

BAAQMD Title V Permit
Semi-Annual Monitoring Report

July-12 - December-12

B2758 & B2759 - Tesoro Golden Eagle Refinery and Amorc Terminal

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Applicable Regulation / Permit Condition / Other:

BAAQMD 8-18-301

Date Event
Started:

Date Event
Stopped:

07/10/2012

07/26/2012

Source (S#): S101

Abatement Device (A#):

Emission Point (P#):

Event Description: BAAQMD found a leak ~ (1100 ppm) on tubing, which was inserted into an oil waste drum at slops unloading rack. The tubing had double blocks - a spring loaded valve and a ball valve. Tesoro believed the unloading rack was subject to Reg 8-6 vapor tight standards per Title V permit and was told on July 18, 2012 that the end of the tubing was subject to Reg 8-18-301 (100 ppm).

Probable Cause:

Tubing may have been recently used or drum had hydrocarbon vapors.

Corrective Action or Preventive Steps Taken:

Operations added a carbon canister on the drum and the end of the tubing was sealed as it entered the drum.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-18-305, Title V-I(F)

Date Event
Started:

Date Event
Stopped:

07/12/2012

09/02/2012

Source (S#): S802

Abatement Device (A#):

Emission Point (P#):

Event Description: Pressure Relief Valve (Tag 62913.01) was found leaking on 6/27/2012 and was not repaired within the 15 day period, nor was it reported on time. Tesoro had planned to replace the PRV. However, the PRV could not be isolated since the block valve under the PRV was still allowing pressure through the valve. This PRV is fully spared by another PRV on the same tower.

Probable Cause:

First attempt was unsuccessful but was not communicated to appropriate personnel.

Corrective Action or Preventive Steps Taken:

Tesoro clamped PRV (Tag 62913.01) and will be using the other PSV. Tesoro modified procedures for repairs, including work flow and documentation. Maintenance and Fugitives Inspectors will be trained on new work flow and document requirements.

Applicable Regulation / Permit Condition / Other:

BAAQMD 9-10-304

Date Event Started: Date Event Stopped:

07/18/2012 07/21/2012 Source (S#): Abatement Device (A#): S901 Emission Point (P#):

Event Description: Reported Indicated NOX excess at #7 Boiler following FCCU shutdown in Reportable Compliance Activity RCA 06G01 and 06G05 (duplicate).

Probable Cause:

Excess oxygen at #7 Boiler with no FCCU regen gas

Corrective Action or Preventive Steps Taken:

Operations started up FCC and eliminated excess oxygen as soon as possible.

Applicable Regulation / Permit Condition / Other:

BAAQMD 9-2-301

Date Event Started: Date Event Stopped:

07/20/2012 07/20/2012 Source (S#): B2758 Abatement Device (A#): Emission Point (P#):

Event Description: Reported Waterfront GLM H2S Excess >60 PPB/3 min average and >30 ppb/60 minute average under Reportable Compliance Activity # 06G04. Max = 140 PPB/3 min avg and 61 ppb/60 min avg.

Probable Cause:

Possible odor from slops tank

Corrective Action or Preventive Steps Taken:

Operations transferred slops to another tank, which eliminated the odors.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-33-309(15)

Date Event Started: Date Event Stopped:

07/24/2012 On Going Source (S#): S613 Abatement Device (A#): Emission Point (P#):

Event Description: NOV A52051 was issued on July 24, 2012, for incorrect tubing size and incorrect location of the sample line. Regulation 8-33-309.15 requires 0.25 inch or larger so size was erroneously cited.

Probable Cause:

The sample line was situated greater than one centimeter from the potential leakage source.

Corrective Action or Preventive Steps Taken:

Tesoro relocated line within one centimeter from source.

Applicable Regulation / Permit Condition / Other:

BAAQMD 1-441(3)

Date Event Started: Date Event Stopped:

07/25/2012 07/26/2012 Source (S#): B2758 Abatement Device (A#): Emission Point (P#):

Event Description: NOV A52477 was received for alleged failure to provide requested data in a timely manner.

