START TIME IF THE DATE HAS CHANGED FROM THAT APPROVED IN THE SOURCE TEST PLAN.
- H. A WRITTEN SOURCE TEST REPORT SHALL BE SUBMITTED TO THE AIR POLLUTION CONTROL OFFICER WITHIN 60 DAYS AFTER COMPLETION OF THE SOURCE TEST.

EMISSION OFFSETS

- 15. EMISSION REDUCTION CREDITS FOR ROC HAVE BEEN PROVIDED BY PROCTER & GAMBLE TO FULLY OFFSET THE ROC EMISSIONS SPECIFIED IN CONDITION NO. 8.

PERMIT NO.	CERTIFICATE NO.	POLLUTANT	EMISSION REDUCTION CREDITS (LB/QUARTER)			
			1 ST QUARTER	2 ND QUARTER	3 RD QUANTER	4 TH QUARTER
P/O 22483	07-01036	ROC	73	73	73	73

- (A) ERC CERTIFICATES WERE SURRENDERED BY PROCTER & GAMBLE IN THE PRECEDING PERMIT ACTION IN P/O 21602.

RECORDKEEPING

- 16. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ON-SITE FOR THE MOST RECENT FIVE-YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. ALL RECORDS AS SPECIFIED IN THE TABLE BELOW SHALL BE MADE AVAILABLE FOR INSPECTION WITHIN 30 DAYS FROM THE END OF THE SPECIFIED FREQUENCY.

FREQUENCY	INFORMATION TO BE RECORDED
AT ALL TIMES	A. APC THERMAL OXIDIZER (NTO) OPERATIONS & MAINTENANCE PLAN. B. RECORDS SPECIFIED IN THE APPROVED OPERATIONS & MAINTENANCE PLAN. C. NUMBER OF HOURS OF PLANNED ROUTINE MAINTENANCE (HRS/OCCURRENCE). D. SOURCE TEST REPORTS.
YEARLY	E. TOTAL NUMBER OF HOURS OF PLANNED ROUTINE MAINTENANCE OF THE APC THERMAL OXIDIZER (NTO) (HOURS/YEAR).

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE 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	PERMIT FEES – STATIONARY SOURCE
401	RINGELMANN CHART
402	NUISANCE
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
443	LEAKS FROM SYNTHETIC ORGANIC CHEMICALS AND POLYMER MANUFACTURING
464	ORGANIC CHEMICAL MANUFACTURING OPERATIONS
40 CFR 60 SUBPART VV	STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY
40 CFR 60 SUBPART NNN	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY DISTILLATION OPERATIONS
40 CFR 60 SUBPART RRR	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY REACTOR PROCESSES
40 CFR 63 SUBPART FFFF	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE 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.

SACRAMENTO METROPOLITAN


AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: **THE PROCTER & GAMBLE MANUFACTURING CO.**

EQUIPMENT LOCATION: **8201 FRUITRIDGE RD., SACRAMENTO, CA 95826**

PERMIT NO.	EQUIPMENT DESCRIPTION
22484	APC THERMAL OXIDIZER [SOUTH THERMAL OXIDIZER (STO)], BAKER FURNACE, MODEL SX 2500 SCFM, 6 MMBTU/HR HEAT INPUT RATING, 7½ HP COMBUSTION BLOWER <i>[VENTING VARIOUS EMISSIONS UNITS IN THE FATTY ALCOHOL MANUFACTURING PROCESS (P/O NO. 22007)]</i>

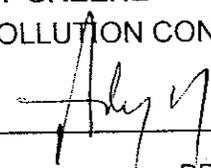
SUBJECT TO THE FOLLOWING CONDITIONS:

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 PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT 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.
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 PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

DATE ISSUED: 09-08-2011
DATE EXPIRES: 04-04-2012 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: 

