# PERMIT TO CONSTRUCT EVALUATION

| | |
|---|---|
| **Applicant's Name** | TABC |
| **Company ID** | 0003968 |
| **Mailing Address** | 6375 N. PARAMOUNT BLVD., LONG BEACH, CA 90805 |
| **Equipment Address** | SAME AS ABOVE |

## EQUIPMENT DESCRIPTION:

| Equipment | ID No. | Connected To | RECLAIM Source Type/ Monitoring Unit | Emissions and Requirements | Conditions |
|---|---|---|---|---|---|
| **PROCESS 1: ELECTRODEPOSITION LINE** | | | | | |
| TANK, NO. 1, CLEANING, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., BONDERITE C-AKE2007 MU, LA & LB, 2,043 GALLON CAPACITY, HEATED.<br><br>A/N 568735 | D367 | | | | A433.1, A433.2, B59.5 |
| TANK, NO. 2, CLEANING, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., BONDERITE C-AKE2007 MU, LA & LB, 2,043 GALLON CAPACITY, HEATED.<br><br>A/N 568735 | D368 | | | | A433.1, A433.2, B59.5 |
| TANK, NO. 3, CLEANING, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., BONDERITE C-AKE2007 MU, LA & LB, 2,043 GALLON CAPACITY, HEATED. | D380 | | | | A433.1, A433.2, B59.5 |

| Equipment | ID No. | Connected To | RECLAIM Source Type/ Monitoring Unit | Emissions and Requirements | Conditions |
|---|---|---|---|---|---|
| **PROCESS 1: ELECTRODEPOSITION LINE** | | | | | |
| A/N 568735 | | | | | |
| TANK, NO. 6, CONDITIONER, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., PREPALENE X-PREPALENE ADDITIVE 2 & 6, 2,043 GALLON CAPACITY. UNHEATED. A/N 568735 | D369 | | | | |
| TANK, NO. 7, PHOSPHATE, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., BONDERITE M-AD 131, 100FL, 110, 319, 500, M-ZN 3080 MU, AND M-ZN 3080 R GK, 2,043 GALLON CAPACITY, HEATED.<br><br>A/N 568735 | D370 | | | | A433.1, A433.2, B59.5, D29.5 |
| TANK, NO. 12, ELECTRO-DEPOSITION, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., CATIONIC RESIN, CATIONIC PASTE, 2-BUTOXYEHTANOL WITH A 400 AMPERE RECTIFIER, 2,543 GALLON CAPACITY HEATED<br><br>A/N 568735 | D372 | C112 | | VOC (9) [RULE 1115, **5-12-1995**; RULE 1171, **11-7-2003;** 05-01-2009] | H23.5 |
| TANK, NO. 13, PERMEATE, WIDTH: 5 FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., MZD7330, MZD40940, 2,043 GALLON CAPACITY, UNHEATED<br><br>A/N 568735 | D373 | | | | A433.1, A433.2, B59.5 |
| TANK, NO. 14, PERMEATE, WIDTH: 5 | D374 | | | | A433.1, A433.2, |

