Attachment I.8 Environmental Considerations, Main Alternatives and BAT

The installation location is well suited for the recovery and recycling of wastes for the following reasons:

- Located off the N2 National Primary Route that facilitates easy access to the Dublin Port via the M50 and Dublin Port Tunnel.
- Proximity to the Knockharley Landfill where the treated IBA can be recovered/disposed.
- Site size is more than adequate to accommodate the scale of the activities;
- The waste recovery activities are compatible with the Land Zoning and the current land use in the surrounding area
- Existing ground conditions (soil type/geology/hydrology) and distances from sensitive environmental receptors minimise the risk of unexpected emissions given rise to pollution

Alternatives

While the Beauparc installation is the preferred location for the processing of the ash a third party has taken a Judicial Review against the Agency's decision to grant the current licence. It could take up to 18 months for the Court Hearing to be completed and if it finds that the Agency erred in law in making its decision the current licence would be quashed.

This would mean that a licence review of the previous licence (140-03) would be required to accommodate the acceptance of the IBA, pending which the acceptance of the ash at Beauparc would have to stop.

As a fall back a potentially suitable alternative location is the SEHL Materials Recovery Facility at Millennium Business Park in Fingal. It has planning approval and an Industrial Emissions Licence (W0180-01). SEHL will submit a licence review application to accept and process the IBA.

Another alternative is to develop a new standalone waste management facility. This would require the acquisition of land, the construction of a new waste processing building and supporting infrastructure and the provision of new site services. The development of such a new facility offers no environmental advantages compared to proposed changes at the existing installation.

The proposed method of removing the metals uses technologies that have been proven to be effective in ash processing plants in Europe and the USA and which are considered best industry practice.

BAT

The design and method of operation of both the existing facility and proposed development are based on the requirements of the European Commission's Reference Document on Best Available Techniques for the Waste Treatment Industries 2006 (BREF), which specifies the Best Available Techniques (BAT) for Waste Management Facilities.

BREF

The BREF addresses design, operational and procedural matters, including efficient processing, waste acceptance, emission controls and environmental management systems (EMS). Section 2.1 describes the Common Techniques that are applied in the sector. It requires the provision of appropriate waste reception and acceptance measures (2.1.1); appropriate management techniques (2.1.2); energy systems (2.1.3); storage and handling measures (2.1.4); blending and mixing (2.1.5); facility decommissioning (2.16) and baling (2.1.9).

Section 2.3.3 deals with Physio-chemical treatment of waste solids and waste sludges. Section 2.3.3.3 addresses the mechanical separation of IBA the purpose of this is to generate a material which is inert, does not negatively affect water bodies, and has the potential for safe recovery, e.g. as a soil substitute or in road construction. Such treatment also reduces the mass of waste for disposal. Section 2.3.3.15 states that IBA treatment improves the slag/bottom ash quality and therefore can help to improve its opportunities to be used as construction material.

Section 2.5.1 describes the treatment aimed at producing materials for use as a fuel or improving its calorific value, including the preparation of solid waste fuel by the mechanical separation of non-hazardous solid waste (2.5.1.1). This type of fuel is manufactured by sorting wastes mainly to leave a combustible material, by mainly removing wet putrescibles and heavy inerts (stones, glass, scrap metals, etc.) from the wastes. Other operations used are for example sieving, separators, crushers, screening and picking.

Existing BAT Measures

Condition 2 of the current licence requires PANDA to develop and implement an EMS for the facility. It requires the preparation of operational control procedures for all waste activities and ensure that facility staff are provided with the appropriate skills and training to perform their assigned functions.

The licence conditions require the implementation of BAT 7 to 33 and BAT 57 to 61 of the BREF, in so far as they apply to non-hazardous solid waste processing, and BAT 62 to 64 as regards prevention of soil contamination. The existing BAT Measures adequately address the acceptance and processing of the IBA and additional measures are not required.

Risk of Pollution

The facility design and method of operation take BAT into consideration. The facility when operated in accordance with the Licence conditions, which includes compliance with the emission limit values, will not give rise to significant pollution.

Waste Production

The facility operations generate relatively small quantities of waste, primarily office and canteen. PANDA has a source segregation policy designed to ensure that the maximum possible amount of these wastes are recycled/recovered.

Energy and other Resource Consumption;

Details on energy efficiency measures and resource consumption are described in Section G of the Licence Application.

Measures to prevent accidents and limit their consequences;

The measures to prevent accidents and limit their consequences are described in Section J of the Licence Application.

Measures to be taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

These measures are detailed in Section K of the Licence Application.

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