Probable Cause:

BAAQMD deviated from normal procedure for determining timely submission of data. BAAQMD requested data via email, not certified letter. There were inconsistencies in the letter. Historically, receipt date of the signed BAAQMD letter-head would have officially started the clock toward 30 days. Due date should be July 29, 2012.

Corrective Action or Preventive Steps Taken:

Tesoro provided requested data on July 26, 2012.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-322(1), BAAQMD 8-5-112(5)

Date Event Started: Date Event Stopped:

07/26/2012 07/26/2012 Source (S#): S707 Abatement Device (A#): Emission Point (P#):

Event Description: During a routine tank inspection, HMT discovered a 5 inch hole in the fabric of the secondary seal on Tank 707. The fabric was repaired immediately.

Probable Cause:

Hole in fabric

Corrective Action or Preventive Steps Taken:

The fabric was repaired immediately.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-304(4)

Date Event Started: Date Event Stopped:

07/27/2012 07/28/2012 Source (S#): S33 Abatement Device (A#): Emission Point (P#):

Event Description: Discovered a small amount of product on the roof of TK 33. Determined that the roof drain check valve and internal drain line were bad, causing liquid to puddle on the roof. Tesoro faxed in breakdown notification in a RCA #06G15 for equipment malfunction.

Probable Cause:

Failed drain line and check valve.

Corrective Action or Preventive Steps Taken:

Tesoro emptied the drain line via vacuum truck and blinded the check valve opening. Drain line will not be used until the next tank turnaround is completed.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-304(4), BAAQMD 8-5-111(1)

Date Event Started: Date Event Stopped:

07/29/2012 07/30/2012 Source (S#): S26 Abatement Device (A#): Emission Point (P#):

Event Description: Took external floating roof TK 26 (S26) below float without proper notification to BAAQMD. Operations was making space available in the tank to accomodate product transfer operations.

Probable Cause:

Communication lapse

Corrective Action or Preventive Steps Taken:

Provide additional training to Operations on notification requirements.

Applicable Regulation / Permit Condition / Other:

Title V-VI(11433)(8)

Date Event Started: Date Event Stopped:

08/18/2012 08/23/2012 Source (S#): S802 Abatement Device (A#): Emission Point (P#):

Event Description: Reported excess SO2 at FCCU of greater than 50 ppm for the seven day average. #3 HDS compressor malfunction caused untreated feed to be processed at the FCCU.

Probable Cause:

#3 HDS compressor malfunction caused untreated feed to be processed at the FCCU.

Corrective Action or Preventive Steps Taken:

Tesoro added DeSOx catalyst to decrease SO2 emissions.

Applicable Regulation / Permit Condition / Other:

Title V-VI(7397)(1)

Date Event Started: Date Event Stopped:

08/22/2012 08/23/2012 Source (S#): Abatement Device (A#): Emission Point (P#): S901

Event Description: Reported ammonia (NH3) Injection >40 gallons per hour under RCA #06G56. Actual limit is 1800 lbs NH3 in a consecutive 24 hour period so start and end dates are different from RCA.

Probable Cause:

Alarm for injection rate was acknowledged but no action was taken.

Corrective Action or Preventive Steps Taken:

Operations reduced ammonia injection rate to 30 gallons per hour. Operators were trained that the ammonia injection rate is an environmental limit.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-306

Date Event Started: Date Event Stopped:

08/22/2012

On Going

Source (S#): S137, S134,
S532, S1496,
S990

Abatement Device (A#):

Emission Point (P#):

Event Description: Pressure Vacuum Valves (PVV) and explosion hatches found to be greater than 500 ppm on vapor recovery tanks (Tank 134, 137, 532, 749 and 876).