| Equipment | ID No. | Connected To | RECLAIM Source Type/ Monitoring Unit | Emissions and Requirements | Conditions |
|---|---|---|---|---|---|
| **PROCESS 1: ELECTRODEPOSITION LINE** | | | | | |
| FT. 6 IN; HEIGHT: 7 FT. 9.25 IN.; LENGTH: 7 FT. 5 IN., MZD7330, MZD40940, 2,043 GALLON CAPACITY, UNHEATED<br><br>A/N 568735 | | | | | B59.5 |
| ASSOCIATED RINSE WATER TANKS | D375 | | | | |
| AFTERBURNER, NATURAL GAS, REGENERATIVE TYPE, RATED AT 3 MM BUT/HR.<br><br>A/N ~~439151~~571056 | C112 | D1, D2, **D372, D376** | Process | **CO**: 2000 PPMV (5) [**RULE 407, 4-2-1982**]; **NOX**: 130 LB/MM CF NATURAL GAS (1) [**RULE 2012, 5-6-2005,** *RULE 2012, 6-3-2011*]; **PM**: 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981**] PM (9) [RULE 404, **2-7-1986**] | D29.1, D29.2, D29.4, E193.4 |
| OVEN, DRYING, WIDTH: 10 FT. 2 IN; LENGTH: 82 FT.6 IN. HEIGHT: 7 FT. 5 IN. WITH A,<br><br>LOW NOX BURNER, MAXON, MODEL NO. M-APKT MPB41RSFFNAA, NATURAL-GAS FIRED, RATED AT 2.5 MM BTU/HR<br><br>A/N 568736 | D376 | C112 | Process Unit | **CO**: 2000 PPMV (5) [**RULE 407, 4-2-1982**]; **NOX**: 130 LB/MM CF NATURAL GAS (1) [**RULE 2012, *6-3-2011*]** 30 PPMV NATURAL GAS (4) [**RULE 2005, *6-3-2011*]**; **PM**: 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981**] PM (9) [RULE 404, **2-7-1986**] | C6.9, D29.3, I297.1 |

**A/N 568737:**

RECLAIM/TITLE V PERMIT REVISION, DE-MINIMUS SIGNIFICANT

**BACKGROUND:**

TABC, Inc. filed the above applications on October 2, 2014 as new constrction to install a new Electrodeposition (ED) Coating and drying line to apply primer to its automotive assembly line and metal parts operations. This facility is in the RECLAIM/Title V program. A/N 543637 was filed for the RECLAIM/Title V permit revision. The latest Title V renewal was issued on 11/2/2010. This application is part of the 4th Title V permit revision since then.

The facility has been operating with a Title V permit since 2000. The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had no citizen complaints or Notices to Comply or Violation issued in the last two years.

**PROCESS DESCRIPTION:**

The ED line consists of 15 process tanks. The parts are assembled in a carrier and submerged initially in the pre-coating tanks for cleaning, rinsing, conditioning before they are dipped into the ED dip tank containing VOC-solution where they are coated with a thin film with the help of a rectifier. Afterwards, the parts are transported to post-coating treatment tanks before routing to the drying/curing oven.

The oven is fueled with natural-gas and equipped with a Low NOx burner rated at 2.5 MM btu/hr. The parts are dried and cured in the oven before final shipment. Both the oven and ED dip tank are source of VOC emissions and will be vented to existing afterburner operating under Device id no. C112.

The process line will be operated 24 hr/day x 7 days/week x 52 week/yr.

**EMISSIONS AND ANALYSIS:**

There are two sources of emissions from the operation. VOC and PM emissions from ED coating line and combustion emissions from the natural-gas fired oven.

VOC emissions from ED Line:

The ED dip tank in this process is the only significant source of VOC emissions. The tank is equipped with a 400 AMP rectifier. VOC emissions from the tank are vented to exisiting thermal oxidizer C112. The applicant estimated the uncontrolled emissions from the ED coating line by using following

Given (Per applicant):
Loading Rate: 17 carriers/hr
Sq. Footage of the parts on carrier: 290 ft2
Estimated Target Film build: 0.0035 cm
Density of Solvents in ED solution: 0.04 lb/gal
Density of solids in ED solution: 1.96 lb/gal
Density of ED solution: 8.72 lb/gal
Volume% of solids in ED solution: 22.5

Max. Hourly Volume of solids(VSD) deposited on parts:

VSD = 290 ft2/carrier x 0.0035 cm x 17 carriers/hr x 0.03208 ft/cm
= 0.566 ft3/hr x 7.48 gal/ft3 = 4.235 gal/hr
Max. Hourly Volume of ED Coatings (VED) used:

VED = 4.235 gal/hr x 1 gal ED/0.225 gal solids
= 18.82 gal ED/hr

**Daily VOC Emissions:**

R1: 18.82 gal ED/hr x 0.04 lb VOC/gal ED = 0.753 lb/hr

R2: 0.753 lb/hr x 0.15 (85% Overall Efficiency for RTO) = 0.112 lb/hr

R2= 0.112 lb/hr x 24 hr/day = 3 lb/day x 7 day/week x 52 week/yr = 978 lb/yr.

