



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**STATIONARY SOURCE COMPLIANCE DIVISION**

APPLICATION PROCESSING AND CALCULATIONS

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544927

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**PERMIT TO CONSTRUCT (PC) Revised**

**COMPANY NAME:** DeMenno/Kerdoon  
**MAILING ADDRESS:** 2000 N. Alameda Street  
Compton, CA 90222

**EQUIPMENT LOCATION:** 2000 N. Alameda Street  
Compton, CA 90222

**EQUIPMENT DESCRIPTION:**

**For Permit to Construct in Section H of the RECLAIM FP**

APPLICATION NO. 544926:

TITLE V/RECLAIM REVISION.

APPLICATION NO. 544927:

MODIFICATION OF PROCESS 9 SYSTEM 7, BY ADDITION OF A SULFUR SCRUBBER.

| Description   | ID No. | Connected To   | RECLAIM Source Type  | Emissions and Requirements   | Conditions   |
|---|--------|--|----------------------|--|--|
| <b>Process 9: AIR POLLUTION CONTROL</b>   |        |  |                      |  |  |
| <b>System 7: ARTERBURNER</b>  |        |  |                      |  |  |
| AFTERBURNER, 23.2 MMBTU/HR (PROCESS GAS AND NAT. GAS); 8.2 MMBTU/HR (NAT. GAS), A/N: 527510 | C142   | C139 D140<br>D195 D196<br>D197 D198<br>D226 D241<br>D284 D287<br>D288 D289<br>D295 C300<br>D324 D556 | NOX: LARGE SOURCE**; | CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1), [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981] SO2: 500 PPMV AT 15 MINS (5) [RULE 407, 4-2-1982] | C1.14, C4.1, C8.5, D12.5, D12.7, D28.1, D29.4, D323.1, E71.2, E71.3, E71.4, E448.1, E448.3, E448.4, H116.4, H116.5, H116.6, I298.1, K171.1 |



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| Description  | ID No. | Connected To | RECLAIM Source Type | Emissions and Requirements | Conditions                                 |
|--|--------|--------------|---------------------|----------------------------|--|
| SCRUBBER, CAUSTIC, PACKED BED, ENVITECH, MODEL VT3-5-10-2 RT5-12, TWO SINGLE STAGE, WITH INTEGRATED MIST ELIMINATOR, MUNTERS, T-271 T-125, AND A QUENCH TOWER WITH A COMMON STACK WITH DEVICE C301, HEIGHT 45 13 FT. 0 IN.; WIDTH 8 FT. 6 IN., LENGTH: 3 16 FT. 6 IN.<br><br>A/N 502732-544927 | C 300  | C142         |                     |                            | C8.6, C8.10, D82.1, E448.1, E448.2, K171.1 |

**Background:**

The above applications were submitted on 11/15/12 for modification to the existing Process 9, System 7. Under the proposed modification, the afterburner C142 will be vented to a new single-stage scrubber. Previously D/K was permitted under application (A/N 502732) to install a two-stage acid gas scrubber to vent afterburner C142. The Permit to Construct for the two-stage scrubber was approved on 5/13/2011. However, the two-stage scrubber was never installed since D/K determined that a single-stage scrubber design can meet the same emission requirements at a lower cost.

The facility was found to be out of compliance with District Rules 203 and 431.1 by exceeding the facility condition F48.2 limit (see attached copy of Notice of Violation # P56551 issued on Aug. 28, 09). Under condition F48.2, the operator prohibited from burning gaseous fuels (except natural gas) unless total sulfur compounds emissions from the facility are less than 5 pounds per day (calculated as H<sub>2</sub>S). Controlling sulfur compounds emissions to less than 5 lbs/day (calculated as H<sub>2</sub>S) at this facility is stated as part of the requirements in the Order of Abatement dated Nov. 17, 09 (see attached copy).