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EMISSIONS LIMITATIONS

6. THE PROCESS 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 APC THERMAL OXIDIZER [SOUTH THERMAL OXIDIZER (STO)] SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	MAXIMUM ALLOWABLE EMISSIONS (A)		
	LB/DAY (B)	LB/QUARTER (B)	LB/YEAR (B)
ROC	0.37	34	135

- (A) CONTROLLED PROCESS EMISSIONS ARE BASED ON AN ORGANIC HAP CONTROL DEVICE EFFICIENCY OF 95% BY WEIGHT (40 CFR 63 SUBPART FFFF, SECTION 63.2470 & TABLE 4).
- (B) QUARTERLY EMISSION IS BASED ON UNCONTROLLED PROCESS VENT STREAMS FROM SEVERAL STORAGE TANKS, HEATERS AND RECEIVERS OF 679 LB/QUARTER AND A CONTROL DEVICE EFFICIENCY OF 95%, EXCLUDING COMBUSTION EMISSIONS FROM THE THERMAL OXIDIZER BURNERS (REFER TO CONDITION NO. 8). EMISSIONS ARE BASED ON 92 DAYS/QUARTER AND 365 DAYS/YEAR.

8. COMBUSTION EMISSIONS FROM THE APC THERMAL OXIDIZER [SOUTH THERMAL OXIDIZER (STO)] SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (A) LB/MMCF	MAXIMUM ALLOWABLE EMISSIONS		
		LB/DAY	LB/QUARTER	LB/YEAR
ROC	5.5	0.8	73	289
NOx	36.4	5.2	482	1,913
SOx	0.6	0.09	8	32
PM10	7.6	1.1	101	400
CO	84	12.1	1,113	4,415
GHG	116.89 LB/MMBTU	8.4 TONS/DAY	774 TONS/QUARTER	3,072 TONS/YEAR

- (A) EMISSION FACTORS ARE FROM AP-42, TABLE 1.4-1 ~ 1.4-2, *EMISSION FACTORS FROM NATURAL GAS COMBUSTION*, PG 1.4-5 ~ 1.4-6 (7/98), EXCEPT FOR NOx WHICH IS BASED ON 30 PPMVD @ 3% O₂. GHG EMISSION FACTOR IS THE CO_{2E} 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) EMISSIONS ARE BASED ON A MAXIMUM FUEL USAGE OF 6,000 CF/HOUR, 24 HOURS/DAY, 92 DAYS/QUARTER, 365 DAYS/YEAR AND THE EMISSION FACTORS LISTED IN THIS TABLE.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EQUIPMENT OPERATION

9. THE APC THERMAL OXIDIZER (STO) SHALL DEMONSTRATE EITHER A CONTROL DEVICE EFFICIENCY FOR TOTAL ORGANIC HAZARDOUS AIR POLLUTANT (OHAP) **OR** A PROCESS OUTLET CONCENTRATION FOR TOTAL ORGANIC COMPOUND (TOC) OR ORGANIC HAP (OHAP) ACCORDING TO THE FOLLOWING LIMITS:

CONTROL EQUIPMENT	EMISSION STANDARDS (A)	
	OHAP CONTROL DEVICE EFFICIENCY % BY WEIGHT	TOC OR OHAP OUTLET CONCENTRATION PPMV
APC THERMAL OXIDIZER (STO)	≥ 95 (B)	≤ 20

(A) IN ACCORDANCE WITH 40 CFR 63 SUBPART FFFF, SECTION 63.2470 & TABLE 4, *NATURAL STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING*.

(B) PROCTER & GAMBLE HAS DEMONSTRATED COMPLIANCE WITH THE CONTROL DEVICE EFFICIENCY FOR HAPS DURING THE SOURCE TEST CONDUCTED ON APRIL 3, 2008.