There are few other tanks in the line that conatin Glycol and Propanol. However, the VOC emissions from those tanks are insignicant:

VOC Emissions from other tanks containing Glycol and Propanol are:
1.4e-6 lb/hr & 8.85e-3 lb/hr respectively - refer to attached spreadsheet for emissions calculations.

The applicant will offset the VOC emission increase from this line by providing ERC's in the amount of 4 lbs/day ((3.2 + 0.4 from the oven) x 1.2).

For PM emission calculations from ED line, please see attached spreadsheet that calculates the PM emissions.

Assumptions:

- Evaporative emissions are calculated where the concentration and/or temperature of a process solution tank component allows volatilization and the vapor pressure of the component is known.
- Only tanks that show significant increase in emission as listed in above table are included. Recirculation by educators below the surface of the solutions will not significantly agitate the surface or cause emissions.
- Sparging Emission calculated by the following equation:
  R1= 4.41 E-05 lb/hr x scfm x wt %
  Sparging rate will be calculated based on 1cfm/$ft^2$
- Electrolytic emissions are calculated by the spreadsheet using the following equation:
  R1(plating)(mg/amp-hr) = 0.505 x (w) x (100-N)
  w = wt. fraction of dissolved chemical
  N = plating efficiency (from literature)

The information provided by applicant was entered in the spreadsheet for estimating the uncontrolled and controlled emissions from open process tanks (See attachment).

The weight percent concentrations of the solutions are adjusted based on the information provided by the applicant in the spreadsheer titled 'New ED System Pretreatment Process Materials' along with corresponding vapor pressure values.

PM= PM10
0.082 lb/hr x 24 hr/day = 1.97 lb/day

Combustion Related Emissions from the new burner using the following emissions factors:

| Pollutant | value | units | Ref |
|---|---|---|---|
| ROG | 7 | lb/mmcf | Form B-1, AQMD |
| SOx | 0.6 | lb/mmcf | Form B-1, AQMD |
| PM | 7.5 | lb/mmcf | Form B-1, AQMD |
| NOx | 38 | lb/mmcf | 30 PPM- Permit Limit |
| CO | 77 | lb/mmcf | 100 PPM – Permit Limit, Manufacturer Gurantee |

Emissions:

| | lb/hr | lb/day | 30-dy ave | lb/yr |
|---|---|---|---|---|
| RHC | 0.02 | 0.40 | 0.4 | 146 |
| NOx | 0.09 | 2.18 | 2 | 793 |
| SO2 | 0.0014 | 0.03 | 0 | 12 |
| CO | 0.18 | 4.42 | 5 | 1607 |
| PM | 0.02 | 0.43 | 1 | 156 |

## TOXIC EVALUATION:

The risk from nautral gas combustion and process tanks are calculated in the attached spreadsheets and summarized below:

MICR from the natural gas combustion:

| MICR (Residential) | MICR (Commerical) | Pass/Fail |
|---|---|---|
| 0.084e-7 | 0.009e-7 | Pass |

HIA & HIC from process tanks

HIA: 0.00146 (<1)
HIC: 0.0002 (<1)

RULE 212(c)(1) This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. This facility is not located within 1,000 feet from the outer

boundary of a school. Therefore, public notice will not be required by this section.

RULE 212(c)(2) This section requires a public notice for all new or modified facilities which have on-site emission increases exceeding any of the daily maximums as specified in subparagraph (g). The proposed project will not result in daily emission increase that will exceed the maximum limits specified in subparagraph (g). Therefore, public notice will not be required by this section.

