Delaware Department of Natural Resources and Environmental Control
Division of Air Quality

Removal of Lead-Containing Coatings from Outdoor Water Tanks by Dry Abrasive Blasting

Source Category Permit
(Form: AQM-SCP/WT)

Permit Number: **WT-2026/01**

Water Tank Name: River Road	**Water Tank Owner:** Veolia Water Delaware
Water Tank Location:	705 Governor Lea Rd, NEW CASTLE, Delaware, 19720 Lat / Long Coordinates: 39.598, 75.631
Method of Removal:	Abrasive blasting
End Date for Coatings Removal:	**Dec 01, 2025**

This permit will expire within one year of issuance unless the water tank owner submits a request to the Division of Air Quality (DAQ) for an extension within 45 days of the expiration date, with an explanation of why the extension is needed. The DAQ may approve one such extension of six months, after which, if the project is not completed, the permit will be closed. A new application will be required to restart the project.

Effective Date: **Sep 16, 2025**

Pursuant to 7 DE Admin. Code 1102 Permits, approval of the Department of Natural Resources and Environmental Control (the Department) is hereby granted for the removal of lead-containing coatings from outdoor water tanks by dry abrasive blasting and associated equipment located at the address listed above, in accordance with the application submitted on Form No. AQM-SCP/WT dated 07/17/2025 and submitted on behalf of Larry Finnicum

This Source Category Permit is issued subject to the following conditions:

1.0 General Provisions

1.1 Dry abrasive blasting of an outdoor water tank with a lead-containing coating shall be carried out in accordance with the project as described in the application submitted by the tank owner or operator that served as the basis for the project being permitted under this source category.

1.2 Nothing in this permit relieves the permittee from the obligation to comply with all applicable federal, state, county, and municipal statutes, regulations, ordinances and policies.

1.3 The owner or operator shall not install, construct or alter any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department pursuant to 7 DE Admin. Code 1102, and, when applicable 7 DE Admin. Code 1102, and receiving approval of such application from the Department; except as exempted in 7 DE Admin. Code 1102 Section 2.2.

1.4 Representatives of the Department may, at any reasonable time, inspect this facility.

1.5 This permit may not be transferred to another location or to another person, owner, or operator of an outdoor water tank.

2.0 Emission Limitations

2.1 No person shall cause or allow sandblasting or related abrasion operations unless sufficient containment measures are taken to prevent the sand or abrasive material from traveling beyond the property line where the operation is being conducted, or traveling beyond the containment system should the containment system be located, in whole or in part, beyond the property line.

2.2 No person shall cause or allow the emission of any visible air contaminant.

2.3 There shall be no measurable emissions of lead or lead-containing particles, compared to a previously

determined background level, when measured in the ambient air at the water tank owner's property line, or beyond where the containment operation is being conducted if the containment operation, in whole or in part, extends beyond the property line.

3.0 Operational Limitations

3.1 Dry abrasive blasting shall not be operated unless the containment system ventilation, as described in condition 3.3.3 of this permit, is operating properly, and:

3.1.1 if a Type A1 - Rigid system, as described in 3.3.1.1 of this permit, is maintaining a negative pressure of at least 0.03 inch of water relative to ambient conditions as measured by a manometer or magnehelic gage, or

3.1.2 if a Type A2 -flexible system, as described in 3.3.1.1 of this permit, is maintaining a negative pressure throughout the containment system enclosure as determined by visual observation of the concave nature of the shrouding employed while taking into account wind effects.

3.2 For every start or restart of dry abrasive blasting, observe all areas of the containment system for visible emissions from the containment enclosure and from the exhaust stack. If emissions are observed which cannot be immediately controlled, dry abrasive blasting shall cease until the cause of emissions is found and corrected.