Also, Condition C28.1 will be revised per applicant's request (please see Yorke Engineering letter dated 11/29/12). Presently, both afterburners C281 & C142 are required to conduct source tests every three years. However, the applicant has requested to revise this condition to



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allow for an extension for the afterburner C142 during the time the new scrubber C300 is constructed and until C300 is fully capable of being operated.

Note:

The permit conditions that have been revised/added are as follows:

- 1) C1.14 added to C142 to limit the operating schedule for the afterburner C142 venting only gases from vapor recovery system when the afterburner C281 or the scrubber C301 are shutdown until the scrubber C300 is constructed and is fully operational.
- 2) C8.9 changed to C8.10 (C300) – Changed pH level from minimum of 6 required for the previous two –stage scrubber to minimum of 7.8 required for the new single-stage scrubber.
- 3) C8.9 changed to C8.11 (C301) – Changing Condition No. C8.9 to C8.10 for scrubber C300 (see above) resulted in changing Condition NO. C8.9 for scrubber C301 to Condition No. C.11 with the same parameters.
- 4) D28.1(revised) (C142 & C281) – Condition revised to allow for an extension for the afterburner C142 during the time the new scrubber C300 is constructed and until C300 is fully capable of being operated.
- 5) D28.3 (revised) (C281) – Condition revised to require source tests to determine the control efficiency of the afterburner C281 for VOCs only. The test method TO-15 required for the source tests is only for the outlet and is for the quantification of HAPs and not for determination of destruction efficiency for HAPs. The condition D28.3 before the revision required the tests to be conducted to determine the control efficiency of the equipment for VOCs and Organic HAPs.
- 6) E448.3 added to C142 – Condition will allow the afterburner C142 to vent only the storage tanks and loading/unloading racks vapor recovery prior to installation and operation of the scrubber C300 in the event that the afterburner C281 or the scrubber C301 are required to be shut down for maintenance or repairs.
- 7) E448.4 added to establish operating criteria for operation of C142 during C281 or C301 shutdowns until the scrubber C300 is constructed and fully operational.



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- 8) F2.2 added to limit the facility SOX emissions from the afterburners systems to maximum of 4 tons/yr.
- 9) H116.4 (revised) (C142 & C281) – The condition is revised to require a minimum control efficiency of 98% for VOCs for afterburners C281 & C142. Originally, this condition required a minimum control efficiency of 98% for both VOCs and Organic HAPs.

Facility (General)

DeMenno/Kerdoon operates a waste oil and coolant recycling facility on an 8 acre parcel of land in Compton. The facility originally was used in oil refining and asphalt production. Currently, the facility is a hazardous waste storage, treatment, recycling and transfer facility. It receives hazardous waste including used oil, oil/water mixtures, waste antifreeze, and waste derived fuel from refineries, manufacturers, retail businesses, federal and state governments, counties, municipalities, and utilities. Material received at the facility is analyzed for total organic halides, heavy metals, and PCBs. Waste material accepted is stored for recycle. The recycling process includes dehydration and vacuum distillation. The products include naphtha, Marine Diesel Oil (MDO), fuel oil cutter stock, lube base oil and asphalt. Naphtha produced in the distillation process is sold to nearby refineries. Wastewater treatment consists of mixing with flocculent chemicals, sedimentation, skimming, steam stripping and carbon filtration before discharge into the Los Angeles County Sanitation Districts (LACSD) sewer.

Afterburners (C142 & C281)

D/K currently operates a primary direct flame afterburner (C281) to control emissions of VOCs from oil recycling units, anti-freeze recycling unit, wastewater stripper system, south tank farm vapor recovery system, north tank farm vapor recovery system, wastewater vapor recovery system, product loading vapor recovery system, naphtha tank farm vapor recovery system, flux loading vapor recovery system, and RCRA fuels vapor recovery system. They also operate a direct flame afterburner (C142) as the backup afterburner.

As discussed in more detail in the Compliance Review Section, the C142 afterburner is currently out of compliance with District Rule 431.1, which contains limits on the concentration of total sulfur compounds in gaseous fuels combusted in external combustion devices. D/K has installed a SOx scrubber on afterburner C281 and is proposing to install a SOx scrubber on the afterburner C142 to bring them into compliance with this rule by reducing the facilities total sulfur compound emissions, calculated as H2S, in compliance with Rule 431.1.