RULE 212(c) (3) The MICR, HIA, & HIC from this project are less than 1 in-a-million and less than 1 respectively. Therefore a public notice is not required by this section.

RULE 212(g) This section requires a public notice for all new or modified permit units which undergo construction or modifications resulting in an emissions increase exceeding any of the daily maximums as specified in subparagraph (g). The proposed project will not result in emission increase that will exceed the limits. Therefore, public notice will not be required by this section.

| | Maximum Daily Emissions | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | $PM_{10}$ | $SO_2$ | CO | Pb |
| Emission increase | 4 | 2 | 2 | 0 | 5 | 0 |
| MAX Limit (lb/day) | **30** | **40** | **30** | **60** | **220** | **3** |
| Compliance Status | Yes | Yes | Yes | Yes | Yes | Yes |

RULE 401 Visible emissions are not expected with proper operation of this equipment.

RULE 402 Operation of equipment is not expected to create a nuisance.

Rule 442: This rule is applicable to VOC-containing materials or equipment not subject to the VOC limits in any Regulation XI rules. The applicant will be processing motor vehicle assembly lines parts and non-motor vehicle assembly line parts. The non-assembly parts are subject to the requirements of this Rule. The emissions from the VOC containing tank are vented to an afterburner that is required to meet an overall control efficiency of 85 percent thus satisfying requirements of d(1) of the rule.

Rule 1115: The rule emissions limit of 1.2 lb/gal for electrophoretic primer is met as the VOC content of the ED bath solution is 0.04 lb/gal. Further, VOC emissions from the ED tank are vented to an afterburner that is required to meet an overall control efficiency of 85 percent.

REG. XIII
Rule 1303: Requirements

This rule allows the Executive Officer to deny a Permit to Construct for any new, modified or relocated source which results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia, unless BACT is used. This rule also requires offset

(among other requirements) if there is a net increase in any nonattainment air contaminants for any new or modified source which results in a net emission increase of any nonattainment air contaminant at a facility.

The definition of "Source" in Rule 1302(ao) is "any permitted individual unit, piece of equipment, article, machine, process, contrivance, or combination thereof, which may emit or control an air contaminant. This includes any permit unit at any non-RECLAIM facility and any device at a RECLAIM facility." According to this definition, the proposed ED coating line and oven must be evaluated as separate sources.

The definition of "Facility" in Rule 1302(p) is "any source or group of sources or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2. Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore."

Rule 1303(a)(1)-BACT- The VOC-containing ED tank will be vented to the existing Afterburner which satisfies the requirements of Best Available Control Technology for this operation.

The proposed oven will utilize a Low-NOx bunrner capable of meeting 30 ppmv NOx and 100 ppmv CO BACT limits. The VOC emissions from the oven will be vented to the existing afterburner which also satisfies the requirements of Best Available Control Technology for this operation.

Rule 1303(b)(2)-Offsets- The proposed project will result in an increase of 3.61 pounds per day of VOC emissions. The applicant is providing VOC ERC in the amount of 4 pounds per day to offset the emission increase.

The proposed project will result in an emission increase of 2.4 pounds per day of PM10. The facility only operates another ED coating line, a 16.8 mmbtu/hr boiler, and an emergency internal combustion engine, and as a result, the facility's Potential to Emit (PTE) of PM10 is less than 4 tons per year. Therefore, no PM10 offsets will be required per Rule 1304(d)(2).

The project will also, result in 4.42 pounds per day of CO emission increase. However, since CO is an attainment air contaminant, no emission offsets will be required for the proposed project.

The proposed project will result in 2.18 pounds per day increase in NOx emissions. However, the facility is in the RECLAIM program and the increase in NOx emissions will be evaluated under Reg XX.