3.3 Containment and Ventilation Systems

3.3.1 Containment shall be Class 1A, as described in Table A "Abrasive Blast Cleaning" of the Society for Protective Coatings (SSPC) Technology Guide No. 6 "Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations", dated May 4, 2015. The required components of the Containment System shall be as follows:

3.3.1.1 Containment Materials shall be Type A1 - Rigid or Type A2 – Flexible, as described in section 5.3.1.1 or 5.3.1.2 respectively, of SSPC 6,

3.3.1.2 Penetrability shall be Type B1 – Air Impenetrable, as described in section 5.3.2.1 of SSPC 6,

3.3.1.3 Support Structure shall be Type C1 – Rigid or Type C2 – Flexible, as described in section 5.3.3.1 or 5.3.3.2 respectively, of SSPC 6,

3.3.1.4 Joints shall be Type D1 – Full Seal, as described in section 5.3.4.1 of SSPC 6, and

3.3.1.5 Entryway shall be Type E1 – Airlock or Type E2 - Resealable, as described in section 5.3.5.1 or 5.3.5.2 respectively, of SSPC 6.

3.3.2 Thorough cleanup of the containment system, the water tank exterior surface and all equipment within the containment system shall be performed prior to dismantling or moving any part of the containment system to a new location, lowering, or ceasing dry abrasive blasting operations at the end of the day,

3.3.2.1 with a vacuum equipped with a high efficiency particulate air filter that is capable of removing 99.97 percent of airborne particulate matter with a size of 0.3 microns or larger; or alternatively,

3.3.2.2 with dry, low pressure compressed air (150 psi or less) from a hose to blow off deposited dust and coating chips on contaminated areas described in condition 3.3.2 of this permit, making such dust and chips airborne so the air flow through the containment area will pass these contaminants through the exhaust air filtration system.

3.3.3 Ventilation shall be Class 1A, as described in Table A "Abrasive Blast Cleaning" of the Society for Protective Coatings (SSPC) Technology Guide No. 6 "Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations", dated May 4, 2015. The required components of the Ventilation System shall be as follows:

3.3.3.1 Air Makeup shall be Type F1 – Controlled, as described in section 5.4.1.1 of SSPC 6,

3.3.3.2 Input Air Flow shall be Type G1 – Forced or Type G2 - Natural, as described in section 5.4.2.1 or 5.4.2.2 respectively, of SSPC 6,

3.3.3.3 Air Pressure Inside Containment shall be Type H1 – Instrument Verification or Type H2 – Visual Verification, as described in section 5.4.3.1 or 5.4.3.2 respectively, of SSPC 6,

3.3.3.4 Air Movement shall be Type I1 - Minimum Specified, as described in section 5.4.4.1 of SSPC 6, and

3.3.3.5 Exhaust Air Filtration shall be Type J1 – Filtration, as described in section 5.4.5.1 of SSPC 6, where all air in the containment system is a forced flow into dust collectors followed by a high efficiency particulate air filter that is capable of removing 99.97 percent of airborne particulate matter with a size of 0.3 microns or larger and the filtered air is then exhausted through a stack.

3.3.4 The containment system shall be inspected daily, as well as when the system is raised, lowered, or moved prior to conducting any dry abrasive blasting activity. The inspection shall ensure the containment system is free of tears and holes and all seals are in working order.

3.3.5 The fan, moving containment system air into, and located just before, the exhaust air filtration system, shall be equipped with an outlet static pressure sensor and the dry abrasive blasting system shall be immediately shut down whenever static pressure is noted to have been lost, such as in the case of a fan failure.

3.3.6 The discharge of the exhaust air filtration system shall be directed away from buildings, personnel working in the area, air intakes to the containment system, and the clean compressed air supply for dry air for the dry abrasive blasting equipment.

3.3.7 No fugitive emissions shall be generated as a result of removing collected dust from the exhaust air filtration system or any vacuums used in cleanup or as a result of subsequent handling of the collected dust on-site or during off-site transit.