10. THE APC THERMAL OXIDIZER (STO) SHALL OPERATE CONTINUOUSLY DURING PERIODS OF EMISSIONS-PRODUCING OPERATIONS, BUT MAY BE SHUT DOWN OR BYPASSED ONLY DURING START-UP, SHUTDOWN OR MALFUNCTION AS DEFINED IN THE STARTUP, SHUTDOWN AND MALFUNCTION PLAN (SSMP); OR WHEN THE APC METHANOL KNOCKOUT DRUM ABSORBER (P/O NO. 22485) VENTING TO THE FIRE PIT STACK (P/O NO. 16564) IS BEING USED AS THE CONTROL DEVICE. [ATTACHED AS APPENDIX 'B']
11. THE TEMPERATURE IN THE FIREBOX, AS INDICATED BY THE PRIMARY OR BACKUP TEMPERATURE GAUGE, SHALL BE MAINTAINED AT OR ABOVE 1300°F DURING PERIODS OF EMISSIONS-PRODUCING OPERATIONS.
12. ROUTINE MAINTENANCE OF THE APC THERMAL OXIDIZER (STO) SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED OPERATION AND MAINTENANCE PLAN ENTITLED, *SOUTH THERMAL OXIDIZER OPERATION & MAINTENANCE PLAN*. [ATTACHED AS APPENDIX 'A']

EMISSION TESTING

13. THE FACILITY SHALL PERFORM THE FOLLOWING SOURCE TEST ONCE EVERY CALENDAR YEAR, UNDER THE FOLLOWING CONDITIONS:
- A. VOC MASS EMISSIONS, MEASURED IN CONCENTRATION OF TOTAL ORGANIC COMPOUND AS SPECIFIED IN CONDITION NO. 9 SHALL BE DETERMINED FOR THE FOLLOWING EMISSION POINT:

EMISSION POINT NAME AND ID NO.	TEST METHOD
APC THERMAL OXIDIZER [SOUTH THERMAL OXIDIZER (STO)], ID NO. 5010	EPA METHODS 1 – 4 & EPA METHOD 18 OR EPA METHOD 25 AND EPA METHOD 308

- B. IF EPA METHOD 25 IS PERFORMED TO DETERMINE VOC MASS EMISSIONS FOR STREAMS KNOWN TO CONTAIN METHANOL, METHANOL SHALL ALSO BE MEASURED USING EITHER EPA METHOD 18 OR EPA METHOD 308. A MOLECULAR WEIGHT OF 32 SHALL BE USED FOR METHANOL AND A MOLECULAR WEIGHT OF 16 SHALL BE USED FOR NON-METHANOL VOC IN ALL CALCULATIONS.
- C. IF EPA METHOD 18 IS PERFORMED TO DETERMINE VOC MASS EMISSIONS, THE INDIVIDUAL MOLECULAR WEIGHTS OF EACH VOC PRESENT IN THE EXHAUST SHALL BE ACCOUNTED FOR IN ALL CALCULATIONS.
- D. A SOURCE TEST PLAN SHALL BE SUBMITTED TO THE AIR POLLUTION CONTROL OFFICER FOR WRITTEN APPROVAL AT LEAST 30 DAYS BEFORE THE SCHEDULED DATE OF THE SOURCE TEST. THE SOURCE TESTING REQUIRED BY THIS CONDITION SHALL NOT BE PERFORMED WITHOUT PRIOR APPROVAL OF THE SMAQMD. THE SOURCE TEST PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO, THE PROPOSED OPERATING CONDITIONS DURING THE SOURCE TEST, THE SPECIFIC PROTOCOL BEING USED, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES TO BE USED.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