1303(b) (1)-Modeling: NOx, CO, & PM10 emissions are below the allowable emissions in Table A-1 of Rule 1303. Therefore, no further Modeling analysis is required.

| | Emissions rate (lb/hr) | | |
|---|---|---|---|
| Item | Allowed | calculated | Compliance |
| NOx | 0.31 | 0.09 | Yes |
| CO | 17.1 | 0.2 | Yes |
| PM10 | 1.9 | 0.02 | Yes |
| PM10 (Non-Combustion source) | 0.41 | 0.083 | Yes |

1303(b)(4)-Facility Compliance: The facility is expected to be in full compliance with all applicable rules and regulations of the District.

1303(b)(5)-Major Polluting Facilities: The proposed project will not result in an increase of 15 tons per year or more, of the facility's potential to emit particulate matter with an aerodynamic diameter of less than or equal to a nominal ten microns ($PM_{10}$); or, or an an increase of 50 tons per year or more, of the facility's potential to emit carbon monoxide (CO).

Further, the increase in VOC emissions from the proposed project will be bubbled under existing Facility Wide emission limit of 2,766 pounds per day specified under condition F2.1. Therefore, since the proposed operation will not result in a an increase of one pound per day or more, of the facility's potential to emit, the proposed project will not qualify as a major modification at major polluting facility.

Rule 1401 Toxics: Rule 1401 contains the following requirements:

1) *(d)(1) MICR and Cancer Burden* - The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:
(A) an increased MICR greater than one in one million ($1.0 \times 10^{-6}$) at any receptor location, if the permit unit is constructed without T-BACT;
(B) an increased MICR greater than ten in one million ($1.0 \times 10^{-5}$) at any receptor location, if the permit unit is constructed with T-BACT;
(C) a cancer burden greater than 0.5.

2) *(d)(2) Chronic Hazard Index* - The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

3) *(d)(3) Acute Hazard Index* - The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

Based on the Risk assessment performed using the Risk Assessment

Module, the equipment passed Tier 2 modeling. The MICR values were determined to be less than 1 in-million for residential and commercial. The Acute and Chronic values for all target organs did not exceed 1.0. The values are presented in the Risk Assessment in the appendix.

Regulation XX: TABC is a NOx cycle 1 RECLAIM facility. The proposed oven will be classified as a NOx process unit. The oven is equipped with a low NOx burner. The oven will comply with the BACT requirements of 30 ppmv NOx and CO concentrations of 100 ppmv.

Rule 2005: TABC is a NOx RECLAIM facility. The proposed oven will result in 2.18 pounds per day of NOx emissions. For this reason, compliance with Rule 2005 must be achieved prior to issuing a permit for the proposed project.

Rule 2005(c)(1)(A): The oven will be operated with a low-NOx natural-gas fired burner. The burner is designed to operate at 30 ppm of NOx or less and 100 ppm of CO or less. The oven is expected to operate in compliance with BACT through the use of the low-NOx burner. BACT for this oven is defined as use of a low-NOx burner emitting no more than 30 ppm.

Rule 2005(c)(1)(B):No further modeling analysis is required since the estimated hourly NOx emissions of 0.09 lb/hr does not exceed the allowable limit of 0.31 lb/hr. The proposed project will not result in a significant increase in the air quality concentration for $NO_2$.

Rule 2005(c)(2): The proposed installation of the oven will result in NOx emission increase. However, the facility holds sufficient RTCs to offset the annual emission increase for the first year of operation at a 1-to-1 ratio for year 2015-16. Condition no. I297.1 will be included to enforce this section of the rule.

Rule 2005(g)- Additional Requirements For Major Stationary Sources

The facility is a Major Source so the requirements of this section are applicable. The facility has demonstrated compliance with the requirements of this section by certifying that all other major stationary sources in the state which are controlled by the applicant are in compliance with all applicable federal emission limitations or standards. The proposed project is exempt from CEQA requirements. Furthermore, this project is not subject to modeling analysis and the emissions increase from the project is less than 40 tons/year.