Probable Cause:

Higher pressure in tanks

Corrective Action or Preventive Steps Taken:

Tesoro adjusted natural/nitrogen gas flow to vapor recovery tanks, replaced PVV's and performed other repairs (hatches and pressure control valves). Maintenance is working to repair Tanks 134 and 876.

Applicable Regulation / Permit Condition / Other:

BAAQMD 12-11-401

Date Event Started: Date Event Stopped:

08/31/2012

09/04/2012

Source (S#): B2758

Abatement Device (A#):

Emission Point (P#):

Event Description: Flare Monitoring Report for July 2012 was not submitted on time due to malfunctioning scanners associated with a server being down. Tesoro also counted on submitting the report via US mail. However, due to vacations and extended holiday weekends, the mail was not delivered to the post office. Tesoro has modified internal procedures to prevent reoccurrence.

Probable Cause:

Poor communication

Corrective Action or Preventive Steps Taken:

Tesoro Environmental staff will fax or deliver mail to the post office to assure compliance with due dates.

Applicable Regulation / Permit Condition / Other:
BAAQMD 8-18-302, BAAQMD 8-18-304, Title V-I(F)

Date Event Started: 09/04/2012 Date Event Stopped: On Going Source (S#): B2758 Abatement Device (A#): Emission Point (P#):

Event Description: After updating the fugitive database with all outstanding paperwork and reviewing the fugitives database on September 4, Summit Environmental Services discovered the following: 14 past due valve leaks, 93 past due connector leaks, 46 late valve repairs, 108 late first repairs on connectors, and 5 late connector repairs. We have done the following for the past due items:

- 1) Database showed that 93 connectors leaks were past due - This was due to missing paperwork that the connectors were repaired and rechecked. Fugitive inspectors recalled performing most of the followup inspections. Tesoro rechecked the connectors and verified that most of them were fixed. All but 5 have been repaired and verified as of 9/13/2012. Three will be put on turnaround list. The two remaining will be repaired.
- 2) Database showed that 14 valve repairs were past due. Majority of the leaks on past due list can be put on the Turnaround list. However, Maintenance worked overtime to repair all but one valve leak and the one remaining valve will be put on the turnaround list.
- (3) For other items designated as "late," all work was completed prior to database query. Deviation is for late repairs and reporting.

Probable Cause:

Missing paperwork and poor communication

Corrective Action or Preventive Steps Taken:

Tesoro checked the "past due" leakers, repaired valves and connectors, and added some of the components to the turnaround list.

Applicable Regulation / Permit Condition / Other:
BAAQMD 8-5-322(4)

Date Event Started: 09/05/2012 Date Event Stopped: 09/08/2012 Source (S#): B19 Abatement Device (A#): Emission Point (P#):

Event Description: During a routine tank inspection on B-19 at Amorco Wharf, a portion of the serrated sealing surface on the secondary seal was found to be worn. Tesoro kept the tank still initially and filled it once at the request of HMT in order for them to changeout the serrated sealing surface at a safer height on the tank. The seal was repaired as quickly as possible.

Probable Cause:

Worn serrated sealing surface.

Corrective Action or Preventive Steps Taken:

Tesoro kept the tank still initially and filled it once at the request of HMT in order for them to changeout the serrated sealing surface at a safer height on the tank. More serrated sealing was ordered to replace the remaining sections on Tank B-19. Other riveted tanks were checked to see if they have similar issues.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-307(3)

Date Event Started: Date Event Stopped:

09/07/2012 09/08/2012 Source (S#): S652 Abatement Device (A#): Emission Point (P#):

Event Description: PSV-0225 (Pressure Vacuum Vent) was found to be leaking above 500 ppm limit. PVV was replaced on September 8, 2012.

Probable Cause:

Vacuum Vent was leaking.

Corrective Action or Preventive Steps Taken:

The pressure vacuum vent was replaced as soon as possible.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-307(3)

Date Event Started: Date Event Stopped:

09/12/2012 09/13/2012 Source (S#): S515 Abatement Device (A#): Emission Point (P#):

Event Description: PSV-0117 (Pressure Vacuum Vent) was found to be leaking above 500 ppm limit. PVV was replaced on September 13, 2012.

