

*This Report has been cleared for submission to the Board by Programme Manager, Marie O'Connor.*

Signed: *Gráinne Dylesby* Date: 9<sup>th</sup> October 2019



**OFFICE OF ENVIRONMENTAL SUSTAINABILITY**

**REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO PROPOSED DETERMINATION**

<b>TO:</b>	Directors	
<b>FROM:</b>	Technical Committee	Environmental Licensing Programme
<b>DATE:</b>	09 October 2019	
<b>RE:</b>	Objection to Proposed Determination for Starrus Eco Holdings Limited, Rathdrinagh, Beauparc, Navan, County Meath, IEL Reg: W0140-05.	

Application Details	
<b>Class(s) of activity:</b>	<p>11.1 - The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.</p> <p>11.4 (b)(i) - Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): biological treatment; when the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.</p> <p>11.4 (b)(ii) - Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than</p>

	<p>activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): pre-treatment of waste for incineration or coincineration;</p> <p>11.4 (b)(iii) - Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): treatment of slags and ashes;</p> <p>11.4 (b)(iv) - Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components;</p>
<b>Location of activity:</b>	Rathdrinagh, Beauparc, Navan, County Meath
<b>Licence application received:</b>	21 April 2017
<b>PD issued:</b>	20 February 2019
<b>First party objection received:</b>	Yes
<b>Third Party Objection received:</b>	No
<b>Submissions on Objections received:</b>	No
<b>Additional Information received:</b>	No
<b>Article 36(1) extension of time:</b>	Yes (11 July 2019, 25 September 2019)

## Company

The application relates to the operation of an existing integrated waste management installation by Starrus Eco Holdings Ltd (SEHL, previously Nurendale Ltd trading as Panda Waste Services Ltd). The installation is located approximately 4km south of Slane, on the Slane-Ashbourne Road (N2) which runs adjacent to the western boundary of the site. The predominant land use surrounding the site is agricultural and residential. There are also some commercial units on the western boundary of the site.

The Proposed Determination (PD) is for the acceptance and processing of 130,000 tonnes per annum of non-hazardous incinerator bottom ash (IBA) from the Dublin Waste to Energy Ltd waste recovery plant at Poolbeg. The PD also permits the operation of a civic amenity and the total acceptance of 120,000 tonnes of household, commercial and industrial waste. Permitted wastes include construction and demolition (C&D) waste,

source segregated dry recyclables and municipal solid waste for non-hazardous materials recovery and the production of refuse derived fuel.

Two third party submissions (one of which was subsequently withdrawn) were received in relation to the application and were considered by the Board at PD stage.

### **Consideration of the Objection**

The Technical Committee, comprising of Anne Lucey, has considered all of the issues raised in the Objections and this report details the Committee's comments and recommendations following the examination of the objections together with discussions with the inspector Breen Higgins and the Office of Environmental Enforcement (Carol O'Sullivan, Cathal Gahan & Hilda Robinson), who provided comments on the points raised.

This report considers the first party objection received by the Agency in relation to the PD issued to Starrus Eco Holdings Ltd on 20 February 2019.

## **First Party Objection**

The applicant makes 13 points of objection which are summarised below. The original objection should be referred to at all times for greater detail and expansion of particular points.

### **A.1. Condition 3.4.3**

*Condition 3.4.3 requires that a plan of the installation clearly identifying the location of each storage and treatment area shall be displayed as close as is possible to the installation entrance on a durable material and that the plan is replaced as material changes to the installation are made.*

*The applicant notes that such a plan at the site entrance is helpful to emergency response services in the event of an incident but objects to the need for the plan to be replaced every time there is a change to the waste storage areas. The applicant states that there can be frequent changes to waste storage locations in any one year depending on market conditions and that the Waste Materials & Storage Plan required under Condition 8.16 will be amended to reflect the changes and a copy maintained at the site offices.*

*The applicant considers that Condition 3.4.3 requires the plan at the site entrance to be amended simultaneously with the Waste Materials & Storage Plan and failure to do so will result in a non-compliance and one national priority list point. The applicant suggests alternative wording for Condition 3.4.3 which requires a plan of the installation clearly identifying the location of emergency response equipment rather than the location of each storage and treatment area to be displayed.*

### **Technical Committee's Evaluation:**

An installation plan as outlined in Condition 3.4.3 provides valuable information to relevant authorities and emergency services and in particular fire services in the event of an on-site fire. For this reason, it is essential that the plan, including the location of each storage and treatment area, is updated as material changes to the installation are made. Waste storage and treatment areas can provide fuel sources to ignite and sustain fires.

Additionally, the licensee is required to maintain a drawing or plan of the location of each waste type and the means of storage for each waste type (Waste and Materials Storage Plan, Condition 8.16.4 & 8.16.5).