- E. SOURCE TESTS SHALL BE PERFORMED BETWEEN MAY 15 AND SEPTEMBER 30. IF THE SOURCE TEST IS CONDUCTED BEFORE OR AFTER THIS TIME PERIOD, SOURCE TEST RUNS SHALL BE CONDUCTED WHILE THE OUTSIDE AMBIENT TEMPERATURE IS 80°F OR HIGHER.
- F. SOURCE TEST RUNS SHALL COINCIDE WITH THE WORST CASE OPERATING SCENARIO APPROVED BY THE DISTRICT. FOR BATCH PROCESSES OR EQUIPMENT VENTING BATCH PROCESSES, THE DURATION OF TEST RUNS SHALL BE THE TIME FROM THE START TO THE COMPLETION OF THE BATCH CYCLE, UNLESS THE TEST RUN IS CONDUCTED UNDER AN ABSOLUTE OR HYPOTHETICAL WORST CASE SCENARIO AS DESCRIBED IN SMAQMD RULE 464, SECTION 412.3. FOR A BATCH CYCLE OR TEST PERIOD GREATER THAN 3 HOURS, A SINGLE TEST RUN CONDUCTED OVER THE DURATION OF THE BATCH CYCLE OR TEST PERIOD SHALL BE USED FOR THE EMISSION DETERMINATION. FOR BATCH CYCLES OR TEST PERIODS LESS THAN OR EQUAL TO 3 HOURS, TESTING SHALL INCLUDE AT A MINIMUM 3 ONE-HOUR RUNS.
- G. THE AIR POLLUTION CONTROL OFFICER SHALL BE NOTIFIED AT LEAST 7 DAYS PRIOR TO THE ACTUAL SOURCE TEST DATE AND START TIME IF THE DATE HAS CHANGED FROM THAT APPROVED IN THE SOURCE TEST PLAN.
- H. A WRITTEN SOURCE TEST REPORT SHALL BE SUBMITTED TO THE AIR POLLUTION CONTROL OFFICER WITHIN 60 DAYS AFTER COMPLETION OF THE SOURCE TEST.

EMISSION OFFSETS

- 14. EMISSION REDUCTION CREDITS FOR ROC HAVE BEEN PROVIDED BY PROCTER & GAMBLE TO FULLY OFFSET THE ROC EMISSIONS SPECIFIED IN CONDITION NO. 8.

PERMIT NO.	CERTIFICATE NO.	POLLUTANT	EMISSION REDUCTION CREDITS (LB/QUARTER)			
			1 ST QUARTER	2 ND QUARTER	3 RD QUANTER	4 TH QUARTER
P/O 22484	07-01035	ROC	73	73	73	73

- (A) ERC CERTIFICATES WERE SURRENDERED BY PROCTER & GAMBLE IN THE PRECEDING PERMIT ACTION IN P/O 21601.

RECORDKEEPING

- 15. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ON-SITE FOR THE MOST RECENT FIVE-YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. ALL RECORDS AS SPECIFIED IN THE TABLE BELOW SHALL BE MADE AVAILABLE FOR INSPECTION WITHIN 30 DAYS FROM THE END OF THE SPECIFIED FREQUENCY.

FREQUENCY	INFORMATION TO BE RECORDED
AT ALL TIMES	<ul style="list-style-type: none"> A. APC THERMAL OXIDIZER (STO) OPERATIONS & MAINTENANCE PLAN. B. RECORDS SPECIFIED IN THE APPROVED OPERATIONS & MAINTENANCE PLAN. C. NUMBER OF HOURS OF PLANNED ROUTINE MAINTENANCE (HRS/OCCURRENCE). D. SOURCE TEST REPORTS.
YEARLY	<ul style="list-style-type: none"> E. TOTAL NUMBER OF HOURS OF PLANNED ROUTINE MAINTENANCE OF THE APC THERMAL OXIDIZER (STO) (HOURS/YEAR).

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE 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	PERMIT FEES – STATIONARY SOURCE
401	RINGELMANN CHART
402	NUISANCE
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
443	LEAKS FROM SYNTHETIC ORGANIC CHEMICALS AND POLYMER MANUFACTURING
464	ORGANIC CHEMICAL MANUFACTURING OPERATIONS
40 CFR 60 SUBPART VV	STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY
40 CFR 60 SUBPART NNN	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY DISTILLATION OPERATIONS
40 CFR 60 SUBPART RRR	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY REACTOR PROCESSES
40 CFR 63 SUBPART FFFF	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE 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.