4.0 Site Emergency and Release Response Plan

4.1 The water tank owner or operator shall submit a Site Emergency and Release Response Plan to the Department a minimum of thirty (30) days prior to the start of on-site work. This plan shall include all aspects of foreseeable events likely causing environmental hazards to the public, describing proposed resolution, and including notification of the public likely to be impacted. Considerations must be site specific and should include, at a minimum:

4.1.1 Contractor’s Lead and Health safety program;

4.1.2 Contractor’s procedures to address a release or discharge;

4.1.3 Activities in response to a suspected or impending severe weather event;

4.1.4 Notification tree (including phone numbers and email addresses);

4.1.5 Procedures to be implemented to ensure adequate clean-up of off-site and on-site environmental consequences of event;

4.1.6 Procedures to be implemented to review system performance to ensure prevention of future similar environmental events;

4.1.7 List of on-site equipment to be used for clean-up;

4.1.8 Addresses and contact information for the lab used for certified air monitoring analyses; and,

4.1.9 Post-incident report to be submitted to the Department.

5.0 Monitoring Requirements

5.1 The Department reserves the right to require the owner or operator to perform emission tests using methods approved in advance by the Department. The owner or operator may submit a request to the Department to use a different method.

5.2 Visible Emission Observations

5.2.1 Upon initiation of dry abrasive blasting, observe all areas of the containment system for visible fugitive emissions and emissions from the stack(s) of the exhaust air filtration system. The observation shall be conducted using a trained observer in EPA Method 22 (EPA 40 CFR 60, Appendix A) for a period of at least five minutes. If visible emissions are observed from any point, the dry abrasive blasting operation shall cease until the cause is determined and corrected. A list of trained observers shall be posted on site.

5.2.2 Observations shall be recorded to include the date, name of observer, time, and the presence or absence of visible emissions. In the event that emissions are observed, record the actions taken to eliminate the emissions. Upon resumption of dry abrasive blasting, record observations until a successful startup is attained.

5.2.3 Observations of the containment system shall continue throughout the day so that for every two hour period of continuous dry abrasive blasting there is a recorded observation of at least five minutes in duration. If visible emissions are observed at any time, the dry abrasive blasting operation shall cease until the cause is determined and corrected.

5.3 Air Monitoring

5.3.1 Prior to initial startup of dry abrasive blasting, background air monitoring for lead shall be conducted for at least a three-day period as described in section 9.5 ”Background Monitoring” of SSPC Technology Update No.7 “Conducting Ambient Air, Soil, and Water Sampling of Surface Preparation and Paint Disturbance Activities”, dated May 4, 2015. The determination of the type and number of monitors and the locations and height above ground of each monitor shall be based on SSPC Technology Update No. 7. Operation of these same monitor sites shall be continued during dry abrasive blasting activity. This activity requires the use of a laboratory certified under the National Lead Laboratory Accreditation Program (NLLAP) of the EPA or an equivalent independent national accreditation program, to set-up the monitors, start and stop operation and analyze for lead in air monitor and HEPA filters. The laboratory report shall contain evidence of certification and limit of detection for each analysis performed.

5.3.2 The set of air monitors established in condition 5.3.1 of this permit shall be operated continuously during dry abrasive blasting and shall include a half hour prior to the start of dry abrasive blasting and a half hour following the termination of dry abrasive blasting, and during periods when lowering the shroud and until the area exposed by lowering the shroud has been cleaned of blasting debris.

5.3.3 The water tank owner or operator shall use either EPA 40 CFR Part 50, Appendix B method for high volume air sampling or 40 CFR Part 50, Appendix O method for low volume air sampling.

5.3.4 Air monitor filters shall be replaced daily when in operation. Filters shall be analyzed for lead by EPA Method 7010 “Graphite Furnace Atomic Absorption Spectrophotometry” or EPA Method 6020 A “Inductively Coupled Plasma Mass Spectrometry”. The analysis shall be performed by an EPA accredited lead air monitor analysis laboratory. Upon initial startup of dry abrasive blasting for the first time (or after an extended shutdown of more than two weeks), the performance of the containment system, as described in conditions 2.0, 3.0 and 5.2 of this permit, shall be closely observed for compliance and if all systems are found to be performing as required and there are no visible emissions over a two-hour period of operation, then that day’s air monitor samples shall be submitted for analysis on a standard sample turnaround basis. Subsequent samples may be accumulated for up to one week before submission for analysis on a standard sample turnaround basis. If the system is shut down due to any system upset or visible fugitive emissions, start-up of abrasive blasting shall be closely observed to ensure all operating parameters are under control for two hours and the air monitor samples for that day’s operation shall be submitted for analysis on an expedited basis. Any samples found to contain lead above the background level shall require the dry abrasive blasting operation to cease until the cause is determined and corrected.