Furthermore, in accordance with the EPA Guidance on Fire Risk Assessment for Non-Hazardous Waste Facilities (2016), the Fire Risk Assessment (FRA) must address the:

*Provision of an accurate laminated site plan at all times, available at locations where it can be readily accessed and removed from the site in an emergency situation/on evacuation. Storage of an off-site copy should also be considered. The plan should include applicable fire prevention, detection and fire fighting measures, buildings, designated fire quarantine area, main waste storage areas, high risk areas, utility cut off points, prevailing wind direction and drainage layout.*

The installation plan as required by Condition 3.4.3 could be utilised to incorporate this requirement of the FRA in its current format without amendment as suggested by the applicant.

#### Reason for Decision

The TC propose not to amend Condition 3.4.3 as set out below and has reached its conclusion having regard to the following reason:

To ensure a current installation plan is available to all relevant authorities and particularly fire services in the event of an on-site fire.

<b>Recommendation:</b> No change
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### **A.2. Condition 3.8.3**

*Condition 3.8.3 relates to waste inspection and quarantine areas and requires that drainage from these areas is directed to the trade effluent collection and storage system.*

*The applicant states that rainwater run-off from the waste inspection and quarantine areas currently discharges to the on-site Integrated Constructed Wetland (ICW) via the holding tanks that were originally used to collect the run-off and store it pending removal for off-site treatment. In the event that a suspect load is brought to the waste inspection and/or quarantine area, the shut-off valves on the outlets from the tanks to the ICW are closed thus containing all run-off from the area within the tanks. Following the removal of the wastes from the inspection and quarantine areas, the tanks are emptied, cleaned and the valves re-opened.*

*The applicant objects to Condition 3.8.3 as diverting clean rainwater run-off from the inspection and quarantine areas to the trade effluent collection system results in the unnecessary transport of rainwater by tanker to the Irish Water Wastewater Treatment Plant for treatment. The applicant suggests alternative wording for Condition 3.8.3 which would require drainage from waste inspection and quarantine areas to be directed, to the trade effluent collection and storage system, when in use only.*

Technical Committee’s Evaluation:

There is no detail provided by the applicant on how the quarantine and inspection areas would be cleaned, and validated as being cleaned, following use before diverting rain water run-off back to the ICW. There is also no detail provided on the operation system for diverting and switching between the trade effluent collection and storage system and the ICW. Without adequate cleaning and fail safe operational controls in place, the risks of contaminated run-off reaching the ICW and discharging to surface water are not eliminated.

Reason for Decision

The TC propose not to amend Condition 3.8.3 as set out below and has reached its conclusion having regard to the following reason:

To mitigate and protect against the release of contaminants to surface water from the installation.

<b>Recommendation:</b> No change.
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**A.3. Condition 3.12.2**

*Condition 3.12.2 requires all storm water to be diverted to the ICW prior to discharge from emission point SW1.*

*The applicant objects to Condition 3.12.2 as it has replaced Condition 3.12.3 of the current licence (Reg. No. W0140-04) which permits the discharge of rainwater run-off from the paved yards around Building 4 to an on-site soak pit or percolation area. Approval of the existing licence condition was on the basis of the findings of a hydrogeological assessment that confirmed the ground conditions were suitable. The applicant states that the licence review application did not seek to make changes to the approved stormwater drainage system that will be installed during the construction of Building 4.*

*The existing ICW, which was commissioned in 2016, was designed and constructed to treat rainwater run-off from the existing building roofs and paved yards excluding, both the yards around Building 4 and the run-off from its roof. The applicant considers that the proposed condition, to divert all stormwater to the ICW, will result in the overloading of the system, non-compliances with the proposed emission limit values and the accumulation of national priority points. The applicant requests that current licence Condition 3.12.3 is retained and proposes alternative wording to Condition 3.12.2 which would exclude storm water from the roof of Building 4 and in the vicinity of Building 4 being diverted to the ICW.*

Technical Committee’s Evaluation:

Condition 3.12.3 of the current licence (Reg. No W0140-04) permits a soak pit or percolation area for the treatment of storm water arising in the vicinity of Building 4. The

condition was included on the basis of a hydrogeological risk assessment, the results of which showed that the soils in the area were suitable for percolation of the storm water from the concrete yards around Building 4. Condition 3.12.3 also reflected the requirements of Condition 19 of the grant of planning permission (Reg. No. SA/60656) which specifies the design and build criteria of the soakaway. The hydrogeological risk assessment also states that rain water run-off from the Building 4 roof will be kept separate from yard run-off. Roof water will be directed to an existing above ground water storage tank, which has a capacity of 660m<sup>3</sup>. This arrangement for roof water was also reiterated in correspondence from the applicant dated 15 June 2018. Run-off from the roof of Building 4 will be used instead to supply a dust suppression system, road sweeper and jet vac fleet. On this basis and considering the applicants contention that the system will be overloaded in the event that all stormwater is diverted to the ICW, it is proposed to reinstate Condition 3.12.3 from current licence W0140-04 and amend Condition 3.12.2 accordingly. Current Condition 3.12.3 is to be renumbered as a result.

