

## WIN Waste Innovations Saugus

### Frequently Asked Questions

#### **What's the difference between a waste-to-energy plant and an incinerator?**

While a traditional incinerator employed old technology, no emission controls and no energy recovery, the WIN Waste facility in Saugus processes up to 1,500 tons of residential and commercial waste daily from local homes and businesses and converts it into renewable energy that is transferred to the grid. The facility is highly regulated and operates in compliance with all local, state and federal guidelines.

#### **How much energy does the plant produce?**

The WIN Waste facility in Saugus has the capability of generating 31 megawatts of electricity, enough to power almost 17,000 homes.

#### **What about emissions?**

WIN Waste meets the state regulatory standards for nitrogen oxide emission levels. The regulations allow for 185 parts per million (ppm) NO<sub>x</sub> levels for the specific technology at our facility and DEP has issued a permit reflecting that emission limit. In response to feedback from the Town's Landfill Committee, we have proposed to accept an even lower level of 175 ppm, which is included in a proposed Host Community Agreement.

Air quality as measured at the nearest DEP monitoring station is in compliance with the National Ambient Air Quality Standards (NAAQS), which are based on being protective of the most sensitive members of society. Modeling ambient air quality concentrations under worst-case meteorological conditions also shows compliance with NAAQS. The Saugus Board of Health's consultant agrees that there are no exceedances of NAAQS at the permitted emission levels. According to a report on air quality in Saugus issued by Tech Environmental, the company the Board of Health contracts with to monitor WIN Waste, **"The results demonstrate that the facility did not cause adverse effects on air quality, even when using the worst-case operating emission rates."**

#### **Where does the ash go?**

The inert ash that is created as part of the waste-to-energy process is treated and deposited in a monofill on the property. The ash is classified as non-hazardous material by both the Mass. DEP and U.S. EPA. The monofill has a clay soil barrier wall, leachate collection system and natural clay layer that are at least as protective of the environment as a plastic liner system. The DEP has reviewed and approved this groundwater protection system on multiple occasions.

**What happens when the monofill reaches capacity?**

When the current permitted capacity is reached, the most environmentally friendly option is to allow WIN Waste to continue to operate the monofill on the same footprint using the same environmental controls. The alternative is to ship the ash off site to a facility at least an hour away, putting 12 to 15 diesel-fueled trucks on local roads daily.

**What is Bear Creek Wildlife Sanctuary?**

Bear Creek Wildlife Sanctuary is a 370-acre nature refuge adjacent to the waste-to-energy plant that surrounds the monofill and abuts the Rumney Marsh ecosystem in Saugus and Revere. Supported and managed by WIN Waste Saugus, Bear Creek is a rich environmental and educational resource that provides habitat for more than 200 species of migratory birds and is certified by the Wildlife Habitat Council. It features an outdoor classroom and hosts school groups for tours and field trips. A large group of birders participate in weekly walks, documenting species that have taken up residence in the sanctuary.