



**CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR MANAGEMENT SERVICES**

INSTALLTION PERMIT

Permit No.: 15302
Plant ID: 10479

Date: November 29, 2016
Source: Philadelphia Refinery Complex

Owner: Philadelphia Refinery Operations: Location: 3144 Passyunk Avenue
Address: 3144 Passyunk Avenue Philadelphia, PA 19145-5299
Philadelphia, PA 19145-5299

Attention: Jim Oppenheim
Senior Environmental Consultant
Address: 2 Righter Parkway, Suite 200
Wilmington, DE 19803

Pursuant to the provisions of Title 3 of the Philadelphia Code, the Air Management Code of February 17, 1995, as amended, and after due consideration of an application received under the rules and regulations of the Philadelphia Air Pollution Control Board, the City of Philadelphia, Department of Public Health, Air Management Services (AMS) on November 29, 2016 approved plans for the modification of the air contamination source(s) described below:

Adjust the following monitoring requirements in Plan Approval 06170 dated April 30, 2007 to the following:

- Change the monthly inspection and calibration of the humidification system monitoring requirements to an annual inspection;
- Change the monthly inspection and calibration of the temperature control system monitoring to an annual inspection;
- Change the monthly inspection of steam valve position to an annual inspection;
- Change the monitoring of the blower fan differential pressure and current from weekly to monthly.

Monitoring Requirements	Monitoring Requirement Under Plan Approval 06170	Monitoring Approved - AMS Installation Permit No. 15302
Sewer influent (26th Street & Packer Avenue) vacuum, temperature, and vapor concentration	Weekly	Weekly
Treatment bed (Cell 1, Cell2, Cell 3, and Cell 4) Temperature moisture, and effluent vapor concentration.	Weekly	Weekly
ST-1 influent vapor concentration	Weekly	Weekly
TI-4 and TI-5 temperature	Weekly	Weekly

INSTALLATION PERMIT CONDITIONS
INSTALLTION PERMIT NO. 15302
COMPANY: PHILADELPHIA REFINERY COMPLEX

Monitoring of the steam injection system	Weekly	Weekly (during winter months)
Blower fan differential pressure and current	Weekly	Monthly
Treatment bed (Cell 1, Cell2, Cell 3, and Cell 4) pressure	Monthly	Monthly
Inspection and calibration of the humidification system	Monthly	Annual
Inspection and calibration of the temperature control system	Monthly	Annual
Inspection of steam valve position	Monthly	Annual
Treatment bed (Cell 1, Cell 2, Cell 3, and Cell 4)Media pH testing	Quarterly	Quarterly
Blower fan performance (vibration, tighten anchor bolts, v-belts, bearing lubrication)	Quarterly	Quarterly
Smoke testing of air distribution piping and treatment beds.	Annual	Annual
Winterization	Annual	Annual

This Installation Permit expires on **November 29, 2017**. If the modification has not been completed by this date, an application for either an extension or new installation permit must be made. The conditions of this installation permit will remain in effect until they are incorporated in an operating license or operating permit. This Installation Permit is subject to conditions prescribed in the attachment.

This permit replaces and supersedes Plan Approval No. 06170 dated April 30, 2007.

Maryjoy Ulatowski

Maryjoy Ulatowski
Environmental Engineering Supervisor
215-685-9475

INSTALLATION PERMIT CONDITIONS
INSTALLTION PERMIT NO. 15302
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1. The Biofilter shall be operated in accordance with the specifications in the application (as approved herein) and in such a manner as to maximize odor reduction for the air stream it controls.
2. The Permittee shall perform all routine maintenance procedures to the Biofilter according to Camp Dresser & McKee's (CDM's) maintenance plan (including but not limited to annual maintenance/testing of the heating coil and air distribution piping).
3. The Permittee shall monitor and record the following:
 - a. Weekly monitoring of the steam injection system.
 - b. Weekly temperature of the inlet gas to the Biofilter.
 - c. Weekly CDM checklists.
 - d. Monthly checklists for fan current and fan differential pressure.
 - e. Monthly checklists for steam valve positions and Biofilter cell pressures.
 - f. Quarterly checks of blower fan performance.
 - g. Quarterly checks of pH cell beds.
 - h. Annual inspection and calibration of the humidification and temperature control systems.
 - i. Annual inspection of the stem valve position.
 - j. All checklists must follow those included in the application for this plan approval. New or modified checklists may be substituted if approved by AMS.
4. All records must be kept for a minimum of 5 years and made available to AMS upon request.