#### Reason for Decision

The TC propose to amend Condition 3.12.2, reinstate Condition 3.12.3 from W0140-04 and renumber current PD Condition 3.12.3 as set out below and has reached its conclusion having regard to the following reason:

To mitigate and protect against the overloading of the storm water treatment system and prevent the release of contaminants to surface water from the installation.

**Recommendation:** Amend Condition 3.12.2, reinstate Condition 3.12.3 from W0140-04 and renumber 3.12.3 from W0140-05 PD as follows:

#### 3.12 Storm Water Management

3.12.2 All storm water generated, **except in the vicinity of Building 4**, shall be diverted to the Integrated Constructed Wetland prior to discharge from SW1.

**3.12.3 The soak pit or percolation area for the treatment of storm water arising in the vicinity of Building 4 shall be designed and built to satisfy the criteria set out in the UK Building Research Establishment, Soakaway Design, Digest 365 of 2007, or equivalent as agreed by the Agency.**

3.12.4 The licensee shall provide shut-off valves on discharge lines to surface water.

#### **A.4. Condition 3.29**

*Condition 3.29 stipulates that the biological treatment of organic waste materials is not authorised.*

*The applicant objects on the basis that the condition unintentionally prohibits the operation of the sanitary wastewater treatment plant and requests alternative wording to provide clarification to the condition.*

Technical Committee's Evaluation:

The licence review application noted that the applicant no longer wished to proceed with the installation of a biological treatment plant which was previously authorised for the treatment of organic waste to produce compost and biostabilised waste. The intent of Condition 3.29 was to affirm that such treatment of organic waste to produce compost and biostabilised waste was not permitted.

Sanitary wastewater from the Administration Building at the installation is collected and treated in an on-site biocycle wastewater treatment plant. To ensure clarification that Condition 3.29 excludes the biological treatment of sanitary effluent arising on-site, it is recommended that the Condition is amended accordingly.

Reason for Decision

The TC propose to amend Condition 3.29 as set out below and has reached its conclusion having regard to the following reason:

To clarify that the condition permits the treatment of on-site sanitary effluent.

**Recommendation:** Amend Condition 3.29 as follows:

3.29 The biological treatment of organic waste materials, **other than sanitary effluent arising on-site**, is not authorised under this licence.

**A.5. Condition 6.12**

*Condition 6.12 requires that all wastewater/leachate/contaminated storm water gullies, drainage grids and manhole covers are painted with red squares whilst all clean storm water discharge gullies, drainage grids and manhole covers shall be painted with blue triangles. The colour codes are required to be maintained so as to be visible at all times during installation operation, and any identification designated in the licence (i.e. SW1) must also be inscribed on manhole covers.*

*The applicant objects to Condition 6.12 as operational experience of the movement of heavy goods vehicles across yards has proven that it is not practical to maintain the markings so as to be visible at all times. The applicant states that repeat non-compliance with the condition will result in the accumulation of national priority list points and proposes an alternative text that the colour codes are maintained so as to be visible "in so far as is practical" during installation operation. Additional text to the condition, requiring "maps showing the drainage layout shall be maintained at strategic locations around the site and agreed with the Agency" is also proposed.*

Technical Committee's Evaluation:

The difficulty in maintaining the designated red squares and blue triangles in relation to the movement of heavy goods vehicles across yards is acknowledged, however the colour coding provides a system whereby the process and stormwater drainage network is instantly identifiable. This facilitates rapid emergency response actions in the event of

spillages and other incidents such as fires resulting in firefighting water reaching drains. Colour coding also facilitates site operations and helps to prevent accidental or unauthorised discharges to the inappropriate drainage network. In order to achieve a more practical solution to maintaining the colour coding system, it is proposed to amend the condition to allow colouring of the entire drainage gullies, grids and manhole covers rather than painting with the designated squares or triangles. The requirement for the identification of SW1 can also be removed as this is the only licensed emission point reference for clean storm water. Additionally, the requirement for drainage drawings to be available on site at all times is to be included.

#### Reason for Decision

The TC propose to amend Condition 6.12 as set out below and has reached its conclusion having regard to the following reason:

To provide a practical solution to the physical identification of the process and storm water drainage network.