SACRAMENTO METROPOLITAN


AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: THE PROCTER & GAMBLE MANUFACTURING CO.
EQUIPMENT LOCATION: 8201 FRUITRIDGE RD., SACRAMENTO, CA 95826

PERMIT NO.	EQUIPMENT DESCRIPTION
22485	APC METHANOL ABSORBER [KNOCKOUT DRUM], VENTING TO THE FIRE PIT STACK (P/O 16564) [QUALIFIED AS A MON CONTROL DEVICE]

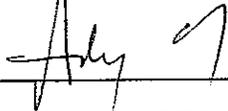
SUBJECT TO THE FOLLOWING CONDITIONS:

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 PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT 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.
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 PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

DATE ISSUED: 09-08-2011
DATE EXPIRES: 04-04-2012 (UNLESS RENEWED)

BY: 

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EMISSIONS LIMITATIONS

6. THE PROCESS 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.

EQUIPMENT OPERATION

7. THE APC METHANOL ABSORBER (KNOCKOUT DRUM) SHALL OPERATE CONTINUOUSLY DURING PERIODS OF EMISSION-PRODUCING OPERATIONS, BUT MAY BE SHUTDOWN OR BYPASSED ONLY DURING STARTUP, SHUTDOWN OR MALFUNCTION AS DEFINED IN THE OPERATION AND MAINTENANCE PLAN AND/OR STARTUP, SHUTDOWN AND MALFUNCTION PLAN; OR WHEN THE APC THERMAL OXIDIZER [NORTH THERMAL OXIDIZER (NTO)] IS BEING USED AS THE CONTROL DEVICE.
8. THE MINIMUM INLET WATER FLOW TO THE APC METHANOL ABSORBER (KNOCKOUT DRUM) SHALL BE 8.0 GALLONS PER MINUTE (HOURLY AVERAGE BASIS).
9. THE APC METHANOL ABSORBER (KNOCKOUT DRUM) SHALL BE EQUIPPED WITH A FLOW METER CAPABLE OF MEASURING THE INLET WATER FLOW RATE WITH AN ACCURACY OF ± 0.5 GALLONS/MINUTE. THE READOUT OF THE FLOW METER SHALL BE EASILY ACCESSIBLE TO OPERATING PERSONNEL.
10. THE MAXIMUM INLET WATER TEMPERATURE OF THE APC METHANOL ABSORBER (KNOCKOUT DRUM) SHALL NOT EXCEED 80°F WHEN OPERATING (HOURLY AVERAGE BASIS).
11. THE APC METHANOL ABSORBER (KNOCKOUT DRUM) SHALL BE EQUIPPED WITH A TEMPERATURE GAUGE CAPABLE OF MEASURING THE INLET WATER TEMPERATURE IMMEDIATELY PRIOR TO ENTERING THE EQUIPMENT. THE READOUT OF THE TEMPERATURE GAUGE SHALL BE EASILY ACCESSIBLE TO OPERATING PERSONNEL.
12. ROUTINE MAINTENANCE OF THE APC METHANOL ABSORBER (KNOCKOUT DRUM) SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED OPERATION AND MAINTENANCE PLAN ENTITLED, *KNOCKOUT DRUM & SCRUBBER OPERATION & MAINTENANCE PLAN*. [ATTACHED AS APPENDIX 'A']

RECORDKEEPING

13. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ON-SITE FOR THE MOST RECENT FIVE-YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST.

FREQUENCY	INFORMATION TO BE RECORDED
AT ALL TIMES	KNOCKOUT DRUM OPERATION RECORD.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE 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
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406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
443	LEAKS FROM SYNTHETIC ORGANIC CHEMICALS AND POLYMER MANUFACTURING
464	ORGANIC CHEMICAL MANUFACTURING OPERATIONS
40 CFR 60 SUBPART VV	STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY
40 CFR 60 SUBPART NNN	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY DISTILLATION OPERATIONS
40 CFR 60 SUBPART RRR	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY REACTOR PROCESSES
40 CFR 63 SUBPART FFFF	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE 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.