Probable Cause:

Vacuum vent was leaking.

Corrective Action or Preventive Steps Taken:

PVV was quickly replaced and reinspected.

Applicable Regulation / Permit Condition / Other:

BAAQMD 9-1-307, 40 CFR 60.104(a)(2)(i)

Date Event Started: Date Event Stopped:

09/27/2012 09/27/2012 Source (S#): Abatement Device (A#): S1401 Emission Point (P#): A1525

Event Description: Reported SO2 Excess >250 ppm for one hour under RCA 06H02.

Probable Cause:

SRU and Scot unit tripped due to low boiler level during blowdown activities. Operator did not put level on bypass.

Corrective Action or Preventive Steps Taken:

Operator received an unsatisfactory work report in his file and received additional training on the boiler blowdown procedure.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-18-402(1), BAAQMD 8-18-401

Date Event Started: Date Event Stopped:

09/28/2012 09/28/2012 Source (S#): Abatement Device (A#): Emission Point (P#):

Event Description: Quarterly report for missing fugitive tags. Missing tags on kerosine lines at 50 Crude Unit (S-1001) and compressor spillback lines at Coker (S-1510) were discovered.

Probable Cause:

Fugitives tags not installed

Corrective Action or Preventive Steps Taken:

Tags were installed and fugitives monitoring performed.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-2-301, BAAQMD 2-6-307

Date Event Started: Date Event Stopped:

10/18/2012 10/18/2012 Source (S#): S1005 Abatement Device (A#): Emission Point (P#):

Event Description: Received a Notice of Violation (No. A 52482) For No 1 Hydrogen Plant being over the limits cited under Regulation 8-2.

Probable Cause:

Source testing conducted at #1 Hydrogen Plant CO2 vent stacks showed the presence of MDEA in the wet exhaust stream, along with other carbon compounds. Previous source testing gas chromatograph analyses were run under a different methodology and their results are being re-analyzed. The question if MDEA is a precursor volatile organic compound, which is the description cited under Regulation 8-2-101 continues to be discussed with District staff.

Corrective Action or Preventive Steps Taken:

Tesoro has been in negotiations with the District Enforcement staff, and applied for a short term variance under BAAQMD Hearing Board Docket # 3640. Further, source testing at a different location at the CO2 vent stack is being conducted on November 13 - 14, 2012 under the guidance of the District Source Testing staff. The results of this source testing determined that the CO2 vents were in compliance with Regulation 8-2. The application for a Short Term Variance under Docket #3640 was formally dismissed by the BAAQMD Hearing Board in mid-January 2013.

Applicable Regulation / Permit Condition / Other:

BAAQMD 9-2-301

Date Event Started: Date Event Stopped:

10/20/2012 10/20/2012 Source (S#): B2758 Abatement Device (A#): Emission Point (P#):

Event Description: Reported a H2S emission excess at Waterfront Road ground level monitor under Reportable Compliance Activity Excess Episode ID # 06H38.

Probable Cause:

The Shift Superintendent immediately dispatched the Logistics supervisor to see if he could determine the source of the GLM activity. The Tract 2 slops tanks were inspected to determine if they were the source. Initially the external floating roof tank 896 was suspected to be the source and our tank seal inspection contractor, HMT, was dispatched to inspect the floating roof seal. HMT determined that the tank seal was in compliance with the gap requirements, as were the tank fittings.

Corrective Action or Preventive Steps Taken:

The Shift Superintendent re-routed the slops rundown from TK 896 to the vapor recovery tank 137, and the odors and GLM activity subsided.

Applicable Regulation / Permit Condition / Other:

BAAQMD 9-2-301

Date Event Started: Date Event Stopped:

10/26/2012 10/26/2012 Source (S#): B2758 Abatement Device (A#): Emission Point (P#):

Event Description: Reported an H2S excess at Waterfront Road ground level monitor under Reportable Compliance Activity Excess ID# 06H47.