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Sources Venting to Afterburners

The C142 & C281 afterburners provide control for a variety of sources including: storage tanks, loading racks, waste water systems, and processing units. The process units and vapor recovery systems that feed waste gases to the afterburners are summarized below. There are two actual waste gas lines connected to the afterburners. One line contains combined process waste gases and the other contains combined gases from the various refinery vapor recovery systems (VRS). According to D/K, the maximum expected flow and sulfur content for the process gas stream is 100 scfm and 50,500 ppmv (as H<sub>2</sub>S) and for the vapor recovery stream is 3600 scfm and 280 ppmv (as H<sub>2</sub>S). The VOC concentration of the process waste gas stream is also substantially higher. During a 2007 source test, the flow rate and VOC content for the process gas stream were 45 scfm and 484,000 ppmv and for the vapor recovery stream were 894 scfm and 5870 ppmv.

\*It should be noted that the applicant has requested that in the event the primary afterburner C281 or its associated scrubber C301 needs to be shut down for maintenance or repairs, the secondary afterburner C142 to be allowed to operate prior to installation and testing of the new single-stage scrubber C300, but only to process gases from the vapor recovery system venting the storage tanks and the loading/unloading racks (connections D226 & D241 to process waste gas are to be disconnected). Once the new scrubber C300 is installed and is operational, in the event the afterburner C281/scrubber C301 system has to be shut down for emergency, maintenance or repairs, DK will switchover and direct the process and vapor recovery streams to the old afterburner C142/new scrubber C300 system.

**Afterburner C142**

The afterburner is a John Zink, Model No. 045480, 8,200,000 Btu/hr natural gas fired direct flame afterburner. It has a design operating temperature of 1400 °F and a minimum residence time of 0.5 seconds. It has dimensions of 5'-6" diameter and 38'-10" height. The total refractory lined volume is 369 cubic feet. Testing conducted by ECOSERVE Inc. in 1987 indicated that the unit was operating at an exhaust temperature in the range of 1400 to 1473 °F, with a minimum actual residence time of 1.17 seconds (range: 1.17 to 1.32 seconds). A current permit condition requires that the Plant Afterburner reduce VOC by at least 95%. VOC and BTEX control efficiency during a June 18, 2007 source test were both greater than 99.8%.

**Scrubber C300 venting Afterburner C142**

Based on the recent information (see email dated Mar. 6, 2013), the final design specifications of the proposed scrubber are as follows:

Final design of the proposed scrubber:

Envitech Model RT5-12 single-stage packed bed scrubber. Scrubber dimensions are 13'-0" tall, 8'-6" width, 16'-6" length. The scrubber is designed with 7 transfer units with a height of 1.07 feet each. The scrubber will utilize Lantec Q-PACK Random Dumped packing with a packing factor of 7.



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Based on the applicant's data provided on 1/18/2013, the proposed scrubber design parameters are as follows:

1. The proposed scrubber has been designed to ensure that the outlet emissions of sulfur compounds as SO<sub>2</sub> do not exceed 6.7 lbs/day based on a maximum total sulfur loading of 1000 ppmv or 873 lbs/day as H<sub>2</sub>S. Based on the data provided, the maximum outlet emissions for SO<sub>2</sub> & H<sub>2</sub>S are 5.95 lbs/day & 3.17 lbs/day, respectively (see attached email dated 1/18/2013). The applicant will be required to conduct source tests to demonstrate compliance with Rule 431.1.
2. The expected control efficiency (see Attachment 1):  

|                  |                 |
|------------------|-----------------|
| H <sub>2</sub> S | SO <sub>2</sub> |
| 99.64%           | 99.64%          |
3. The pH range required for SO<sub>2</sub> removal = 7.8 or greater

