

DWMC Newsletter Number 5, October 2021

Message from Tim Clarke, CEO of DWMC

Welcome to the fifth DWMC newsletter. Good progress is being made in the walkways and interconnecting platforms in the boiler hall as our contractor pushes ahead with the completion



of lines one and two as a priority. Our contractor has finalised the plans and supporting documents for the offsite noise, air, and dust monitoring station during October, and DWMC has produced documents that describe how emissions monitoring will be carried out when the plant is in full operations. My team have shared these plans with the regulators at Dubai Municipality to ensure we remain compliant with the strict emissions controls that apply.

This months' Spot Focus looks at how the incinerator grating and ram feeder operate, moving the waste from the feed hopper into the combustion chamber.

Project progress

The ram feeder for line two has been installed in October and the contractor is installing the second set of grate hoppers and incinerator grating at the time of writing. Until all the walkway gantries have been completed, the working areas in lines one and two require fall arrest equipment to be worn by all persons. This is one of the measures our contractor has implemented as part of the safe working at height campaign. Grouting works continue in the Incinerator Bottom Ash storage area and staircases in shaft 7 are being completed. Pre-assembly works continue with feed hopper, feed hopper chutes and primary air pre-heater and further major lifts of feed hopper assemblies will take place in November.

(A grate hopper in line two is lifted into position.)



Foundations are underway for the technical building and large-scale civil works continue to the east side of the site, preparing the ground for the access roadways and accommodation building. The blast proof transformer building walls are nearing completion, preparations are being made for roof construction on the turbine building and the installation of reinforcement and formwork for the silo has started.

Environmental and Social

E+S Focus 'Permit to Work Procedures'. The DWE plant is a complex construction project with multiple contractors and subcontractors, carrying out a variety of tasks in restricted working areas. To ensure the safety of staff and equipment is maintained at all times, our contractor has implemented a Permit to Work System. This system ensures that all work activities are planned, designated persons are appointed to take control of each area, that staff required to undertake specialist roles, such as welding or lifting operations, are trained to do so, and all staff involved are briefed so they understand the risks involved with the work and how these are to be controlled. Safety staff are designated to check that these controls are in place at the place of work and regular safety audits assess and report how the system is working. A daily PTW meeting is held by construction management staff from all contractors, so that everyone is aware of the works at site and any conflicting activities can be identified and timings changed to suit.

Focus Spot - The Ram Feeder and Incinerator grating (Incinerator grating and boiler walls-when completed)



The surface of the incinerator grating is moved by hydraulic rams in the ram feeder at the top of the image. This action moves waste deposited at the top of the structure progressively downwards, while superheated air supports the combustion process as the waste is incinerated. Ash from the combustion process is collected underneath the grating in grate hoppers, shown opposite, and transferred to a storage and handling area for disposal. The walls of the structure contain the pipework where water is converted into superheated steam and transferred to the turbine building to drive the turbine generator. Flue gases from the process are collected above for further treatement and recirculation before the final emission gases are monitored and then released via the chimney stacks. Please check out our website for more project information, to leave a comment or to raise a grievance. www.DWMC.ae.