SACRAMENTO METROPOLITAN



AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: THE PROCTER & GAMBLE MANUFACTURING CO.

EQUIPMENT LOCATION: 8201 FRUITRIDGE RD., SACRAMENTO, CA 95826

PERMIT NO.	EQUIPMENT DESCRIPTION
22486	APC SCRUBBER, MAKE UNKNOWN, VERTICAL, COUNTER-FLOW PACKED-BED, 1'-6" DIAMETER x 31'-0" HIGH, PROCESS FLOWRATE - 43 DSCFM, SCRUBBING LIQUID - WATER, SCRUBBING LIQUID FLOWRATE - 7 GPM INLET - PROCESS VENTS FROM NORTH HFA AND ALCOHOL DISTILLATION PROCESS OUTLET - NORTH VENT SEAL TANK (P/O 16567) <i>[QUALIFIED AS A MON CONTROL DEVICE]</i>

SUBJECT TO THE FOLLOWING CONDITIONS:

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 PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT 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.
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.

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: _____

DATE ISSUED: 09-08-2011
DATE EXPIRES: 04-04-2012 (UNLESS RENEWED)

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

5. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSIONS LIMITATIONS

6. THE PROCESS 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.

EQUIPMENT OPERATION

7. THE APC SCRUBBER SHALL BE OPERATED AND MAINTAINED IN ACCORDANCE WITH THE LATEST APPROVED OPERATION AND MAINTENANCE PLAN ENTITLED, *NORTH HFA/DISTILLATION VENT SCRUBBER OPERATION AND MAINTENANCE PLAN*. [ATTACHED AS APPENDIX 'A']
8. FOR DISTILLATION AND TANK 646 (SOURCE ID #1164), THE APC SCRUBBER SHALL OPERATE CONTINUOUSLY DURING PERIODS OF EMISSION-PRODUCING OPERATIONS, BUT MAY BE SHUTDOWN OR BYPASSED ONLY DURING STARTUP, SHUTDOWN OR MALFUNCTION AS DEFINED IN THE OPERATION AND MAINTENANCE PLAN AND/OR STARTUP, SHUTDOWN AND MALFUNCTION PLAN; OR WHEN THE APC THERMAL OXIDIZER [SOUTH THERMAL OXIDIZER (STO)] IS BEING USED AS THE CONTROL DEVICE. FOR OTHER NORTH HFA SOURCES VENTING TO THIS DEVICE, THE APC SCRUBBER SHALL OPERATE CONTINUOUSLY DURING PERIODS OF EMISSION-PRODUCING OPERATIONS, BUT MAY BE SHUTDOWN OR BYPASSED ONLY DURING STARTUP, SHUTDOWN OR MALFUNCTION AS DEFINED IN THE OPERATION AND MAINTENANCE PLAN.

RECORDKEEPING

9. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ON-SITE FOR THE MOST RECENT FIVE-YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST.

FREQUENCY	INFORMATION TO BE RECORDED
AT ALL TIMES	A. THE APC SCRUBBER OPERATION AND MAINTENANCE PLAN. B. RECORDS SPECIFIED IN THE APPROVED OPERATION AND MAINTENANCE PLAN.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE 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.

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40 CFR 60 SUBPART RRR	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY REACTOR PROCESSES
40 CFR 63 SUBPART FFFF	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE 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.

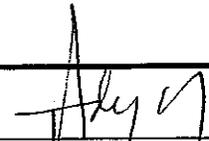
FOR FURTHER INFORMATION PLEASE CONSULT YOUR AQMD RULEBOOK OR CONTACT THE AQMD FOR ASSISTANCE.

**AIR QUALITY
MANAGEMENT DISTRICT**

AUTHORITY TO CONSTRUCT

A/C NO.: 22794

ISSUED BY:


ADY R. SANTOS

DATE ISSUED: JANUARY 26, 2011

DATE EXPIRES: JANUARY 26, 2013

ISSUED TO: THE PROCTER & GAMBLE MANUFACTURING CO.