**NOTE:**

1. The scrubber C300 re-circulating caustic solution for each stage shall be the minimum of 400 gpm, averaged over 15 minutes (see Conditions C8.6).
2. The pH level of the scrubbers scrubbing solution for each stage shall be maintained at a minimum of 7.8, averaged over 15 minutes (see Condition C8.10).
3. Only one afterburner (C142 or C281) shall be operating at any one time except during afterburners switchover period, i.e., switching from one afterburner to another and back to the original afterburner. Switchover period shall not exceed 6 hours/day and 12 times/yr. Switch over period does not apply during the scrubbers initial start-up period of maximum of 168 hrs during a 30-day period (see Condition E448.1).
4. During the discussions between the District personnel, the applicant and their consultant, it was agreed to condition the scrubbers exhaust to a SOX BACT/LAER limit of 12 ppmv as SO<sub>2</sub>, at 0% O<sub>2</sub>, dry, averaged over 24 hours. Also, it was agreed to limit the sulfur compounds as SO<sub>2</sub> to a maximum of 6.7 lbs/day, based on design specification of 2.28 ppmv, at actual O<sub>2</sub>, wet basis, and the flow rate of 720,000 scfh (see Condition E448.2). Maximum concentration at scrubber stack is 3.86 ppmvd (based on vendor guarantee at 6439 dscfm).

**CALCULATIONS:**

The following calculations are from the previous emissions calculations for the existing afterburners and the scrubbers. No additional or increase in emissions are expected from changing the two-stage scrubber to the proposed single-stage scrubber.

Operating schedule: 24 hrs/day, 365 days/yr

Natural gas combustion emissions:

Emission Factors based on the District's Annual Emission Inventory, Form B-1:



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NOX: 130 lbs/mmcf\*  
CO: 35 "  
SOX: 0.6 "  
ROG 7 "  
PM: 7.5 "

\* The default Emission Factor of 130 lbs/mmcf is used for emissions calculations (as a worst case) per applicant's request.

**Afterburner C281 (based on evaluation for C281 A/N 508214):**

Given:

Heat input rating: 9 mm btu/hr

Max. Fuel Consumption Rate = 9,000,000 btu/hr x ft<sup>3</sup>/1,040 btu  
= 8654 ft<sup>3</sup>/hr

| CONTAMINANT | LB/HR |       | LB/DAY |       |
|-------------|-------|-------|--------|-------|
|             | R1    | R2    | R1     | R2    |
| CO          | 0.3   | 0.3   | 7.2    | 7.2   |
| NOX         | 1.13  | 1.13  | 27.12  | 27.12 |
| PM10        | 0.065 | 0.065 | 1.56   | 1.56  |
| ROG         | 0.06  | 0.06  | 1.44   | 1.44  |
| SOX         | 0.005 | 0.005 | 0.12   | 0.12  |



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**Application 502732, Afterburner C142:**

Natural gas combustion emissions:

Given:

Heat input rating: 8.2 mm btu/hr

$$\begin{aligned} \text{Max. Fuel Consumption Rate} &= 8,200,000 \text{ btu/hr} \times \text{ft}^3/1,040 \text{ btu} \\ &= 7885 \text{ ft}^3/\text{hr} \end{aligned}$$

Based on the previous evaluation for A/N 452879 using emissions factors from Environmental Impact Report dated May 2001, the emissions are as follows:-

| CONTAMINANT | LB/HR  |        | LB/DAY |       |
|-------------|--------|--------|--------|-------|
|             | R1     | R2     | R1     | R2    |
| CO          | 0.21   | 0.21   | 5.04   | 5.04  |
| NOX         | 1.07   | 1.07   | 25.68  | 25.68 |
| PM10        | 0.094  | 0.094  | 2.26   | 2.26  |
| ROG         | 0.041  | 0.041  | 0.98   | 0.98  |
| SOX         | 0.0047 | 0.0047 | 0.11   | 0.11  |