Rule 2012 – Requirements For MRR for NOX Emissions

The oven is classified as Process Units. Since the applicant has decided to report NOx emissions based on the default factor of 130 lbs/mmscf, a dedicated fuel meter is not required for this equipment.

**Regulation XXX:**

This facility is in the RECLAIM/Title V program. The proposed project is considered as a "de minims significant permit revision" to the Title V permit for this facility.

Rule 3000(b)(6) defines a "de minims significant permit revision" as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants

(HAPs) from these permit revisions during the term of the permit are not greater than any of the emission threshold levels on the following page:

| Air Contaminant | Daily Maximum (lbs/day) |
|---|---|
| HAP | 30 |
| VOC | 30 |
| NOx | 40 |
| PM10 | 30 |
| SOx | 60 |
| CO | 220 |

To determine if a project is considered as a "de minims significant permit revision" for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is the 4th permit revision to the Title V renewal permit issued to this facility on November 2, 2010. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued.

**Title V Permit Revisions Summary**

| | Revision | HAP | VOC | $NO_x$ | $PM_{10}$ | $SO_x$ | CO |
|---|---|---|---|---|---|---|---|
| Previous Revisions | | **0** | **0** | **0** | **0** | **0** | **0** |
| 4th | Permit Revision: Installation of ED Line, Oven, & modification to the existing afterburner (a/nos. 527465-66). | 0 | 3 | 2 | 2 | 0 | 5 |
| Cumulative Total | | 0 | 3 | 2 | 2 | 0 | 5 |
| Maximum Daily | | 30 | 30 | 40 | 30 | 60 | 220 |

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a "de minimus significant permit revision".

## CONCLUSION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimus significant permit revision", it is exempt from the public participation requirements under Rule 3006 (b). A proposed facility permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised RECLAIM/Title V permit will be issued to this facility with the following conditions:

CONDITIONS:

ED Line

A433.1 & 433.2: The operator shall not use in this equipment any compounds except as identified below up to the following content limit and temperature.

| COMPOUND | TANK NOS. | MAX CONTENT (WT %) | TEMPERATURE- DEG. F |
|---|---|---|---|
| Sodium Hydroxide | 1,2,3 | 1.5 | 140 |
| Hydrofluoric Acid | 7 | 0.08 | 130 |
| Sodium Hydroxide | 7 | 0.6 | 130 |
| Phosphoric Acid | 7 | 1.3 | 130 |
| Nitric Acid | 7 | 0.15 | 130 |
| Nickel Compound | 7 | 1.4 | 130 |
| (2-methoxymethylethoxy) propanol | 13,14 | 1.5 | Ambient |

B59.1 The operator shall not use the following material(s) in this device.

Toxic Air Contaminants in Table 1 of Rule 1401 with a Listing Date of 9/10/10 or earlier except for Sodium Hydroxide, Nitric acid, Hydrofluoric Acid, & Nickel compound, as specified in condition no. A433.1.

D29.5
The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---|---|---|---|
| Total PM | Approved District method | District-approved averaging time | Outlet |

The test shall be conducted no later than 180 days after initial startup unless otherwise approved in writing by the District.

The PM sample shall be analyzed for Nickel emissions using District approved analytical Method.

A source test protocol shall be submitted to the District no later than 45 days before the proposed test date and shall be approved by the District prior to the source test. The protocol shall include the proposed operating conditions of the test, the identity of the testing laboratory, and a description of all sampling and analytical procedures to be used.

The tests shall be conducted while the tank is operating at its maxmium production rate.

Written notice of the source tests shall be submitted to the District at least 14 days prior to testing so that an observer can be present.

Two complete copies of the source test reports shall be submitted to the District (South Coast Air Quality Management District, P.O. Box 4941, Diamond Bar, CA 91765) within 45 days after the test. The report shall include, but may not be limited to emission rates in pounds per hour:

A. The exhaust flow rates, in actual cubic feet per minute (ACFM).

B. The exhaust temperature, in degrees F.

A testing laboratory certified by the California Air Resources Board in the required test methods for the criteria pollutants to be measured, and in compliance with District Rule 304 (non conflict of interest) shall conduct the test.