Probable Cause:

The Shift Superintendent dispatched the Logistics supervisor to determine if the source of the GLM activity could be found. Based on the previous incident, both TK 896 and TK 137 were inspected to see if there were any abnormal mechanical issues that could possible cause the odors.

Corrective Action or Preventive Steps Taken:

Based on the inspection of the vapor recovery system settings on TK 137, Maintenance discovered that the vapor vent line going to the vapor recovery header was experiencing pluggage, causing the tank to vent light sour gas, instead of allowing the gas to be recovered by the vapor recovery compressors. The vent line was removed and cleaned, and the system returned to normal operation.

Applicable Regulation / Permit Condition / Other:

Title V-VI(19528)(21)

Date Event Started: Date Event Stopped:

11/15/2012 11/17/2012 Source (S#): S963 Abatement Device (A#): A963 Emission Point (P#):

Event Description: Had little or no flow of 250 psig steam injection to the Alky Gas Turbine, and thus was below the steam to fuel ratio required by the permit condition. Maintenance was actively working on the steam injection system during this time.

Probable Cause:

Maintenance work was required on the flow transmitter for the steam injection control valve to the Alkylation Gas Turbine. There is no manual bypass piping to allow steam injection to the gas turbine while the control valve and associated flow monitoring is being serviced.

Corrective Action or Preventive Steps Taken:

Maintenance expedited the work on the system to minimize the amount of time the gas turbine was run without steam injection. The flow transmitter and flow meter build up condensate, due to the piping configuration, and cause inaccurate flow measurement. The flow measurement is also an integral part of the control logic for the gas turbine. Operations was advised that the Alky gas turbine could not be operated without steam injection.

Applicable Regulation / Permit Condition / Other:

Title V-VI(17322)(5)

Date Event Started: Date Event Stopped:

12/07/2012 12/07/2012 Source (S#): S904 Abatement Device (A#): A904 Emission Point (P#):

Event Description: Received notification that a source test on #6 Boiler demonstrated that the ammonia slip in the stack was higher than the permitted limit.

Probable Cause:

Best Environmental contractor conducted the source test on 11/27/2012. During the source test period, the 600 psi steam header experienced higher steam demand fluctuations than normal, which caused the boiler operation to fluctuate to meet header pressure requirements. As the boiler responded to the fluctuating steam demand, the ammonia flow controller had limited ability to match the boiler firing response. As a result, the ammonia injection system was overfeeding ammonia to the SCR grid.

Corrective Action or Preventive Steps Taken:

Based on the data, it appears that the ammonia injection control valve lags in response to the steam production requirements. Operations performed engineering testing to tune the ammonia injection grid and the ammonia injection control valve to varying steam demand. Another source test was performed on 12/7/2012, and demonstrated that the #6 Boiler was tuned correctly, and passed the ammonia slip permit condition limit.

Applicable Regulation / Permit Condition / Other:

BAAQMD 8-33-309(12)

Date Event Started: Date Event Stopped:

01/02/2013 01/02/2013 Source (S#): S1025 Abatement Device (A#): A14 Emission Point (P#):

Event Description: During an internal compliance audit, discovered there were nine instances where the backpressure at the Tract 3 loading rack had exceeded the 18" of water column requirement which were not immediately reported to District Enforcement.

Probable Cause:

The nine events which were not reported occurred during the time when Tesoro compliance staff believed the interpretation of Regulation 8-33-309.12 applied only to times when there was an actual back-pressure event at the loading rack, and not those events related to maintenance activities or driver connection errors.

Corrective Action or Preventive Steps Taken:

Following discussions with the District Enforcement Inspector, a procedure was established to notify the District Inspector of all pressure "spikes", regardless of duration (e.g. < 2 seconds) which occurred at the loading rack.