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Waste gas emissions (based on 2004 source test results for the standby afterburner C142):

| CONTAMINANT   | LB/HR  |          | LB/DAY |        |
|---------------|--------|----------|--------|--------|
|               | R1     | R2       | R1     | R2     |
| VOC           | 292.23 | 0.029    | 7013.5 | 0.7    |
| Benzene       | 1.77   | 0.000029 | 42.5   | 0.0007 |
| Toluene       | 6.82   | 0.000035 | 163.7  | 0.0008 |
| Ethyl benzene | 0.29   | 0.00005  | 6.96   | 0.001  |
| Xylenes       | 0.54   | 0.000053 | 12.96  | 0.0013 |

Combustion emissions reported in NSR for A/N 508214 (emiss. differences between afterburners C281 & C142):-

| Compounds | Emissions for afterburner C142 (lb/hr) | Emissions for afterburner C281 (lb/hr) | Emissions Increase/Decrease (lb/hr) | Emissions Increase (lbs/day) |
|-----------|--|--|-------------------------------------|------------------------------|
| CO        | 0.21                                   | 0.3                                    | 0.09                                | 2.16                         |
| NOX       | 1.07                                   | 1.13                                   | 0.06                                | 1.44                         |
| PM10      | 0.094                                  | 0.065                                  | -0.029 (0)                          | 0                            |
| ROG       | 0.041                                  | 0.06                                   | 0.019                               | 0.45                         |



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The flows, sulfur and VOC contents for the process and vapor recovery streams are known from several lab samples and source tests to be approximately as follows:

| Ranges:        | Flow Rate (cfm) | Sulfur Content (ppm) | VOC Content (ppm) |
|----------------|-----------------|----------------------|-------------------|
| Process        | 45-100          | 6090-62500           | 484000            |
| Vapor Recovery | 894-2500        | 100-280              | 5870              |

The above concentrations vary based on the materials being processed and also the effectiveness of the process waste gas in-line scrubber (P9, S3).

For the purposes of the scrubber design, the afterburner inlet basis is 1920 ppmvd sulfur at 3569 dscfm (68.37 lbs/hr SO<sub>2</sub>).

For the purposes of the scrubber design, the sulfur oxides exiting the afterburner are 1000 ppmv. For comparison purposes, the most recent source test (9/1/2010) found,

|  | Run 1 | Run 2 |
|--|-------|-------|
| Flow rate, dscfm (afterburner exhaust) | 3196  | 2729  |
| SO <sub>2</sub> concentration, ppmv    | 86.2  | 120   |

SOX emissions at the scrubbers exhaust based on the concentration of 3.86 ppmvd (see Attachment 1):

Exhaust stack flow rate: 386,340 dscfh

$$\begin{aligned} \text{lbs/hr} &= 386,340 \text{ scfh} \times 3.86 \text{ ppm} \times 64 \text{ lbs/lb-mole} \times \text{lb-mole}/379 \text{ scf} \times 10^{-6} \\ &= 0.25 \text{ lb/hr} \\ &= 6.0 \text{ lbs/day (to be reported in NSR under application 544927)} \end{aligned}$$

The estimated (design) control efficiency is therefore:  $(68.37 - 0.25)/68.37 = 99.63\%$

**Evaluation**

Rule 212: There is a K – 12 grade school within 1000 feet from the stack. However, the applicant conducted public notice regarding modifications of various equipment including the addition of previous two-stage scrubber C300 at this facility. Since the replacement of the two-stage scrubber with a single-stage scrubber C300 will not result in any emissions increase, additional public notice for replacement of the above scrubber is not required.

Rule 401: No violations are expected.



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Rule 402: Numerous NOVs for the nuisance odors concerning the wastewater treatment system, truck unloading operation, and the asphalt plant have been issued to this facility. A permit to construct has been issued to this facility for construction of an enclosure to the truck wash area, which will help control odors from the truck unloading operation.

Nuisance due to the above proposed modifications is not expected.

Rule 404: The proposed modification will not result in emissions increase. Therefore, compliance is expected.