Sampling facilities shall comply with the District Guidelines for Construction of Sampling and Testing Facilities, pursuant to Rule 217

During the test, the type, size, and quantity of the parts being processed, the weight concentrations of the material in the solution of the tank, and operating temperature of the tank shall be monitored and included in the source test report

H23.5. This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule | Rule/Subpart |
|---|---|---|
| VOC | District | Rule 109 |
| VOC | District | Rule 1115 |
| VOC | District | Rule 442 |

Oven

C6.9

The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, does not exceed 500 Deg F.

To comply with this condition, the operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the oven. The operator shall determine and record the parameter being monitored once every 1 days.

D29.3

The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---|---|---|---|
| CO | Approved District method | District-approved averaging time | Outlet |
| NOx | Approved District method | District-approved averaging time | Outlet |

Source testing shall be conducted within 180 days after the initial start-up unless otherwise approved in writing by the Executive Officer.

The source tests shall be performed to verify compliance with the NOx and CO emission limits specified by this permit.

The tests shall be conducted while the burner is firing at maximum, minimum, and average firing rates.

A source test protocol shall be submitted to the District within 60 days after the initial start-up with the ST-1 and ST-2 completed by the testing laboratory.

Written notice of the source tests shall be submitted to the District (addressed to South Coast Air Quality Management District, P.O. Box 4941, Diamond Bar, CA 91765) at least 14 days prior to testing so that an observer can be present.

Two complete copies of the source test reports shall be submitted to the District (South Coast Air Quality Management District, P.O. Box 4941, Diamond Bar, CA 91765) within 45 days after the test. The report shall include, but may not be limited to emission rates in pounds per hour and concentrations in ppmv at the outlet of the oven, measured on a dry basis at 3% oxygen. The following operating data shall also be included for each firing rate:

_ A. The exhaust flow rates, in actual cubic feet per minute (ACFM)._
_ B. The firing rates, in BTU per hour._
_ C. The exhaust temperature, in degrees F._
_ D. The oxygen content of the exhaust gas, in percent._
_ E. The fuel flow rate._

A testing laboratory certified by the California Air Resources Board in the required test methods for the criteria pollutants to be measured, and in compliance with District Rule 304 (non conflict of interest) shall conduct the test.

Sampling facilities shall comply with the District Guidelines for Construction of Sampling and Testing Facilities, pursuant to Rule 217

Afterburner

E193.4

The operator shall operate and maintain this equipment according to the following requirements:

The combustion chamber temperature shall be maintained at a minimum of 1,500 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7. Such a system shall have an accuracy within 1% of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications. For the purpose of this condition, a deviation shall be defined as when the combustion chamber temperature of less than 1,500 degrees Fahrenheit occurs during the normal operation of the equipment it serves.

The operator shall review the records of the combustion chamber temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs. Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective actions to maintain the combustion

chamber temperature at or above 1,500 degrees Fahrenheit, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective actions taken. All deviations shall be reported to the AQMD pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit.

The operator shall submit an application with an Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications.

The operator shall keep adequate records in a format that is acceptable to the AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.

D29.1

The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---|---|---|---|
| VOC | Approved District method | District-approved averaging time | Simultaneous inlet and outlet |

The test(s) shall be conducted at least once every five years.

The test shall be conducted no later than May 10, 2014 unless otherwise approved in writing by the District.

The test shall be conducted to determine the VOC emissions using an approved District method to demonstrate compliance with all applicable rules and regulations.

The test shall be conducted while the oxidizer is operating at a temperature of not less than the minimum operating temperature specified in this permit. If the operating temperature during the source test is greater than the minimum operating temperature specified in this permit, the minimum operating temperature specified in this permit may be increased to reflect the operating temperature during the source test.

