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| <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b><br><br><b>ENGINEERING &amp; COMPLIANCE</b><br><br>APPLICATION PROCESSING AND CALCULATIONS | PAGES<br>7                 | PAGE<br>1      |
|  | APPL. NO.<br>477953        | DATE<br>5-2-13 |
|  | PROCESSED By<br>Thomas Lee | CHECKED<br>By  |

**PERMIT TO OPERATE**

**COMPANY NAME AND ADDRESS**

Edgington Oil Company  
2400 E. Artesia Blvd.  
Long Beach, 90805

Contact : Kathryn Gleeson  
Telephone: (562) 748-4613  
Email : kgleeson@ppcla.com

**EQUIPMENT LOCATION**

Edgington Oil Company  
2400 E. Artesia Blvd.  
Long Beach, 90805

Facility ID: 800264

**EQUIPMENT DESCRIPTION**

Additions are noted in underlines. Deletions are noted in ~~strikeouts~~.

**Section D of Facility Permit, ID# 800264**

(The following changes have been made in P3/S1, Sec. D of the Facility Title V permit).

| Description  | ID No.             | Connected To | RECLAIM Source Type/Monitoring Unit | Emissions And Requirements | Conditions |
|--|--------------------|--------------|-------------------------------------|----------------------------|------------|
| <b>Process 3: TREATING/STRIPPING</b>   |                    |              |                                     |                            |            |
| <b>System 1: FUEL OIL CLAY TREATING</b>  |                    |              |                                     |                            |            |
| SCRUBBER, PACKED BED, D-310, CAUSTIC, HEIGHT: 35 FT; DIAMETER: 7 FT<br><br>A/N: <del>387882</del> 477953 | D283               |              |                                     |                            |            |
| <b><u>TANK, SETTLER, D-1200, CAUSTIC, LENGTH: 31 FT; DIAMETER : 8 FT</u></b><br><br>A/N: 477953          | <b><u>Dxxx</u></b> |              |                                     |                            |            |
| TANK, SETTLER, D-1201, CAUSTIC, LENGTH: 31 FT; DIAMETER : 8 FT<br><br>A/N: <del>387882</del> 477953      | D367               |              |                                     |                            |            |

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|   |                    |  |  |  |        |
|---|--------------------|--|--|--|--------|
| FILTER, SAND, D-1202,<br>LENGTH: 10 FT 9 IN;<br>DIAMETER: 6 FT<br><br>A/N: <del>387882</del> 477953               | D368               |  |  |  |        |
| DRYER, SALT, D-1203, DIA.: 72<br>FT; LENGTH: 15 FT<br><br>A/N: <del>387882</del> 477953                           | D369               |  |  |  |        |
| DRYER, SALT, D-1206, DIA.: 6<br>FT; LENGTH: 16 FT<br><br>A/N: <del>387882</del> 477953                            | D370               |  |  |  |        |
| VESSEL, CLAY, D-1204 & D-<br>1205, 2 TOTAL, HEIGHT: 16 FT;<br>DIAMETER: 6 FT<br><br>A/N: <del>387882</del> 477953 | D371               |  |  |  |        |
| VESSEL, CLAY, D-1207,<br>HEIGHT: 20 FT; DIAMETER: 7<br>FT<br><br>A/N: <del>387882</del> 477953                    | D372               |  |  |  |        |
| FILTER, F-1201<br><br>A/N: <del>387882</del> 477953   | D284               |  |  |  |        |
| <b><u>FILTER, F-1202</u></b><br><br>A/N: <b>477953</b>  | <b><u>Dxxx</u></b> |  |  |  |        |
| FUGITIVE EMISSIONS,<br>MISCELLANEOUS<br><br>A/N: <del>387882</del> 477953   | D332               |  |  |  | H13.13 |

## CONDITIONS

H23.13 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule             | Rule/Subpart |
|-------------|------------------|--------------|
| VOC         | 40CFR60, SUBPART | GGG          |
| VOC         | District Rule    | 1173         |

[**RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40CFR 63 Subpart GGG, 4-20-2006**]

[Devices subject to this condition : D202, D295, D302, D303, D304, D305, D306, D307, D308, D309, D310, D312, D313, D314, D315, D316, D317, D318, D319, D320, D321, D322, D326, D327, D329, D330, D331, D332, D364, D365, D383]

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## BACKGROUND

Edgington submitted A/N 477953 on February 7, 2008 for the following changes in the Fuel Oil Clay Treating (FOCT) permit to “more accurately portray the current state of the equipment” in Process 3, System 1:

| Equipment ID(s) | Requested Changes  |
|-----------------|--|
| D-1200          | Add caustic settling tank D-1200 (identical to D-1201) to the permit.              |
| D-1201          | Correct equipment description typographical error from “SETLER” to read “SETTLER”. |
| D-1202          | Correct equipment description typographical error from “SAN” to read “SAND”.       |
| F-1202          | Add filter, F-1202 (identical to F-1201), to the permit.                           |

## APPLICATION SUMMARY

The following table lists the application and fee submitted by EOC:

| A/N    | Equipment    | BCAT <sup>1</sup> | Status <sup>2</sup> | Type | Fee Schedule | Fee Required | Fee Paid   | Amt Due    | Previous A/N |
|--------|--------------|-------------------|---------------------|------|--------------|--------------|------------|------------|--------------|
| 477953 | All in P3/S1 | 300950            | 20                  | 50   | D            | \$4,071.37   | \$4,680.85 | (\$609.48) | 387882       |

<sup>1</sup>This application was accepted with a wrong BCAT (333950), which resulted in an overpayment of permit processing fee. A refund of \$609.48 will be made to EOC. The correct BCAT is 300950.

