Viridor

Overwood Energy Recovery Facility

Ensuring a Robust Planning Application

Climate Change

A Climate Change Assessment is being undertaken, which assesses two aspects; the impact of the ERF on climate change; and the resilience of the ERF to the effects of climate change.

The impact of the ERF on climate change will focus on carbon dioxide and other greenhouse gas emissions from the ERF. The net greenhouse gas emissions of the ERF will be calculated by comparing emissions from the ERF to the most likely alternative waste treatments and alternative electricity production. Due to the efficiency of the ERF, it is expected for there to be a net carbon benefit of the ERF, when compared to these alternatives.

The assessment will consider;

- Emissions from the ERF caused by the combustion of waste;
- Emissions from the ERF caused by combustion of fuel in the auxiliary burners;
- Emissions from vehicles associated with the transport of waste and residues to and from the ERF;
- The offset of electricity produced from the ERF compared to the emissions produced from alternative electricity production;
- Emissions produced from landfill for the equivalent amount of waste;
- Emissions from vehicles associated with the transport of waste to landfill; and
- The offset of electricity produced from landfill gas engines.

The resulting net emissions from the ERF will be assessed for significance in the context of local emissions, sector emissions, and UK carbon budgets.

The assessment of the ERF's resilience to climate change will evaluate the significance of predicted climate change impacts on the ERF. The assessment will review the expected changes in climate across Western Scotland using UKCP18 climate change predictions to 2050, compared to the current climate conditions. Each predicted change in climate will then be qualitatively assessed for its potential impact to the ERF, with particular focus on the impacts to the ERF buildings and operation, vehicular access to site, grid connection and on-site workers. The assessment will consider the value, vulnerability and susceptibility of the ERF to climate change impacts, taking into account the various climate change mitigation measures integrated within the design of the ERF.

Air Quality and Odour

An Air Quality Assessment is being undertaken to assess the dust generated during construction, transport emissions both during construction and operation, the impact of emissions from the ERF process, and any dust and odour created from the operation of the facility.

During the construction phase, site activities will be managed by a Construction Environmental Management Plan to ensure minimal local air quality impacts (more details can be found in this virtual exhibition, on the 'Construction of the ERF' board.)

The facility has been designed to mitigate impacts on the local environment and air quality. These measures include:

- The facility is designed to be entirely enclosed. All site operations would be conducted within enclosed buildings and vehicles would deposit waste in an enclosed tipping hall. The tipping hall would be held under negative pressure, with the air being used in the combustion process. This prevents the release of odours and dust from the building when the doors are opened for short periods for deliveries.
- The facility is designed so no waste is stored outdoors. All non-recyclable waste would be stored within a waste bunker in the enclosed tipping hall.
- Waste would not be stored for prolonged periods, helping to minimise the conditions which can lead to the generation of malodours. Any odours from waste stored within the bunker would be drawn into the combustion process by the induced draft fan, where the odorous compounds would be destroyed as a result of the high temperatures from the furnace.
- The ERF is designed to comply with the strict emission standards set out in the Waste Incineration BREF. A Pollution Prevention Control (PPC) Permit will be needed to operate the plant and will include conditions to ensure no significant pollution is caused.

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