The operator shall submit two complete copies of the source test report specified in condition No.10 of section E of this facility permit to the District Engineering and Compliance Division. The Engineering copy of the report shall be sent to: SCAQMD, Coating, Printing and Aerospace Operations, Attn: AQACS, 21865 Copley Drive, Diamond Bar, CA 91765. The compliance copy of the report shall be sent to: SCAQMD, P.O.Box 4941, Diamond Bar, CA 91765_

D29.3

The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---|---|---|---|
| VOC | Approved District method | District-approved averaging time | Simultaneous inlet and outlet |

The test shall be conducted no later than 365 days after device Nos. 372 & 376 are connected to the afterburner unless otherwise approved in writing by the District.

A source test protocol shall be submitted to the District within 60 days after the initial start-up with the ST-1 and ST-2 completed by the testing laboratory.

The source tests shall consist of, but may not be limited to, testing at the inlet and the exhaust of the afterburner for:

1. Volatile organic compound (VOC) in PPMV and lbs/hr
2. VOC destruction efficiency
3. VOC collection efficiency
4. Oxygen content
5. Moisture content
6. Flow rate
7. Temperature

The source test shall be conducted during normal operation while the afterburner is operating at a temperature of not less than the minimum operating temperature specified in this permit. The operating temperature in the combustion chamber shall be recorded during the entire testing period and included in the source test report. If the operating temperature during the source test is greater than the minimum operating temperature specified in this permit, the minimum operating temperature may be increased at the time a permit to operate is issued to reflect the operating temperature during the source test. In addition, the usage of all VOC-containing materials shall be recorded during the test.

A written notice of the source tests shall be submitted to the District at least 14 days prior to source testing date so that an observer from the District may be present.

Two complete copies of the source test reports shall be submitted to the District within 45 days after the source testing date. The source test report shall include, but not be limited to all testing data required by this permit.

A testing laboratory certified by the California Air Resources Board in the required test methods for criteria pollutants to be measured, and in compliance with District rule 304 (no conflict of interest) shall conduct the test.

Sampling facilities shall comply with the District Guidelines for Construction of Sampling and Testing Facilities, pursuant to Rule 217.

I297.1

This equipment shall not be operated unless the facility holds 793 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

In lieu of holding RTCs for the entire duration specified above, RTCs held for the purpose of demonstrating compliance with this condition may be transferred as specified below, provided quarterly emissions do not exceed the corresponding quarterly limit listed in the table below. The amount available for transfer shall be as specified in Rule 2005(f)(3). Such amount may be transferred only after the end of the subject quarter. If the first day of operation does not coincide with the first day of a calendar quarter, the emission limit for that calendar quarter shall be prorated based on the number of days remaining in the calendar quarter as of the first day of operation and the amount available for transfer after that calendar quarter shall be theprorated emission limit minus the actual emissions reportable for that calendar quarter pursuant to RECLAIM Monitoring, Recordkeeping, and Reporting protocols (MRR) and the emission limit for the portion of the first year of operation falling in the fifth calendar quarter shall be prorated based on the number of days of the first year of operation occurring in that calendar quarter and the amount available for transfer after that calendar quarter shall be the prorated emission limit minus the actual emissions reportable for the portion of the first year of operation occurring in that calendar quarter pursuant to RECLAIM MRR. If the quarterly certified emissions for any quarter (or portion of a quarter occurring within the first year of operation) exceed the corresponding quarterly emission limit or prorated quarterly emission limit, as applicable, the facility may only sell RTCs held pursuant to Rule 2005(f) after the first calendar quarter ending at least one year after operation commences.

| Calendar Quarter Emission Limit | (Pounds of NOx RTCs) |
|---|---|
| January 1 through March 31 | 198 |
| April 1 through June 30 | 198 |
| July 1 through September 30 | 198 |
| October 1 through December 31 | 199 |