Rule 407: This rule limits the exhaust concentration of CO to a maximum of 2000 ppmv & SO<sub>2</sub> to 500 ppmv. The afterburner C142 after the proposed modification is expected to operate with CO & SO<sub>2</sub> concentrations below the above limits. Compliance with this rule is expected.

- Rule 431.1 The rule contains the following limits on fuel sulfur concentration:
- Rule 431.1(c)(1) - A person shall not transfer, sell or offer for sale or use in the jurisdiction of the District natural gas containing sulfur compounds calculated as H<sub>2</sub>S in excess of 16 parts per million by volume (ppmv).
  - Rule 431.1(c)(2) - a person shall no burn a gaseous fuel in equipment requiring a Permit to Operate if the fuel contains sulfur compounds, calculated as H<sub>2</sub>S, in excess of 40 ppmv on a 4-hr average basis. According to Rule 431.1(d)(1), external combustion devices that burn gaseous fuels, other than exclusively natural gas, must be equipped with a District approved continuous fuel gas monitoring system (CFGMS) to determine the sulfur content, calculated as H<sub>2</sub>S, of the fuel; or a continuous emission monitoring system (CEMS) to determine exhaust gas SO<sub>x</sub> emissions .

Per Rule 431.1(b)(7), a gaseous fuel is "any gaseous material which releases heat when burned including, but not limited to, any natural, refinery, field produced, process, synthetic, landfill, sewage digester, or waste gases with a gross heating value of 2670 kilocalories per cubic meter (300 BTU per cubic foot) or higher, at standard conditions." The waste gas combusted in this afterburner is a "gaseous fuel" as defined in this rule. Therefore, the concentration of sulfur compounds in the waste gas must be less than 40 ppmv, usually achieved by pre-combustion sulfur removal technologies.

To comply with the requirements of this rule, the facility has opted to use the Optional Facility Compliance Plan (c)(3), applicable to facilities utilizing post-



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combustion sulfur removal. This approach results in equivalent emissions of SO<sub>x</sub> as if the waste/fuel gas meets 40 ppm, as demonstrated by a SO<sub>x</sub> CEMS, on a daily basis.

The facility has filed application 515619 for approval of the OFCP to demonstrate compliance. Although the review is not complete, a preliminary determination is that the facility will be able to comply based on the historical vapor flows and the proposed scrubber discharge limits as explained below in BACT.

Rule 1176: This rule requires that sumps & wastewater separators be equipped with either a floating roof with seals, or a fixed cover venting to an air pollution control device. The air pollution control device is required to reduce VOC by 95% by weight and emit no more than 500 ppm of VOC at the exhaust point. The February 2004 source test for the existing afterburner C142 has verified that the plant existing afterburner has a control efficiency of at least 95% (99.989% for VOC) and the VOC concentration is under 500 ppm (maximum exhaust VOC was measured as 10.11 ppm). The new afterburner C281 is expected to have the same or better control efficiency than the existing afterburner. Therefore, the venting of the equipment in the Oil/Water Treatment Process to the plant afterburners and the scrubbers is expected to meet the requirements of this rule. The permit to construct for the proposed modification regarding afterburners C142 will have a condition to ensure compliance with this rule.

Reg. XIII: The proposed installation of scrubber triggers BACT/LAER because the premodified SOX PTE from the afterburner was not quantified (zero), and the post-installation SOX PTE is 6.7 lbs/day. The proposed limit of 12 ppm at 0% O<sub>2</sub>, 24-hr avg. would satisfy BACT/LAER. The post-control emissions of SOX are less than 4 tons, and therefore offsets are not required. Modeling for SOX is not required.

Rule 1401: The addition of the scrubber is not expected to change the risk significantly. Note: Cancer risk analysis was carried out as part of engineering evaluation for afterburner C281 (A/N 462565).

Rule 1401.1: Since the facility is an existing facility, this rule does not apply.



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Rule 2005: The facility is in NO<sub>x</sub> RECLAIM. The proposed modification that consists of addition of a scrubber to the afterburner C142 (Process 9, Systems 7) will not result in a change in NO<sub>x</sub> emissions. Exempt from the rule requirements under paragraph (c) per K (1) & (2).

