

**Louisville Metro Air Pollution Control District**  
**850 Barret Ave., Louisville, Kentucky 40204**  
**05 November 2015**

**Federally Enforceable District Origin Operating Permit**  
**Statement of Basis**

**Company:** Atkemix Ten Incorporated

**Plant Location:** 6100 Camp Ground Road, Louisville, Kentucky 40216

**Date Application Received:** 05/07/2007; 08/31/2015

**Date of Draft Permit:** 3/01/2013; 11/05/2015

**District Engineer:** Eva Addison

**Permit No:** O-1225-15-F

**Plant ID:** 1225    **SIC Code:** 8711

**NAICS:** 541330

**Introduction:**

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); and is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>), unclassifiable for the 2012 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and partial non-attainment area for sulfur dioxide (SO<sub>2</sub>).

**Application Type/Permit Activity:**

Initial Issuance

Permit Revision

Administrative

Minor

Significant

Permit Renewal

**Compliance Summary:**

Compliance certification signed

Compliance schedule included

Source is out of compliance

Source is operating in compliance

**I. Source Information**

1. **Process Description:** The source is operating two soil vapor extraction systems and one air stripper for the purpose of soil and groundwater remediation controlled by a dual bed carbon adsorption system.
2. **Site Determination:** There are no other facilities that are contiguous or adjacent to this facility
3. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	One (1) Production Area SVE (Soil Vapor Extraction), make Roots, model URA1718, capacity 1200 scfm; One (1) Curtain Area SVE, make Rotron Chemical Processing Series, model CP909FJ72WLR, capacity 600 scfm; and One (1) Air Stripper, make New York Blower Company, model 404 SER 35 GIDH ARR'GT.8, capacity 7200 acfm at 36" WG; all venting to One (1) dual-bed Carbon Absorption System, make VIC Environmental Systems, model 5108 AD Carbon Adsorption System, capacity 7200 scfm at 70°F, stack ID S1.

4. **Fugitive Sources:** There are no fugitive emissions.
5. **Permit Revisions:**

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	149-02-F	08/01/2002	06/23/2002	Initial	Entire Permit	Initial Permit Issuance
R1	149-02-F (R1)	04/18/2013	03/01/2013	Renewal	Entire Permit	Scheduled Renewal and incorporation of construction permit 264-01-C(R1)
N/A	O-1225-15-F	??	11/05/2015	Admin	Emission Unit U1	Incorporate STAR Exempt limits and remove TAC limits

6. **Construction Permit History:**

Permit No.	Issue Date	Description
264-01-C(R1)	2/28/2013	One (1) Production Area SVE (Soil Vapor Extraction), make Roots, model URA1718, capacity 1200 scfm; One (1) Curtain Area SVE, make Rotron Chemical Processing Series, model CP909FJ72WLR, capacity 600 scfm; and One (1) Air Stripper, make New York Blower Company, model 404 SER 35 GIDH ARR'GT.8, capacity 7200 acfm at 36" WG; all venting to One (1) dual-bed Carbon Absorption System, make VIC Environmental Systems, model 5108 AD Carbon Adsorption System, capacity 7200 scfm at 70°F, stack ID

### 7. Emission Summary:

Pollutant	District Calculated Actual Emissions (tn/yr) 2009 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	N/A	No
NO <sub>x</sub>	N/A	No
SO <sub>2</sub>	N/A	No
PM <sub>10</sub>	N/A	No
VOC	0.2759	Yes
Total HAPs	0.3503	Yes
Single HAP	NA	Yes

### 8. Applicable Requirements:

PSD       40 CFR 60       SIP       40 CFR 63  
 NSR       40 CFR 61       District-Origin       Other

### 9. MACT Requirements: The source has no future MACT requirements.

### 10. Referenced Federal Regulations in Permit: There are no federal regulations for soil remediation.

## II. Regulatory Analysis

### 1. Acid Rain Requirements: Atkemix Ten is not subject to the Acid Rain Program.

### 2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This

rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Atkemix Ten does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. **Prevention of Accidental Releases 112(r):** Atkemix Ten does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
4. **40 CFR Part 64 Applicability Determination:** Atkemix Ten is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.
5. **Basis of Regulation Applicability**

- a. **Plant-wide**

Atkemix Ten is a potential major source for the criteria pollutant VOC and single and total HAPs. Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements. The source requested limits of the criteria pollutant VOC < 25 tn/yr, and Total HAPs < 12.5 tn/yr and largest single HAP < 5.0 tn/yr, to be a FEDOOP STAR Exempt source as defined by Regulation 5.00, section 1.13.5. The source is not major for Greenhouse Gases.

Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Atkemix Ten took the total plantwide limits of 25 tpy for criteria pollutants 12.5/5.0 tpy for Total HAPs and single HAP to be a FEDOOP STAR Exempt source

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the district upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued shall submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an Annual Compliance Report to show compliance with the permit, by March 1 of the following

calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

**b. Emission Unit U1 – Soil and Groundwater Remediation Operation**

**i. Equipment:**

<b>P/PE</b>	<b>Capacity</b>	<b>Install Date</b>	<b>Applicable Regulation</b>	<b>Basis for Applicability</b>
E1: One (1) Production Area SVE (Soil Vapor Extraction), make Roots, model URA1718	1200 scfm	Originally installed 8/6/1996; modified 7/23/2001	7.25	Regulation 7.25 Establishes the requirements for VOC emissions, applies to a process not elsewhere regulated in District Regulation 7, and applies to new processes commenced after June 13, 1979
E2: One (1) Curtain Area SVE, make Rotron Chemical Processing Series, model CP909FJ72WLR	6000 scfm	Originally installed 8/6/1996; modified 7/23/2001		
E3: One (1) Air Stripper, make New York Blower Company, model 404 SER 35 GIDH ARR'GT.8	720 acfm at 36" WC	Originally installed 8/6/1996; modified 7/23/2001		

**ii. Standards/Operating Limits**

**1) VOC**

Regulation 7.25 establishes VOC emission limits of less than twenty five (25) tons during any consecutive 12-month period through Best Available Control Technology (BACT). The District has determined the carbon adsorption unit represents BACT level control.

**III. Other Requirements**

- 1. Temporary Sources:** The source did not request to operate any temporary facilities.
- 2. Short Term Activities:** The source did not report any short term activities.
- 3. Emissions Trading:** N/A

- 4. **Operational Flexibility:** The source did not request any operation flexibility.
- 5. **Compliance History:** There are no records of any violations of the terms of the present or prior construction or operating permits.
- 6. **Calculation Methodology or Other Approved Method:**

The emission calculations are based upon the concentration of pollutant measured in the air stream each month, and the average air flow for each month.

7. **Insignificant Activities**

Equipment	Quantity	PTE (tpy)	Basis for Exemption
VOC Storage Tanks 250 gal or less	1	0.01 VOC	Regulation Appendix A 1.02,
Brazing, Soldering, or Welding Equip.	1	0.01 PM <sub>10</sub> ; 0.001 total HAPs	Regulation Appendix A 1.02,

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- 3) The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15<sup>th</sup>.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
- 6) The District has determined that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.