

Powerfuel Portland Limited

Portland Energy Recovery Facility

Schedule 5 Response No 1

This Technical Note has been developed to respond to the Schedule 5 Request, dated 18 December 2025.

1 Waste storage

1. Detail the waste storage procedures for the additional incoming waste.

All requested additional waste types will be delivered via road and will be unloaded directly into the waste bunker. On this basis, the waste storage procedures as described in section 1.4.1 of the Supporting Information for the original application (Ref: S2953-0320-0003NT1 - Supporting Information rev 01), as referenced as an Operating Technique within Table S1.2 of the Environment Permit, for use of the waste bunker remain unchanged.

2 Noise

2. Detail any changes to traffic movement on site as a result of the additional waste types. Provide an updated noise impact assessment if there will be an increase in on-site vehicle movements.

The current permit was granted based on the modelled scenario of 80 heavy goods vehicle movements throughout the day on site at 20 miles per hour (*'BS4142 Noise Impact Assessment, AAc/267701/R04'*). It is not proposed that on-site vehicle movements will exceed the previous modelled scenario, therefore section 5.1 noise mitigation methods of the Noise Impact Assessment will not change and continue to be applicable – note this is referenced as an Operating Technique within Table S1.2 of the Environment Permit.

3 Fire prevention plan (FPP)

3. Provide an updated FPP to include the additional waste codes. Also clarify the following and update the FPP accordingly:

An updated FPP is provided as a separate document for the response the Schedule 5 notice. The FPP reference is S2953-0320-0005NT1 Fire Prevention Plan rev5 (Appendix A). Table 3-1 of the FPP has been updated for the waste codes, and the FPP no longer refers solely to refuse derived fuel (RDF) as the waste type handled and stored at the Facility.

- i) **Detail any changes to the bale storage capacity or waste storage bunker capacity set out in the fire prevention plan dated 10 October 2022 reference S2953-0320-0005NT1.**

No changes are proposed to the bale storage capacity or waste storage bunker capacity due to the inclusion of the additional waste codes.

ii) Confirm if there will be any changes to the storage duration of waste in the waste reception area.

As set out in response to Q1, the additional waste codes will be unloaded directly into the waste bunker. The additional waste codes will be processed on a continuous basis.

As set out in section 3.2.1.2 of the FFP for the original application (Ref: S2953-0320-0005NT1 Fire Prevention Plan rev4, and retained in rev5), the storage capacity of the waste bunker is 3 days. As set out above, the storage capacity of the bunker is not changing; therefore, the storage duration of the wastes will not change.

4 Odour

4. Based on the additional waste codes provide an updated assessment of odour risk during planned and un-planned shut-down including extended periods.

As set out in response to Q1, the additional waste codes will be unloaded directly into the waste bunker. The majority of the waste being received at the Facility will be RDF, or similar. Therefore, the request to accept additional waste types will not present a different odour risk determined in the odour mitigation strategy (Ref: S2953-0320-0013JRS - Odour Mitigation Note r1, listed as an Operating Technique in the Environmental Permit).

The odour control measures for planned and unplanned shutdown set out in section 3 of the odour mitigation strategy remain applicable.

As the Pye Bibby has been removed from the Port of Portland, the proximity of the Facility to sensitive receptors has been revised within the updated odour risk assessment, as shown in Table 1.