Rule 3000: The proposed modification will be considered De Minimis Significant Permit Revision. The applicant has filed a Title V/RECLAIM revision application.

**Conclusions and Recommendations**

Issuance of Permit to Construct with the permit conditions stated in the attached copy of Section H of the Facility Permit is recommended.

|   |                    |                   |
|---|--------------------|-------------------|
| <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b><br><b>ENGINEERING AND COMPLIANCE DIVISION</b><br><b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b> | PAGES<br>1         | PAGE<br>1         |
|   | APPL NO<br>544926  | DATE<br>12/8/12   |
|   | PROCESSED BY<br>AM | CHECKED BY<br>COT |

**TITLE V PERMIT EVALUATION (REVISION)**

**COMPANY NAME:** DeMenno/Kerdoon  
**MAILING ADDRESS:** 2000 N. Alameda Street  
Compton, CA 90222

**EQUIPMENT LOCATION:** SAME

**FACILITY ID NO.:** 800037

**Background:**

The application 544926 was submitted for Title V/RECLAIM permit revision on 11/15/12 for modification to the existing Process 9, System 7 by venting the afterburner C142 to a new single-stage scrubber. It should be noted that previously D/K was permitted under application (A/N 502732) to install a two-stage acid gas scrubber to vent afterburner C142. The Permit to Construct for the two-stage scrubber was approved on 5/13/2011. However, the two-stage scrubber was never installed since it was determined that a single-stage scrubber design can meet the same emission requirements at a lower cost. In addition to the scrubber replacement, applicant has also requested to reissue the permits to the afterburners (C142 & C281) in order to modify several conditions. The proposed modifications will be considered De Minimis Significant Permit Revision.

The latest facility permit revision (revision No. 14) was completed on July 1, 2012.

Note:

A 45-day EPA review period for the revision of TV permit is required. Therefore, prior to the issuance of the of TV revision permit, a copy of the TV revision permit will be sent to EPA for a 45-day review.

**Rules Evaluation:**

Compliance with applicable requirements of Rules 2005, 3002 & 3005 for De Minimis Significant Permit Revisions is expected.

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| <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b><br><b>ENGINEERING AND COMPLIANCE DIVISION</b><br><b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b> | <b>PAGES</b><br>1         | <b>PAGE</b><br>2       |
|   | <b>APPL NO</b><br>544926  | <b>DATE</b><br>12/8/12 |
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**Recomendation:**

Recommend issuing a TV Permit revision pending EPA review.

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| <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b><br><b>ENGINEERING AND COMPLIANCE DIVISION</b><br><b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b> | PAGES<br>1         | PAGE<br>1         |
|   | APPL NO<br>547513  | DATE<br>4/5/13    |
|   | PROCESSED BY<br>AM | CHECKED BY<br>cot |

**TITLE V PERMIT EVALUATION (REVISION)**

**COMPANY NAME:** DeMenno/Kerdoon  
**MAILING ADDRESS:** 2000 N. Alameda Street  
Compton, CA 90222

**EQUIPMENT LOCATION:** SAME

**FACILITY ID NO.:** 800037

**Background:**

The application 547513 was submitted on 2/20/13 for Title V/RECLAIM permit revision for modification of Process 3 (Treating/Stripping), System 1 (Naphtha Splitter Unit) by replacing the existing 0.75 hp pump (D12) with a new seal less 2 hp pump. The proposed modification will not result in any change to the process or the throughput.

The latest facility permit revision (revision No. 14) was completed on July 1, 2012.

Note:

A 45-day EPA review period for the revision of TV permit is required. Therefore, prior to the issuance of the of TV revision permit, a copy of the TV revision permit will be sent to EPA for a 45-day review.

**Rules Evaluation:**

The proposed modification is considered an admin change and therefore compliance with applicable requirements of Title V/RECLAIM rules is expected.