**Recommendation:** Amend Condition 6.12 as follows:

**6.12** All wastewater/leachate/contaminated storm water gullies, drainage grids and manhole covers shall be painted with red squares whilst all clean storm water discharge gullies, drainage grids and manhole covers shall be painted with blue triangles. These colour codes shall be maintained so as to be visible at all times during installation operation; and any identification designated in this licence (i.e., SW1) shall be inscribed on these manholes. **Appropriately scaled and up-to-date drainage drawings shall be available on site at all times.**

#### **A.6. Condition 6.17.2**

*Condition 6.17.2 requires an additional dust monitoring location (to be identified as AD5) to be provided at the southern boundary of the installation.*

*The applicant objects to this condition as they state that dust monitoring point AD5 has already been provided and is included in the dust deposition monitoring programme. The applicant requests that the condition is deleted as the existing dust deposition monitoring provides adequate site coverage to assess compliance.*

#### Technical Committee's Evaluation:

Drawing No. 3 "Monitoring and Emissions Locations" shows the location of dust monitoring point AD5 on the southern boundary of the installation. AD5 is also included for monitoring in Schedule C.5 Ambient Monitoring. Condition 6.17.2 can therefore be removed and current Condition 6.17.3 renumbered as a result.

#### Reason for Decision

The TC propose to remove Condition 6.17.2 as set out below and has reached its conclusion having regard to the following reason:



To ensure clarity in the number of ambient dust monitoring locations required by the licence.

**Recommendation:** Remove Condition 6.17.2 and renumber current Condition 6.17.3 as follows:

6.17 Monitoring Locations

~~6.17.2 The licensee shall provide an additional dust monitoring location (to be identified as AD5) at the southern boundary of the installation.~~

**6.17.2** The licensee shall maintain an appropriately scaled drawing showing all the monitoring locations that are stipulated in this licence including any noise-sensitive locations and private wells to be monitored. The drawing shall include the eight-digit national grid reference of each monitoring point.

### **A.7. Condition 8.11.4**

*Condition 8.11.4 stipulates that no hazardous waste shall be accepted at the installation except at the civic amenity facility.*

*The applicant states that they agree to the prohibition of intentional acceptance of hazardous waste other than the minor amounts at the civic amenity area. However, despite their best efforts to inform customers about acceptable wastes, it is not possible to prevent small amounts of hazardous waste (e.g. oil and paint tins, batteries and household cleaning agents) from being accepted in mixed waste loads.*

*The applicant acknowledges that to-date the Agency has not considered the inadvertent acceptance of hazardous waste to be a non-compliance but objects to Condition 8.11.4 on the basis that the current wording does not take account of such acceptance. The applicant requests the condition is amended to state "No hazardous waste shall intentionally be accepted....".*

#### Technical Committee's Evaluation:

With the exception of the civic amenity facility, Condition 8.11.4 clearly sets out that no hazardous waste shall be accepted at the installation. It is not practical to amend the condition as requested by the applicant as authorising unintentional acceptance of hazardous waste is not a feasible approach. As noted by the applicant, hazardous waste if identified is to be removed to the Quarantine Area as required by Condition 8.11.7.

#### Reason for Decision

The TC propose not to amend Condition 8.11.4 as set out below and has reached its conclusion having regard to the following reason:

To mitigate and protect against the acceptance of hazardous waste at the installation.

**Recommendation:** No change.

### **A.8. Condition 8.12.1**

*Condition 8.12.1 requires all waste treatment, processing and storage to be carried out inside a building or enclosed vessel or, in the case of storage of recycled C&D waste, in an appropriately enclosed or covered area.*

*The applicant currently stores processed C&D waste, which includes aggregates and metals in designated open areas and objects to Condition 8.12.1 for a number of reasons as follows:*

- Section 4.10 of the Environmental Impact Statement that accompanied the licence review application described processed C&D aggregates as being stockpiled in an open paved area. The external storage of the aggregate is also referenced in the Environmental Liability Risk Assessment and the Decommissioning Management Plan of the current waste licence, both of which have been approved by the Office of Environmental Enforcement (OEE).*
- The external storage of the recovered C&D waste is noted in the Technical Committee's report on objection to the current licence. It is also clearly identified in the Waste & Materials Storage Plan prepared in compliance with Condition 8.20 of the current licence. The Plan, as attached to this objection submission, has been submitted to the OEE.*
- Originally, C&D aggregates were sent to permitted waste recovery sites, primarily for land improvement. However these sites can no longer accept this type of waste and there is limited availability of alternative authorised outlets, resulting in the material having to be stored for much longer than initially intended. With limited storage capacity inside the processing buildings or at other SEHL sites, on-site external storage is the only option.*
- The storage areas are paved, subject to regular inspection and repair, and the rainwater run-off is collected and directed to the ICW via the silt trap and oil interceptor.*
- The site environmental monitoring programme has never identified the external storage as either causing an emission limit value exceedance or giving rise to nuisance or impairment of amenity outside the site boundary. The enclosure or covering of the storage is considered not required either to prevent risk of exceedance or environmental pollution.*
- The external storage of metals is authorised in licences and permits granted to metal recycling facilities, while many licences that accept and process C&D wastes also authorise the external storage of processed materials.*