<sup>2</sup>As a status 20 application, a decision was made to process it as a PC/PO and issue the permit in Section D. The addition of D-1200 should be an administrative change since previous C&C permits identified a second identical caustic settling tank to D-1201. The addition of F-1202 is a modification of the permit unit but the emissions impact from this change, which has already been made, is negligible and requires no post-modification source test.

## EVALUATION

| Equipment ID(s) | Conclusion and Recommended Action   |
|-----------------|---|
| D-1200          | Earlier C&C permits PO P68436 and PC C39747 (see Attachment 1) for this permit unit shows two identical caustic settling tanks with dimensions: 31’L x 6’D. It is recommended that this second unit be added back to the fuel oil clay treating (P3/S1) permit as D-1200 per EOC’s request. It appears the second unit was inadvertently left off the permit when PC C39747 was converted to PO M28001. |
| D-1201          | The typographical error for “Settler” was corrected during initial TV permit issuance in 2009 and is reflected in the most recent revision  |

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| Equipment ID(s) | Conclusion and Recommended Action  |
|-----------------|--|
|                 | (#19) of Section D on 12-20-12. No action needed.  |
| D-1202          | The typographical error for “Sand” was corrected during initial TV permit issuance in 2009 and is reflected in the most recent revision (#19) of Section D on 12-20-12. No action needed.  |
| F-1202          | The addition of F-1202, which is identical to F-1201, should have negligible impact on emissions. It is recommended that filter F-1202 be added to this permit unit per EOC’s request. Please see Emissions section for details. This is based on the following: |

## EMISSIONS

The Fuel Oil Clay Treating unit (P3/S1) operates as a closed system during normal operating conditions. The only emissions associated with this permit unit are from fugitive components. Of the 19 lbs/day (AV30) of ROG emissions established in NSR for this permit unit, almost 90% (17 lbs/day) of it is attributed to the 7 PRVs installed on the scrubber, settling tanks, sand filter, salt dryers and clay pots. The remaining 2 lb/day is attributed to the 50 valves and 2 pumps within the entire permit unit. Please see engineering evaluation under A/N C-39747 for details.

Just like filter F-1201, F-1202 is also not equipped with a PRV. Assuming, conservatively, that 6 additional valves were added to accommodate F-1202, the fugitive emissions increase can be expected to be ~0.23 lb/day ( $0.08 \text{ lb/hr} \div 50 \text{ valves} \times 6 \text{ valves} \times 24 \text{ hr/day}$ ) using emissions factors from A/N C-39747. This is below the 0.42 lb/day threshold for any NSR implications. Such negligible increase is also not expected to have any impact on cancer risk (MICR), acute (HIA) and chronic (HIC) health indices at any receptor location. Hence, the overall emissions impact from the addition of F-1202 to this permit unit is negligible.

The District refinery permitting unit has adopted the Correlation Equation Method for calculating fugitive emissions pursuant to AQMD’s Guideline for Fugitive Emissions Calculations (June 2003, Method 2). The emission factors derived from this method is believed to be more accurate than the emissions factors used in A/N C-39747. Therefore, fugitive emissions for this permit unit were recalculated using this method for NSR update (see table below).

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**Edgington Fuel Oil Clay Treating Unit (A/N 477953)**  
**Fugitive Emissions Using Correlation Equation Method**  
**(AQMD's Guidelines for Fugitive Emissions Calculations, June 2003, Method 2)**

| Fugitive Component          | Service      | No. of components, A/N C39747 | No. of components, A/N 477953 | A/N C39747 Emissions Factors, lb/yr | Correlation Equation Factor, 500 ppm Screening Value, lb/yr | A/N C39747 Emissions, lb/yr | A/N 477953 Emissions, lb/yr |
|-----------------------------|--------------|-------------------------------|-------------------------------|-------------------------------------|---|-----------------------------|-----------------------------|
| Valve                       | Heavy Liquid | 50                            | 56                            | 13.9                                | 4.55  | 695                         | 255                         |
| PRV                         | -            | 7                             | 7                             | 876                                 | 0   | 6,132                       | 0                           |
| Pumps                       | Heavy Liquid | 2                             | 2                             | 84                                  | 46.83   | 168                         | 94                          |
| Total Emissions, lbs/yr     |              |                               |                               |                                     |   | 6,995                       | 349                         |
| Emissions Decrease, lbs/day |              |                               |                               |                                     |   |                             | 18                          |