**Recomendation:**

TV Permit revision issuance is recommended.

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|  <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b><br><br><b>STATIONARY SOURCE COMPLIANCE DIVISION</b><br><br>APPLICATION PROCESSING AND CALCULATIONS | PAGES<br>3          | PAGE<br>1        |
|   | APPL. NO.<br>547512 | DATE<br>4/5/13   |
|   | PROCESSED BY<br>AM  | CHECKED BY<br>AM |

**PERMIT TO CONSTRUCT (PO)**

**COMPANY NAME:** DeMenno/Kerdoon  
**MAILING ADDRESS:** 2000 N. Alameda Street  
 Compton, CA 90222

**EQUIPMENT LOCATION:** 2000 N. Alameda Street  
 Compton, CA 90222

**EQUIPMENT DESCRIPTION:**

**For Permit to Operate in Section D of the RECLAIM FP**

APPLICATION NO. 547512:

MODIFICATION OF PROCESS 3 SYSTEM 1, BY REPLACING NAPHTHA PUMP P-602 (D12) WITH A SEALLESS PUMP, P-602, BOTTOMS, 2 HP.

| Description                               | ID No. | Connected To | RECLAIM Source Type | Emissions and Requirements | Conditions |
|---|--------|--------------|---------------------|----------------------------|------------|
| <b>Process 3: TREATING/STRIPPING</b>      |        |              |                     |                            |            |
| <b>System 1: NAPHTHA SPLITTER UNIT</b>    |        |              |                     |                            |            |
| PUMP, P-602, BOTTOMS, 2 HP<br>A/N: 547512 | D12    |              |                     |                            |            |

APPLICATION NO. 547512:

TITLE V/RECLAIM REVISION.

**Background:**

The above applications were submitted on 2/20/13 for replacement of naphtha 0.75 hp pump with a new seal less 2 hp pump regarding Process 3 (Treating/Stripping), System 1 (Naphtha Splitter Unit), and the Title V/RECLAIM revision. The above pump replacement will be considered minor permit revision with no change to the process or the throughput.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**STATIONARY SOURCE COMPLIANCE DIVISION**

APPLICATION PROCESSING AND CALCULATIONS

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| APPL. NO.<br>547512 | DATE<br>4/5/13 |
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**Process Description:**

For detailed process description, please see attached copy of the previous evaluation under application 512556.

**Facility (General)**

DeMenno/Kerdoon operates a waste oil and coolant recycling facility on an 8 acre parcel of land in Compton. The facility originally was used in oil refining and asphalt production. Currently, the facility is a hazardous waste storage, treatment, recycling and transfer facility. It receives hazardous waste including used oil, oil/water mixtures, waste antifreeze, and waste derived fuel from refineries, manufacturers, retail businesses, federal and state governments, counties, municipalities, and utilities. Material received at the facility is analyzed for total organic halides, heavy metals, and PCBs. Waste material accepted is stored for recycle. The recycling process includes dehydration and vacuum distillation. The products include naphtha, Marine Diesel Oil (MDO), fuel oil cutter stock, lube base oil and asphalt. Naphtha produced in the distillation process is sold to nearby refineries. Wastewater treatment consists of mixing with flocculent chemicals, sedimentation, skimming, steam stripping and carbon filtration before discharge into the Los Angeles County Sanitation Districts (LACSD) sewer.

**Emissions:**

The proposed pump replacement will not result in any emissions increase.

Operating schedule: 24 hrs/day, 365 days/yr

Emissions reported in the NSR for ROG under previous application 512556 are zero.

**Rules Evaluation**

For rules evaluation, please see the previous evaluation for application 512556.



**SOUTH COAST AIR QUALITY MANAGEMENT  
DISTRICT**

**STATIONARY SOURCE COMPLIANCE DIVISION**

**APPLICATION PROCESSING AND CALCULATIONS**

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APPL. NO.

547512

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**Conclusions and Recommendations**

Issuance of Permit to Operate with the permit conditions listed in the Conditions Section is recommended.