

# Preparing for Plant Operations

During April 2023 the DWMC plant will receive its first deliveries of municipal waste and will be using this as fuel to fire boiler 11, in what will be the start of operations. Preparations for the operational phases go back to environmental studies undertaken several years ago, from which stringent guidelines have been developed for controlling plant emissions. These include threshold values for noise, odors, dust particles and a variety of gases that are typically produced in the combustion process. Monitoring equipment to measure and record plant emissions have been procured and installed during the construction phases, and are now commissioned ready for use as we move into operations. Reports detailing plant emissions are required by regulatory authorities and project investors, to ensure that compliance is achieved. Engineers at site also review emissions data obtained to identify trends and to develop strategies for maintaining compliance.

Plant Emissions fall into two main categories:-

## 1. Exhaust stack emissions-CEMS (Continuous Emissions Monitoring System)

The combustion process produces solid ash, which is retrieved at the bottom of the combustion chamber, and gases and air born particles which pass through the upper sections of the boiler. These Flue Gases pass through a number of chemical processes and filtration systems before being discharged to air up the exhaust stack. CEMS analyzers are located in every exhaust stack and they monitor the different flue gases before final discharge. Plant thresholds are based on the European Union standards, making the DWMC emissions some of the lowest in the world.

## 2. Air, Odor, Noise and Dust (Known as Air Quality Monitoring)

General plant operations generate emissions from the movement of vehicles, the discharge and storage of waste, and the operation of plant equipment and processes. Air quality monitoring is conducted from different locations around the site area, including an offsite station. Data from these units is collected at site and analyzed for compliance with regulatory and contractual thresholds. Air quality monitoring is also subject to stringent thresholds and regulators will be receiving this data when the plant goes into full operation.