Table 1: Assessment of odour risk from the Portland ERF

What Do You Do That Can Harm and What Could Be Harmed?			Managing The Risk	Assessing The Risk		
Hazard	Receptor	Pathway	Risk Management	Possibility of Exposure	Consequence	What is the Overall Risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance and probability and consequence.
Odorous emissions may occur during the delivery of waste, reception of waste and the storage and handling of waste prior to processing	Immediate area. The nearest residential receptor to the installation is located approximately 600 m west of the installation boundary.	Air- Winds generally blow from a south westerly direction.	All wastes received at the Facility will be unloaded inside the enclosed waste reception area. Wastes will be processed on a first-in, first-out principle. The reception hall will be retained at negative pressure. Potentially odorous air within waste reception area will be combusted within the ERF.	Minimal.	Odour annoyance will have more impact in the summer, when temperatures are higher and people are outdoors and more likely to be exposed to odour.	Not significant if managed well.
The escape of odorous emissions from the building during periods of planned shutdown	Immediate area. The nearest residential receptor to the installation is	Air- Winds generally blow from a south westerly direction.	During periods of planned shutdown, waste stored within the waste reception area will be minimised. Where practicable, odorous air from the	Minimal	Odour annoyance, which will more impact in the summer, when temperatures are higher and people are outdoors and	Not significant due to the management systems in place.

What Do You Do That Can Harm and What Could Be Harmed?		Managing The Risk	Assessing The Risk			
	located approximately 600 m west of the installation boundary.		waste reception area will be released to atmosphere via the stack. Sniff tests will be undertaken around the perimeter of the installation boundary and any additional locations requested by the Port.		more likely to be exposed to odour.	
The escape of odorous emissions from the building during periods of unplanned shutdown	Immediate area. The nearest residential receptor to the installation is located approximately 600 m west of the installation boundary.	Air- Winds generally blow from a south westerly direction.	During periods of unplanned shutdown, the doors to the waste reception area will be kept closed to prevent the escape of odour. Where practicable, odorous air from the waste reception area will be released to atmosphere via the stack. Sniff tests will be undertaken around the perimeter of the installation boundary and any additional locations requested by the Port.	Highly unlikely for a period of unplanned shutdown to coincide with winds from an easterly direction	Odour annoyance, which will more impact in the summer, when temperatures are higher and people are outdoors and more likely to be exposed to odour.	Not significant due to the mitigation measures in place.
An extended period of unplanned shutdown	Immediate area. The nearest residential receptor to the	Air- Winds generally blow from a south westerly direction.	During periods of unplanned shutdown, the doors to the waste reception area will be	Minimal	Odour annoyance, which will more impact in the summer, when	Not significant due to the management systems in place.

What Do You Do That Can Harm and What Could Be Harmed?		Managing The Risk	Assessing The Risk	
	installation is located approximately 600 m west of the installation boundary.	<p>kept closed to prevent the escape of odour. Sniff tests will be undertaken around the perimeter of the installation boundary and any additional locations requested by the Port.</p> <p>During an extended unplanned shutdown, if required, waste will be backloaded from the bunker for transfer off-site to a suitably licenced waste management facility.</p>		temperatures are higher and people are outdoors and more likely to be exposed to odour.

- 5. Based on the updated assessment justify the measures that will be used to control odour risk and whether any additional measures are required.**

The measures detailed in the odour mitigation strategy submitted in support of the original application (Ref: S2953-0320-0013JRS - Odour Mitigation Note r1) are considered to represent BAT for the abatement of odour from RDF and the additional waste codes. Therefore, additional measures are not considered to be required.

5 Air quality assessment

- 6. Clarify if the additional waste codes will change emission parameters such as flow, temperature and velocity. Provide an updated air quality assessment and dispersion modelling if there will be a change.**

As shown in the Sankey diagram in Appendix A of the Supporting Information for the original application (Ref: S2953-0320-0003NT1 - Supporting Information rev 01), the boiler will have a thermal capacity of 69.8 MWth, and combust wastes with a nominal design Net Calorific Value (NCV) of 11 MJ/kg – the boiler is designed to combust waste with an NCV of 9.5 MJ/kg to 11.5MJ/kg. This will not be changing with the additional EWC codes.

The flue gas parameters (flow, temperature and velocity) provided in the original application were based on a boiler with a thermal capacity of 69.8 MWth. The nominal design NCV for the waste received at the is not changing with the additional waste codes; therefore, the flue gas parameters will not be changing.

Taking the above into consideration, it is not proposed to update the air quality assessment and dispersion modelling as this has already been considered in the original application.

Appendices

A Fire Prevention Plan