*The applicant requests that the wording of the condition is amended and proposes text that permits the storage of recycled C&D waste and metals "in appropriate areas".*

#### Technical Committee's Evaluation:

Condition 8.12.1 is also a requirement of the current licence W0140-04 and was subject to an objection by the applicant at the time the PD was issued. The Technical Committee recommended no change to the condition on the basis that external storage of waste should be prohibited in the interest of preventing nuisance from odour, dust and contamination of stormwater. Additionally, non-compliances in relation to the outside

storage of waste were noted in OEE inspections in 2018, 2017 and 2015. The requirement to store recycled C&D waste "in an appropriately enclosed or covered area" is an important control measure to prevent dust and leachate from the C&D aggregates and metals.

#### Reason for Decision

The TC propose not to amend Condition 8.12.1 as set out below and has reached its conclusion having regard to the following reason:

To mitigate and protect against the release of contaminants to surface water from the installation.

**Recommendation:** No change.

### **A.9. Condition 8.13.2**

*Condition 8.13.2 requires that the treatment process employed for IBA (e.g. metal separation, ash ageing/carbonation) should be defined with clear treatment objectives (i.e. a defined end point) and reaction chemistry, as agreed by the Agency.*

*The applicant states that they are actively assessing the suitability for the processed IBA for use in a range of construction related applications and if successful, they will be required to demonstrate how the processed IBA meets the requirements of End-of-waste status as set out in Article 6 of the EU Waste Framework Directive (2008/98/EC). On this basis and to facilitate the processing of a future application for end-of-waste status, the applicant objects to the proposed Condition 8.13.2 and suggests alternative wording to include end-of-waste criteria as an example endpoint.*

#### Technical Committee's Evaluation:

Condition 8.13.2 as currently proposed enables the applicant to treat IBA to a defined end point which may not be a point where end-of-waste status is achieved. The condition therefore allows the potential for sending the waste for further treatment or recovery if required. However, in order to support the applicant's intent to achieve end-of-waste status for treated IBA, it is proposed to add a further condition to the licence regarding the storage of waste that has achieved end-of-waste status. The definition of end-of-waste status is also added to the Glossary of Terms as a result.

#### Reason for Decision

The TC propose not to amend Condition 8.13.2 but to insert an additional condition and definition as set out below and has reached its conclusion having regard to the following reason:

To ensure waste that achieves end-of-waste criteria is stored in accordance with the requirements of the Waste and Materials Storage Plan.

**Recommendation:** Insert new condition and definition as follows:

**8.16.9** The Waste and Materials Storage Plan shall include in its scope any material that was waste but has achieved end-of-waste status.

*Glossary of Terms*

**End-of-Waste Status** As specified in Article 28 of the European Community (Waste Directive) Regulations 2011 (SI No. 126 of 2011).

**A.10. Condition 8.14.4**

*The applicant objects to Condition 8.14.4, in relation to the labelling of waste, as they consider it contains a typographical error by incorrectly referencing Condition 8.17.3 instead of Condition 8.14.3.*

Technical Committee's Evaluation:

Condition 8.17.3 relates to fuel supplied for combustion, whereas Condition 8.14.3 details the requirements for labelling bales of waste and is the correct condition which should be referenced within Condition 8.14.4. It is therefore recommended to amend Condition 8.14.4 accordingly.

Reason for Decision

The TC propose to amend Condition 8.14.4 as set out below and has reached its conclusion having regard to the following reason:

To correct a typographical error within the condition.

**Recommendation:** Amend Condition 8.14.4 as follows:

8.14 Wrapping of baled municipal waste

8.14.4 Bales of waste shall be dispatched from the installation in order of the date of first production of the bale, as labelled in accordance with Condition **8.14.3**, unless otherwise agreed by the Agency.

**A.11. Condition 8.14.6**

*The applicant objects to Condition 8.14.6, in relation to the integrity of wrapped bales, as they consider it contains a typographical error by incorrectly referencing Condition 8.17.1 instead of Condition 8.14.1.*

Technical Committee's Evaluation:

Condition 8.17.1 relates to the standard required for fuel produced at the installation, whereas Condition 8.14.1 details the requirements for wrapping of baled waste and is the correct condition which should be referenced within Condition 8.14.6. It is therefore recommended to amend Condition 8.14.6 accordingly.

### Reason for Decision

The TC propose to amend Condition 8.14.6 as set out below and has reached its conclusion having regard to the following reason:

To correct a typographical error within the condition.