## RULE REVIEW

|                 |  |                          |
|-----------------|--|--------------------------|
| <b>Rule 212</b> | <b>Standards for Approving Permits</b>   | <b>November 14, 1997</b> |
|                 | <p>The subject loading racks meet all criteria in Rule 212 for PO issuance and are expected to operate without emitting air contaminants in violation of Division 26 of the State H&amp;SC or in violation of AQMD rules and regulations. Public notice is not required because:</p> <ul style="list-style-type: none"> <li>• R212(c)(1) – The subject permit unit is well beyond 1000 feet from the outer boundary of a school.</li> <li>• R212(c)(2) – There is no emissions increase from the permit unit. Therefore, no increase in emissions greater than the daily maximum thresholds is expected.</li> <li>• Rule 212(c)(3) – Without any emissions increase, there is no increase in MICR or acute/chronic hazard indices.</li> </ul> <p>Compliance is expected.</p> |                          |
| <b>Rule 401</b> | <b>Visible Emissions</b>   | <b>November 9, 2001</b>  |
|                 | <p>Visible emissions are not expected under normal operating conditions. Compliance is expected.</p>   |                          |

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**REG X      NESHAP**

|                             |   |
|-----------------------------|---|
| <b>40CFR 63, Subpart CC</b> | <b>National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries</b>   |
|                             | EOC has provided data to the District to show that the Long Beach facility is not a 'major' HAP source, which is defined as a source emitting 10 tons per year of any single HAP or 25 tons per year of all HAPs combined. As an 'area' HAP source emitting less than these thresholds, the facility is not subject to any major source Maximum Achievable Control Technology (MACT) Standards, including 40CFR 63, Subpart CC, except for the reporting and recordkeeping requirements of 40CFR 61, Subpart FF – National Emission Standard for Benzene Waste Operation. The Subpart FF requirements have been incorporated into the Title V permit as facility condition F16.1. Compliance is expected. |

|  |   |
|--|---|
| <b>40CFR 63, Subpart A<sup>7</sup></b> | <b>National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing</b>  |
|  | <p>This rule limits PAH emissions to 0.003 lb/ton or PM emissions to 1.2 lb/ton of asphalt charged to the blowing stills at EOC. Pursuant to Table 4 of this subpart, ECO is utilizing its incinerator, B-501, to comply with this requirement and has indicated source test will be performed to demonstrate compliance as soon as asphalt blowing operations are resumed. According to an email from EOC dated 10/19/12 (contained in application folder 383221), the facility has not blown asphalt since the compliance date of 12/2/10. The upcoming source test (after asphalt blowing operation is resumed) will verify whether the current combustion zone temperature requirement of 1400°F set forth in condition C8.1 is sufficient to satisfy the monitoring requirement of § 63.11563. Compliance is expected.</p> <p>Note that although Subpart A<sup>7</sup> is applicable to the facility, the applicable requirements of this subpart do not apply to the Fuel Oil Clay Treating unit.</p> |

**Reg XIII      NSR**

|                  |   |                         |
|------------------|---|-------------------------|
| <b>Rule 1303</b> | <b>Requirements</b>   | <b>December 7, 1995</b> |
|                  | <p>This rule specifies that the Executive Officer or designee shall deny the Permit to Construct for any new or modified source which results in a net emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia, unless BACT is employed, Modeling is used to demonstrate no significant change (increase) in quality concentration and Offsets are provided. Since the permit action under this evaluation will not result in any emissions increase, the requirements of this rule do not apply.</p> <p>Note that the PRV emissions (17 lbs/day) under A/N C-39747 discussed in the</p> |                         |

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Emissions section should not have been included since they are emergency devices. The NSR emission has been recalculated, using the Correlation Equation Method, without the PRVs as shown in the Emissions section and the annual emissions of 349 lbs/yr will be entered in NSR.

**Reg XX RECLAIM**

|                  |   |                     |
|------------------|---|---------------------|
| <b>Rule 2005</b> | <b>NSR for RECLAIM</b>  | <b>June 3, 2011</b> |
|                  | EOC is designated as a NOx and SOx RECLAIM facility. However, the Fuel Oil Clay Treating unit is neither a NOx nor a SOx emissions source. As such, this regulation does not apply. |                     |

**REG XXX TITLE V PERMITS**

|                  |  |                          |
|------------------|--|--------------------------|
| <b>Rule 3002</b> | <b>Requirements</b>  | <b>November 14, 1997</b> |
|                  | EOC is designated as a Title V facility. The initial Title V permit was issued on October 1, 2009.   |                          |
|                  | The permit action for D-1200 can technically be considered an Administrative revision of the TV permit because it is for incorporating equipment that was inadvertently left off the permit. However, the permit action to incorporate filter, F-1202 is considered a Minor TV permit revision because it does not meet the requirements for an Administrative, De Minimus or Significant revision pursuant to Rule 3000. As a Minor revision, the proposed permit and a copy of the evaluation will be submitted to the EPA for review. Compliance is expected. |                          |

**COMPLIANCE RECORD REVIEW**

A review of the District's CLASS data base shows there are no pending compliance issues at EOC currently.

**CONCLUSION**

Issue Permit to Operate (PO) for P3/S1 with the recommended permit actions in the Evaluation section above.