

Avonmouth Resource Recovery Centre Update to the Somerset Waste Board

Helen Moon – Avonmouth RRC Project Manager

Background



- In March 2017 Somerset County Council and Viridor signed the NWTF2 Contract covering the
 provision of a non landfill waste treatment service utilising two waste transfer stations (Walpole and
 Dimmer) and waste processing at the Avonmouth RRC.
- The NWTF2 Contract has a term of 25 years from 2020, will provide approximately 120,000 tonnes per annum of residual waste to Viridor
- The NWTF2 Contract necessitated the construction of three new facilities:
 - Avonmouth RRC
 - Walpole Waste Transfer Station
 - Dimmer Waste Transfer Station
- The waste transfer stations need to be completed ahead of the first requirement for waste at Avonmouth RRC.
- When operations commence Somerset will deliver waste to the two waste transfer stations, from where it will be bulked up and transferred to Avonmouth RRC by Viridor.
- There will be two distinct supply phases
 - Avonmouth commissioning between November 2019 and March 2020 when Somerset waste will be used to start and test the facility. Supply to the plant is likely to be sporadic.
 - Substantive contract period from April 1st 2020 for 25 years

Avonmouth RRC





The Process





Avonmouth Resource Recovery Centre



- Designed to process 320,000 tonnes per annum
- Safe and sustainable technology enforced by the Environment Agency
- Landfill diversion is expected to be nearly 100% of inputs
- Facility outputs
 - Metal removed post process and recycled
 - Ash will be recycled locally into aggregate
 - Flue Gas Treatment residues will be processed and recycled in to aggregates or pre-cast concrete blocks
- Electricity up to 36MW of electricity being generated enough to power 44,000 homes and the plant itself. However, Viridor will be constructing a polymers (plastic) recycling plant on site powered by the energy the RRC produces
- Heat offtake enabled

The Site – April 2017



Prior to the Main EPC (Engineer, Procure, Construction) Contract being undertaken, a programme of demolition and remediation was undertaken.

Relocation of grass snakes and tree protection measures were also carried out in preparation for the construction works.

This is the site as it was in April 2017 – the start of the EPC Contract.



The Site – March 2018 One year into the EPC Contract





Site Photos – May 2019





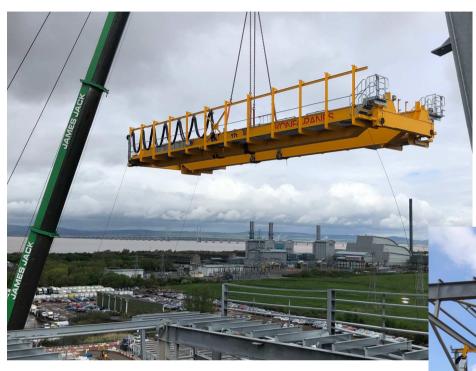
Site Photos – May 2019





Installation of the Waste Cranes





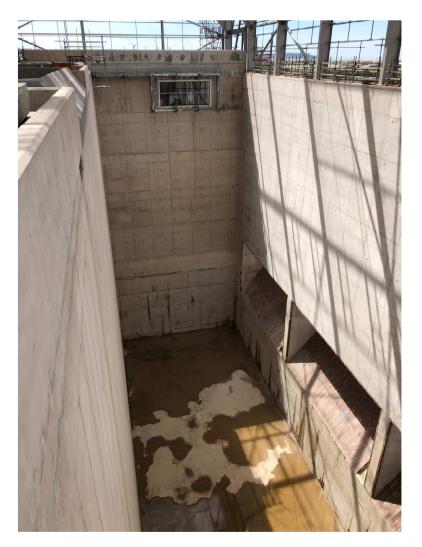


Control Room and Waste Bunker









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Admin Block Cladding





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Current Status



All of the major process equipment items are now delivered and installed

The current focus at site are:

- · Piping installation and testing
- Electrical Cabling installation
- Insulation of piping
- Boiler refractory installation
- Erection of the building steelwork to allow cladding to commence

Key Achievements in May:

- Energisation of the Electrical HV Switchboard
- Pressure test of the Air Cooled Condenser
- Installation of the Waste Cranes
- Installation of the Distributed Control System (DCS)

Plan for June

- Commence installation of the waste bunker roofing and cladding
- Completion of Boiler refractory installation
- Commence cold commissioning testing of individual sub-systems

Viridor Operations



The recruitment of the full Operations and Maintenance team is completed with the team undergoing a training programme

Key positions:

- Operations Manager: Kelvin Hood
- Maintenance Manager: lain Priest
- Environmental, Health and Safety Manager: Ross Watson
- Walpole and Dimmer Transfer Station Manager: Pete Somers

The aim is for the O&M team to be fully engaged during the commissioning process so that they are confident in operating the plant once we achieve Takeover.

We have also opened communication lines between the transfer station operations manager and the Avonmouth management team to ensure a co-operative working relationship is established from the beginning.

Dimmer Transfer Station



Dimmer Design Capacity: 75,000 tpa waste

Started construction works on site: August 2018

Completion planned: June 2019



Walpole Transfer Station





Design Capacity = 150,000 tpa

Started on Site: October 2018
Able to accept waste: August 2019
Planned Completion (including Offices):
October 2019



Any Questions?