**Recommendation:** Amend Condition 8.14.6 as follows:

8.14 Wrapping of baled municipal waste

8.14.6 The integrity of each wrapped bale shall be inspected fortnightly and prior to its dispatch from the installation. Any damaged bales (or those that do not meet the requirements of Condition **8.14.1** above) shall be repaired within 24 hours of damage being detected. No damaged bales shall be dispatched from the installation. Records of these checks and repairs shall be maintained at the installation.

### **A.12. Condition 8.17.4**

*The applicant objects to Condition 8.17.4, in relation to the technical specification of fuel, as they consider it contains a typographical error by incorrectly referencing Condition 8.20.1 instead of Condition 8.17.1.*

### Technical Committee's Evaluation:

There is no Condition 8.20.1 within the PD, whereas Condition 8.17.1 requires that refuse derived fuel or solid recovered fuel produced at the installation must be classified and specified in accordance with *I.S. EN 15359:2011 Solid recovered fuels – Specifications and classes* unless otherwise agreed by the Agency. This is the correct condition which should be referenced within Condition 8.17.4. It is therefore recommended to amend Condition 8.17.4 accordingly.

### Reason for Decision

The TC propose to amend Condition 8.17.4 as set out below and has reached its conclusion having regard to the following reason:

To correct a typographical error within the condition.

**Recommendation:** Amend Condition 8.17.4 as follows:

8.17 Standards Regarding the Supply of Refuse Derived Fuel (RDF) or Solid Recovered Fuel (SRF)

8.17.4 The technical specification referred to in Condition **8.17.1** shall set out the criteria to be met in order that combustion of the refuse derived fuel or solid recovered fuel will not lead to failure to comply with the conditions of a licence or permit as may be applicable at the destination

### **A.13. Condition 8.20**

*Condition 8.20 stipulates that processing of refuse derived fuel (RDF) at the installation is limited to Building 3 only.*

*The applicant objects to the condition as the licence review application sought the flexibility to alternate the RDF and IBA waste treatments between Buildings 3 and 4 to meet changing market conditions without the need for a licence review. The applicant considers that the proposed licence conditions are sufficiently robust to accommodate the use of Building 4 for RDF manufacturing at some time in the future. The applicant notes that SRF is currently being manufactured in Building 1 and that the OEE is aware of this and has not raised any concerns. The applicant requests that Condition 8.20 is deleted from the PD.*

#### Technical Committee's Evaluation:

Building 1 is currently used to handle non-recyclable dry waste for SRF production and bulking up of dry mixed recyclables. Building 2 is used to segregate the C&D waste while Building 3 is used to produce SRF/RDF. As outlined in the Non-Technical Summary, in correspondence dated 13 September 2018, the applicant sought the flexibility to initially process IBA in Building 3 with the potential of moving to Building 4 if constructed. For this reason, emission points A2-1 and A2-6 were included in the PD for dust control.

A third air emission point licensed in the PD (Reference No. A2-2) relates to a biomass furnace. Emission point A2-2 is identified in the PD as being connected with Building 3 if the building is to be used for processing of RDF. The biomass furnace and associated emission point A2-2 was permitted in current licence W0140-04 for the treatment of municipal solid waste (MSW) within Building 3. Under licence W0140-04, it was proposed to divide Building 3 into a wet processing zone and a dry processing zone with the mechanical treatment of MSW taking place in the wet zone. The paper and plastic resultant from mechanical treatment would then be dried in a thermal dryer to reduce the moisture content of the waste. The biomass furnace would be used to supply heat to the dryer. The dried waste would then enter the dry processing zone where it would be screened, shredded, baled and wrapped as SRF/RDF. The biomass furnace would also treat odorous air from the dryer. The infrastructure required by the biomass furnace has been installed but not yet commissioned.

In relation to planning permission, Meath Co. Co. confirmed that planning permission was not required in relation to the treatment of IBA on-site. There is no equivalent confirmation provided in relation to the processing of RDF, including waste drying, in Building 4 however, or whether planning permission would be required if further infrastructure was needed to connect the biomass furnace to Building 4. For this reason, it is proposed to amend Condition 8.20 to clarify that processing of refuse derived fuel (RDF) at the installation is limited to Building 3 only when drying of waste is required.

To facilitate IBA processing in Building 3, the licensee noted, in correspondence dated 13 September 2018, that SRF manufacturing would be moved to another licensed facility but may recommence in the medium term. It is noted, that odour from the processing of non-recyclable dry waste for SRF/RDF production may not be adequately controlled in the current proposed PD to accommodate this future processing. Condition 3.11.2 of the PD

requires that all buildings, vessels and other structures for the storage or treatment of residual, food and odour-forming waste shall be maintained at negative air pressure with ventilation gases being subject to treatment. On consultation with OEE, it was confirmed that odours can be an issue even for non-recyclable dry waste which is currently being processed to make SRF/RDF.

