



Howard M. Neukrug P.E., Water Commissioner

October 14, 2015

Hazardous Waste Facility Siting Team Leader
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

To whom it may concern,

Philadelphia Water would like to submit comments on the application for a Phase I Criteria Siting Permit by Elcon Recycling Services, LLC to construct and operate a hazardous waste treatment facility in Falls Township, Pennsylvania. Philadelphia Water provides drinking water to over 1.7 million people and stormwater and wastewater management to over 2.5 million people in Philadelphia County and surrounding areas.

1. The Phase I Exclusionary Criteria in § 269a.21.(a)(2) that excludes a hazardous waste facility from being sited less than a five miles upstream of a drinking water intake is not adequate to protect drinking water supplies located on a tidal river. Philadelphia Water requests that PADEP deny the Phase I siting permit given the risk of multiple-day contamination of the tidal drinking water supply to millions of people located downstream of the proposed Elcon facility.

The Philadelphia Water Baxter drinking water treatment plant intake is located approximately 15 miles downstream of the proposed Elcon facility on the tidal Delaware River. In a tidal river, the release of hazardous waste or chemicals forms a chemical plume that is moved upstream and downstream with the tide, slowly reaching the Delaware Bay after a period of several days.

To review the drinking water supply risk of the proposed Elcon facility, Philadelphia Water used the Delaware Valley Early Warning System (EWS) Tidal Spill Model. Funded through a Department of Homeland Security grant and developed as a strategic initiative to protect multiple drinking water intakes, the Tidal Spill Model is designed to simulate chemical plume movement in the tidal Delaware River up to 90 hours from the time of a spill, or up to 3.75 days after a spill.

When applying the location of the proposed Elcon facility to a simulation of a conservative contaminant using the EWS Tidal Spill Model, results indicate a chemical plume still envelops the Baxter intake 90 hours or 3.75 days after the time of a spill. The Baxter drinking water intake provides 60% of the potable water to Philadelphia County. Depending upon the severity of an accidental leak or emergency, having to potentially close the Baxter



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intake for over 3.75 days while a chemical plume slowly moves downstream in the tidal Delaware River is catastrophic. As included in EWS, additional drinking water intakes located in the pathway of the plume simulation between Philadelphia and the proposed Elcon facility on the tidal Delaware River include; New Jersey American Water Delran, NJ; Aqua Pennsylvania Bristol, PA; Lower Bucks Joint Municipal Authority in Tulleytown, PA; and Burlington City, NJ.

The millions of people who receive their drinking water supply from the tidal Delaware River in both Pennsylvania and New Jersey are not protected by the exclusionary criteria in § 269a.21.(a)(2). Philadelphia Water requests that PADEP deny the Phase I siting permit given the risk of multiple-day contamination of the tidal drinking water supply located downstream of the proposed Elcon facility.

2. While there are no explicit exclusionary criteria for population density, Philadelphia Water requests that PADEP consider the population of the surrounding areas and downstream areas in their review of the Elcon siting permit.

The Elcon facility will be attracting regional hazardous waste via railways and highways into one of the most densely populated areas on the East Coast. PADEP is one of the signatory members of the Delaware Valley EWS, and has actively participated in the use, promotion and strategic development of the EWS since 2005. Philadelphia Water encourages PADEP to consult the EWS when evaluating the risk to the drinking water of millions of people by the proposed Elcon facility location. PADEP awarded Philadelphia Water with the Governor's Award for Environmental Excellence in 2015, recognizing the importance of the EWS and the Tidal Spill Model for its role in protecting the water resources of the greater Philadelphia region. A fact sheet on the Delaware Valley Early Warning System has been included with this letter for reference.

3. Prior to granting the Phase I siting permit, Philadelphia Water requests more information regarding the transportation of hazardous materials via regional waterways. Given the drinking water supply risk involved, Philadelphia Water requests the right to provide further comment on the information provided prior to a decision to issue the Phase I siting permit.

The siting of the proposed Elcon facility in a navigable waterway, allows for the potential transport of hazardous waste on the Delaware River. Whether the hazardous waste is pre-processed or post-processed, the transport of such materials via ship or barge in the vicinity of the Philadelphia Water Baxter drinking water treatment plant intake is a significant risk to the drinking water supply of millions of people.



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4. In light of the extensive drinking water supply contamination in West Virginia caused by a chemical storage facility leak, Philadelphia Water would like PADEP to consider the precautionary principle when reviewing the Phase 1 Siting Permit for the proposed Elcon facility. The proposed facility location is within a twenty mile radius of large urban areas in both Pennsylvania and New Jersey that use the Delaware River as a drinking water supply. The proposed location along a tidal freshwater drinking water supply amplifies the consequence of any accidental release of hazardous waste, given a chemical plume takes many days to flow past the southern-most drinking water intake located in Philadelphia.

Philadelphia Water recognizes the need for environmentally sound hazardous waste treatment, and has many industrial partners and customers. However, the proposed location in Falls Township, Bucks County is a risk to the high quality drinking water supply that millions of Philadelphians and others in the Delaware Valley region have come to expect.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher S. Crockett".

Christopher S. Crockett, Ph.D., P.E.
Philadelphia Water
Deputy Water Commissioner, Planning and Environmental Services