LOCATION: 8201 FRUITRIDGE RD., SACRAMENTO, CA 95826

DESCRIPTION: IC ENGINE, EMERGENCY STANDBY, CUMMINS, MODEL QSB4.5, SERIAL NO. TO BE VERIFIED, 146 BHP @ 2100 RPM, 275 CU. IN. DISPLACEMENT, DIESEL-FUELED, DRIVING A FIRE PUMP

AUTHORITY TO CONSTRUCT CONDITIONS

START-UP REQUIREMENTS

- S1. UPON INSTALLATION OF THE EQUIPMENT AUTHORIZED IN THIS AUTHORITY TO CONSTRUCT, THE OWNER/OPERATOR SHALL CONTACT THE SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT (SMAQMD) AT 916/874-4858 TO ARRANGE FOR A START-UP INSPECTION.
- S2. THIS AUTHORITY TO CONSTRUCT SHALL SERVE AS A TEMPORARY PERMIT TO OPERATE PROVIDED THAT:
 - A. THE SMAQMD HAS BEEN NOTIFIED FOR A START-UP INSPECTION,
 - B. THE EQUIPMENT INSTALLED MATCHES THE EQUIPMENT AUTHORIZED IN THE AUTHORITY TO CONSTRUCT, AND
 - C. THE EQUIPMENT IS OPERATED IN COMPLIANCE WITH ALL CONDITIONS LISTED WITHIN THE AUTHORITY TO CONSTRUCT.
- S3. BASED ON THIS PROPOSED MODIFICATION BEING DEEMED A MINOR TITLE V PERMIT MODIFICATION:
 - A. A PERMIT APPLICATION FOR A MINOR TITLE V PERMIT MODIFICATION SHALL BE SUBMITTED AFTER THE ISSUANCE OF THIS AUTHORITY TO CONSTRUCT PERMIT BUT PRIOR TO BEGINNING ANY OPERATION ASSOCIATED WITH THE PROPOSED MODIFICATION.
 - B. OPERATION ASSOCIATED WITH THE PERMIT MODIFICATION MAY BEGIN PRIOR TO THE TITLE V PERMIT BEING ISSUED BY THE SMAQMD.

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 THE TERMS AND CONDITIONS OF THIS AUTHORITY TO CONSTRUCT, AND

AIR QUALITY**MANAGEMENT DISTRICT****AUTHORITY TO CONSTRUCT**

(CONTINUED)

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- 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.
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 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 SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTORS (A) G/BHP-HR	MAXIMUM ALLOWABLE EMISSIONS (B)		
		LB/DAY	LB/QUARTER	LB/YEAR
ROC	1.0	7.7	64	64
NOx	3.0	23.2	193	193
ROC + NOx	3.0	23.2	193	193
SOx	0.005	0.04	0.3	0.3
PM10	0.149	1.2	10	10
CO	3.7	28.6	238	238

- (A) EMISSION FACTORS ARE BASED ON THE DISTRICT'S BACT STANDARDS WHICH INCORPORATE THE U.S. EPA TIER 3 STANDARDS, WITH SOx EMISSIONS BASED ON 0.0015% SULFUR BY WEIGHT IN THE CARB DIESEL FUEL. EMISSION FACTOR FOR ROC IS BASED ON THE WORST CASE SCENARIO OF THE UNCONTROLLED AP-42 EMISSION FACTOR OF 1 G/HP-HR, WHILE NOx EMISSION FACTOR IS THE WORST CASE LIMIT OF 3.0 G/BHP-HR.

- (B) EMISSIONS ARE BASED ON 146 BHP, 24 HR/DAY, 200 HR/QUARTER AND 200 HR/YEAR OF OPERATION.