To ensure the PD accommodates processing of any odour-forming waste for SRF/RDF production, it is proposed to reinstate the air emission points from current licence W0140-04 to the PD, which relate to the management of the negative air system and dust/carbon filters. This will enable the licensee to retain the existing dust/odour controlling infrastructure as requested in application Attachment E.1 and F.1 and provides the flexibility desired to process SRF/RDF in Building 3 or 4 (excluding drying of waste in Building 4).

As outlined in the Inspector's report for licence W0140-04, processing areas within Building 3 are maintained under negative pressure, with air extracted and routed through a dust filter and carbon filter before emission to atmosphere via emission point A2-6. It is therefore proposed to reinstate this emission point A2-6 and renumber it as emission point A2-3.

Building 4, which was originally intended for a biological treatment facility, has a permitted emission point (current Reference No. A2-1) related to a biofilter for the treatment of odour. As described in Attachment F.1, the biofilter consists of a first stage acid scrubbing step to remove alkaline based odours, particulates and bioaerosols followed by a biotrickling filter and further subsequent steps designed to remove particulates and odorous gases. It is therefore proposed to reinstate the biofilter and associated emission point and renumber it as emission point A2-4. In the event that the biofilter is not a suitable abatement system for the control of dust/odour for SRF/RDF manufacture, it is also proposed to include an option for the licensee to propose alternative suitable abatement equipment which can be installed instead of the acid scrubber and biofilter.

To accommodate the reinstatement of the dust/odour control system in Building 3 (new Reference No. A2-3) and the biofilter in Building 4 (new Reference No. A2-4) it is also proposed to amend the header of Schedule B.1.1 to clarify that emission points A2-1 and A2-6 relate to dust control when processing IBA. The schedule for ambient dust deposition is also renumbered B.1.4. The schedules for control and monitoring of the reinstated systems are also included.

In relation to Building 1, there is no current or proposed air abatement system to manage negative air pressure, odours or dust, or an associated emission point. A previously installed biofilter remains in place but is not permitted. On consultation with OEE and to ensure clarity in relation to the processing of waste in Building 1, it is proposed to include an additional condition (Reference No. 3.11.2 c) that prevents the processing of odour-forming waste within the building. This is to ensure there is no off-site impact of odours from Building 1.

Additionally, in relation to the use of the biomass furnace in the event drying of waste is carried out, it is proposed to reinstate operation conditions from existing licence W0140-

04 to ensure waste odours and dust are adequately treated from dryer off-gases (Reference Condition No. 6.23).

Reason for Decision

The TC propose to amend Condition 8.20, Schedule B, Schedule C and add new Condition 3.11.2 c) and 6.23 as set out below and has reached its conclusion having regard to the following reason:

To provide clarity on the waste operations permitted within Building 1, 3 and 4 and to ensure there is adequate controls and associated emission points in place for the management of dust and odours.

**Recommendation:** Insert or amend the following Conditions/Schedules:

8.20 RDF processing at the installation, **involving the drying of waste utilising the biomass furnace**, is limited to Building 3 only.

SCHEDULE B: Emission Limits

*B.1 Emissions to Air*

*B.1.1 Emission Limit Values for Emissions to Atmosphere when processing IBA:*

Emission Point Reference No: A2-1  
 Location: HEPA Filter (Building 4)  
 Grid reference X: 297551.50, Y: 269250.70

Emission Point Reference No: A2-6  
 Location: HEPA Filter (Building 3)  
 Grid reference X: 297435, Y: 269109

Minimum discharge height: 15m above ground

Parameter	Emission Limit Value
Dust (PM <sub>10</sub> )	5mg/Nm <sup>3</sup>

*B.1.3 Emission Limit Values for Dust/Carbon Filters when processing RDF:*

**Emission Point Reference No: A2-3**  
**Location: Building 3** <sup>Note 1</sup>  
**Minimum discharge height: 14m above ground**  
**Maximum flow volume: 3,800 Nm<sup>3</sup>/hr**



Parameter	Emission Limit Value
Odour	500 Ou <sub>E</sub> /m <sup>3</sup>

Note 1: Location of emission point (National Grid Reference (12 digit 6E,6N) and labelled on an appropriately scaled map) to be submitted to the Agency within 1 month of date of installation of the emission point.

**B.1.4 Emission Limit Values for Biofilter** <sup>Note 1</sup>:

**Emission Point Reference No:** A2-4  
**Location:** Building 4 <sup>Note 2</sup>  
**Minimum discharge height:** 15m above ground

Parameter	Emission Limit Value
Odour	700 Ou <sub>E</sub> /m <sup>3</sup>

Note 1: Biofilter or suitable alternative abatement technique in accordance with BAT and the prior agreement of the Agency.