5.4 Static Pressure Monitoring

5.4.1 A visual observation, or instrument verification, of the negative pressure inside the containment enclosure shall be recorded every two hours during dry abrasive blasting on a data sheet and the times negative pressure is lost due to restricted air flow through the exhaust air filtration system or significant fugitive air loss noted along with any dry abrasive blasting shutdown and startup times.

5.4.2 A static pressure reading of the exhaust air filtration system shall be recorded every two hours of dry abrasive blasting on a data sheet or through the use of a recording monitor. Each instance when static pressure is lost and dry abrasive blasting is shut down shall be recorded on the data sheet.

6.0 Recordkeeping and Reporting Requirements

6.1 Records produced as required by Section 5.0 of this permit shall be maintained on-site for the duration of the project.

6.2 Analytical results of the filters from air monitoring, as required by condition 5.3 of this permit, shall be maintained on-site for the duration of the project. Test results showing the presence of lead above the background level shall be reported to the Department within two business days. If lead above background levels is detected in the samples, dry abrasive blasting shall be shut down until the cause is determined and corrected, unless such action has already been taken.

6.3 The owner or operator of the water tank shall maintain all records as required by Section 5.0 of this permit and any other records necessary for determining compliance with this permit for three years after completion of the project and shall make these records available to the Department upon written or verbal request.

7.0 Public Notification and Reporting Requirements

7.1 No less than thirty (30) days prior to commencement of initial dry abrasive blasting the owner or operator of the water tank shall prepare and distribute a notice to the Department and to the public located within one-thousand feet of the water tank, including, but not limited to, residences, schools, child care facilities, businesses and social service providers. The notice shall contain, at a minimum, the following items:

7.1.1 a summary of the activities which are proposed to take place on the site;

7.1.2 expected start and end dates of the overall project and expected dates of dry abrasive blasting;

7.1.3 water tank owner company name;

7.1.4 contact information for the tank owner and project contractor;

7.1.5 the DNREC complaint line (1-800-662-8802);

7.1.6 air quality permit issuance date,

7.1.7 a statement identifying the presence of lead in the coatings to be removed;

7.1.8 a Division of Public Health approved lead fact sheet;

7.1.9 steps taken to protect the public;

7.1.10 disposition of blasting waste generated;

7.1.11 the Department website address for dry abrasive blasting of water tanks; and,

7.1.12 the location of the water tank.

7.2 Delays in the project timeline of one month or more shall be communicated to the Department and to the public receiving notice per condition 7.1 of this permit.

7.3 Any complaints received by the water tank owner, operator or project contractor related to dry abrasive blasting shall be relayed to the Department by contacting the complaint line at 1-800-662-8802 as soon as practical.

7.4 Emissions in excess of any permit condition or emissions that create a condition of air pollution shall be reported to the Department upon discovery by calling the complaint line at 1-800-662-8802.

7.5 One original and one copy of all required reports shall be sent to the address below:
Division of Air Quality Attn. Division Director
State Street Commons
100 West Water Street, Suite 6A
Dover, Delaware 19904

8.0 Administrative Conditions

8.1 This permit shall be made available on the premises.

8.2 Failure to comply with the conditions of this permit may be grounds for suspension or revocation.

8.3 This permit will expire within one year of issuance unless the water tank owner submits a request to the Division of Air Quality (DAQ) for an extension within 45 days of the expiration date, with an explanation of why the extension is needed. The DAQ may approve one such extension of six months, after which, if the project is not completed, the permit will be closed. A new application will be required to restart the project.

9.0 Completion of Dry Abrasive Blasting

9.1 Within thirty (30) days of completion of dry abrasive blasting, the water tank owner or operator shall submit to the Department a post-project checklist certifying all conditions of this permit have been met and all citizen complaints, if any, have been addressed. The post-project checklist shall be signed by a responsible official of the company owning the water tank. Upon acceptance of the checklist, the Department shall close this permit.

Sincerely,

Valerie Gray

Valerie Gray
Program Administrator
Air Quality Planning Section