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(CONTINUED)

A/C NO.: 22794**EQUIPMENT OPERATION**

8. THE IC ENGINE SHALL OPERATE ONLY FOR THE FOLLOWING PURPOSES AND SHALL NOT OPERATE MORE THAN THE FOLLOWING HOURS:

TYPE OF OPERATIONAL HOURS	MAXIMUM ALLOWABLE OPERATION	
	HOURS/QUARTER	HOURS/YEAR
MAINTENANCE PURPOSES (A)	50	50
ALL OPERATIONS – MAINTENANCE AND EMERGENCY (B)	200	200

- (A) MAINTENANCE PURPOSES IS DEFINED AS: THE OPERATION OF AN IC ENGINE/FIRE PUMP IN ORDER TO COMPLY WITH THE TESTING REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 25 – *STANDARDS FOR INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS, 2010 EDITION* OR WHEN REQUIRED BY THE DISTRICT TO VERIFY COMPLIANCE WITH THE APPLICABLE RULES AND REGULATIONS.
- (B) EMERGENCY IS DEFINED AS: WHEN A FIRE IS DETECTED AND THE FIRE PUMP IS OPERATED TO SUPPLY WATER FOR FIRE SUPPRESSION.

9. THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RESETTING HOUR METER, WITH A MINIMUM DISPLAY CAPABILITY OF 9,999 HOURS, TO ENSURE COMPLIANCE WITH CONDITION NOS. 7 AND 8
10. UPON REQUEST OF THE AIR POLLUTION CONTROL OFFICER, ONCE EACH YEAR, DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE RUN AT MAXIMUM ANTICIPATED LOAD, FROM A COLD START CONDITION, FOR OBSERVATION OF COMPLIANCE WITH OPACITY LIMITATIONS.
11. THE IC ENGINE SHALL BE FUELED WITH A CARB DIESEL FUEL, OR AN ALTERNATIVE DIESEL FUEL THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE (AS CODIFIED IN TITLE 13, CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FUEL, OR CARB DIESEL FUEL USED WITH FUEL ADDITIVES THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE, OR ANY COMBINATION OF FUELS LISTED IN THIS CONDITION.
12. THE EXHAUST STACK OF THE IC ENGINE SHALL EXIT VERTICALLY AND SHALL NOT BE OBSTRUCTED DURING ENGINE OPERATION. A FLAPPER-TYPE RAIN CAP WILL COMPLY WITH THIS CONDITION PROVIDED IT DOES NOT IMPEDE THE VERTICAL FLOW OF EXHAUST.

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RECORDKEEPING

13. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ON-SITE FOR THE MOST RECENT THREE-YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. MONTHLY, QUARTERLY AND YEARLY RECORDS AS SPECIFIED IN THE TABLE BELOW SHALL BE MADE AVAILABLE FOR INSPECTION WITHIN 30 DAYS FROM THE END OF THE MONTH, QUARTER AND YEAR, RESPECTIVELY.

FREQUENCY	INFORMATION TO BE RECORDED
WHEN OPERATED	A. DATE B. PURPOSE – EITHER MAINTENANCE (M) OR EMERGENCY (E). C. NUMBER OF HOURS OF OPERATION. D. START AND END TIME OF ENGINE FOR MAINTENANCE OPERATION.
MONTHLY	E. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
QUARTERLY	F. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/QUARTER).
YEARLY	G. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/QUARTER).
ALL FUEL DELIVERIES	H. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE IC ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE: 1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATIVE DIESEL, ETC) 2. QUANTITY OF FUEL PURCHASED 3. DATE OF FUEL PURCHASE 4. SIGNATURE OF PERSON RECEIVING FUEL 5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.

AIR QUALITY**MANAGEMENT DISTRICT****AUTHORITY TO CONSTRUCT****(CONTINUED)****A/C NO.: 22794**

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	PERMIT FEES – STATIONARY SOURCE
401	RINGELMANN CHART
402	NUISANCE
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
904	AIRBORNE TOXIC CONTROL MEASURE – STATIONARY COMPRESSION IGNITION ENGINES
40 CFR 60 SUBPART IIII	STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES
40 CFR 63 SUBPART ZZZZ	NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

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.

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