Note 2: Location of emission point (National Grid Reference (12 digit 6E,6N) and labelled on an appropriately scaled map) to be submitted to the Agency within 1 month of date of installation of the emission point.

**B.1.4 Dust Deposition Limits:**

**Emission Point Reference No:** AD1, AD2, AD3, AD4 and AD5  
**Location:** As indicated in Attachment F3 of the licence application or as agreed by the Agency.

Level (mg/m <sup>2</sup> /day) <sup>Note 1</sup>
350

Note 1: 30 day composite sample with results expressed as mg/m<sup>2</sup>/day

**SCHEDULE C: Control & Monitoring**

**C.1.1. Control of Emissions to Air**

**Emission Point Reference No:** A2-4  
**Description of Treatment:** Acid scrubbing (where applied)  
**Bio-filtration** <sup>Note 4</sup>

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
<b>Air Management and Treatment</b>		
<b>Air extraction</b>	Continuous with alarm/call-out	Pumps/ engines Pressure gauges
<b>Acid scrubbing</b>	Daily visual check of flow Daily visual check of pressure drop	Flow and level meters Pressure gauges
<b>Biofilter</b>		
<b>Ammonia</b>	Monthly (at inlet and outlet)	Colorimetric indicator tubes <sup>Note 2</sup>
<b>Hydrogen sulphide</b>	Monthly (at inlet and outlet)	Colorimetric indicator tubes <sup>Note 2</sup>
<b>Mercaptans</b>	Monthly (at inlet and outlet)	Colorimetric indicator tubes <sup>Note 2</sup>
<b>Amines</b>	Monthly (at inlet and outlet)	Colorimetric indicator tubes <sup>Note 2</sup>
<b>Bed Media <sup>Note 3</sup></b>		
<b>Odour assessment</b>	Daily	Subjective impression
<b>Condition and depth of bed media</b>	Daily	Visual inspection
<b>Moisture content</b>	Monthly	Agreed method
<b>pH</b>	Bi-annually	Agreed method
<b>Ammonia</b>	Bi-annually	Agreed method
<b>Total viable counts</b>	Bi-annually	Agreed method
<b>General</b>		
<b>Fan</b>	Daily visual check	System is operational
<b>Negative pressure across biofilter</b>	Monthly	Air current tubes SCADA control system

**Note 1:** The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

**Note 2:** Or an alternative method as agreed by the Agency.

**Note 3:** The biofilter shall be examined to ensure that no channelling is evident. Turning, restructuring and the addition of supplementary bed materials or total replacement of bed materials shall be carried out as required subject to bed performance.

**Note 4: Biofilter or suitable alternative abatement technique in accordance with BAT and the prior agreement of the Agency.**

#### *C.1.2 Monitoring of Emissions to Air*

**Emission Point Reference No:** A2-3, A2-4

**Description of Treatment:** Biofilter <sup>Note 1</sup>, Carbon Filter

Parameter	Monitoring	Analysis Method/Technique
Odour	Quarterly	To be agreed by the Agency

**Note 1: Biofilter or suitable alternative abatement technique in accordance with BAT and the prior agreement of the Agency.**

3.11.2 c) **No residual, food or other odour-forming waste shall be deposited, held, stored or treated in Building 1 to ensure that there is no significant escape of odours. The biofilter associated with Building 1 shall not be operated.**

**6.23 Biomass furnace and dryer off-gas**

**6.23.1 The biomass furnace shall, at all times that off-gases from the thermal dryer are directed to it for treatment, be maintained at a temperature of 850°C with a gas retention time of two seconds unless otherwise agreed by the Agency and if the test programme determines that alternative parameters will ensure compliance with this licence.**

**6.23.2 There shall be no bypass of air abatement systems for dryer off-gases.**

#### Appropriate Assessment – Technical Committee Review

The TC has reviewed the inspector’s Appropriate Assessment screening in the Inspector’s Report and, taking into account all objections received, and the content of this TC report, the TC is satisfied that the Inspector’s Report provides an adequate examination and evaluation of the effects of the proposed activities on the European Sites concerned: River Boyne and River Blackwater SAC (site code 002299), River Boyne and River Blackwater SPA (site code 004232), Boyne Estuary SPA (site code 004080), Boyne Coast and Estuary SAC (site code 001957) and River Nanny Estuary and Shore SPA (site code 004158), in the light of their conservation objectives.

### **Overall Recommendation**

It is recommended that the Board of the Agency grant a licence to the applicant

- (i) for the reasons outlined in the proposed determination and
- (ii) subject to the conditions and reasons for same in the Proposed Determination, and
- (iii) subject to the amendments proposed and the reasons set out in this report.

Signed

*Anne Lucey* \_\_\_\_\_

Anne Lucey

for and on behalf of the Technical Committee