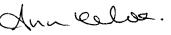
Approved for submission to the Board by Brian Meaney Senior Inspector 20/11/2014





OFFICE OF CLIMATE, LICENSING & RESOURCE USE

INSPECTORS REPORT ON A LICENCE APPLICATION

То:	Directors	
From:	John McEntagart	- LICENSING UNIT
Date:	20 th November 2014	
RE:	Application for review of an IE Licence from NURENDALE LIMITED, Licence Register W0261-02	

Application Details	
Class of activity:	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.
	11.4.(b) 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): (ii) pre-treatment of waste for incineration or co-incineration.
Category of Activity under IED (2010/75/EU):	5.3 (b) 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, and excluding activities covered by Directive

	91/271/EEC:
	(ii) pre-treatment of waste for incineration or co-incineration.
Title of BREF document (main activity):	BREF document for Waste Treatment Industries (August 2006)
Applicable Chapters of the IED:	Chapter II
CRO number of applicant:	115425
Licence application received:	24 April 2014
Notices under Article 10(2)(b)(ii) issued:	26 May 2014
Information under Article 10(2)(b)(ii) received:	10 July 2014, 5 August 2014
EIS received:	24 April 2014
Site notice inspected:	23 May 2014
Site visits:	23 May 2014
Submissions received:	1

Company

Nurendale Limited, trading as PANDA Waste Services, operate a materials recovery facility at Cappagh Road, Cappogue, Finglas, Dublin 11. The company currently employs approximately 19 full time staff at the installation and expects to employ 75 (including drivers) when all the proposed activities are in operation.

The Agency granted Nurendale Limited a Waste licence on 31 August 2010, allowing the acceptance of 200,000 tonnes annually of C&D and C&I waste, but not mixed municipal solid waste (in line with planning permission of the time).

The site is located in an area developed for industrial, commercial and quarrying use. There is one private residence located close to the installation (approximately 30m from the south eastern boundary). Otherwise the only other private residences within 500 m of the site are a cluster of ten houses approximately 450m to the south east. Before being acquired by the licensee in 2005, the site had been used for agricultural purposes.

Nurendale Limited are applying to the Agency for a review of its current IE licence (W0261-01) for the following:

- (i) to increase waste acceptance from 200,000 tonnes per annum (tpa) to 250,000 tpa;
- (ii) to accept Municipal Solid Waste;
- (iii) extend the operational hours; and
- (iv) pre-treat waste for incineration or co-incineration.

Under the existing licence, the licensee received permission to process construction and demolition (C&D) waste, commercial and industrial (C&I) waste, mixed household and commercial dry recyclable wastes and clean paper and cardboard, where the waste processing would take place in three buildings (A1,

B1 and B2). Building A1 is built and in operation and is used to process construction and demolition (C&D) waste and commercial and industrial (C&I) waste. Building B1 (under construction) will handle mixed household and commercial dry recyclable wastes (mixed paper, plastic, cardboard, food and drink cans etc.). Building B2 (also under construction) will handle clean paper and cardboard (newsprint, magazines, office paper, cardboard packaging) from publishers and book printers, offices, supermarkets and shops.

As part of the licence review, the licensee proposes to accept residual and food waste, and to construct a new Building (A2) adjoining A1. Buildings B1 and B2 will continue to be used for dry recyclables and paper and cardboard recovery and storage. The current C&D and C&I processing will be moved into the new building (A2) and A1 will be used to handle the household residual waste and food waste. The reason for the change of use at Building A1 is that it is the furthest away from the nearest sensitive receptor, which is a private residence 30m south east of the site boundary.

The current operational hours are 8am to 8pm Monday to Friday and 8am to 4pm on Saturday. The licensee proposes to extend the waste acceptance hours to 6am to 11pm Monday to Saturday and the operational hours to 7am to 9pm Monday to Saturday, for the following reasons:

- Customer demands and new regulations¹ on the times when wastes can be collected mean there is a need to change the hours to allow early morning and late evening deliveries.

The licensee stated that under normal circumstances the site will not operate on Sundays and Public Holidays. These hours of waste acceptance and operation are approved in the planning permission and are acceded to in the RD.

Fingal County Council granted planning permission for the above developments on 12 May 2014 (Planning ref. FW13A/0135). The application was accompanied by an Environmental Impact Statement.

Reason for Licence Review

Nurendale Limited are applying to the Agency for a review of its current IE licence (W0261-2) for the following:

- (i) to increase waste acceptance from 200,000 tpa to 250,000 tpa;
- (ii) to accept Municipal Solid Waste;
- (iii) extend the operational hours; and
- (iv) pre-treat waste for incineration or co-incineration.

Process Description

Current operations:

- Construction & Development (C&D) and Commercial & Industrial (C&I) wastes are processed inside Building A1;
- Plastic hangers are bulked up into a specially designed transport vehicle near the western site boundary;

¹ Storage, Presentation and Collection of Household and Commercial Waste – Bye-Laws 2013, issued by Dublin City Council.

- Source segregated baled cardboard and baled plastic is stored on an open paved area along the southern site boundary;
- Recovered WEEE and timber are stored on paved areas adjacent to Building A1.

The licensee states that the external storage of baled materials is a temporary measure and will stop once all of the buildings have been constructed. There are strict conditions in the RD (Conditions 8.1 through 8.4) regarding the storage of waste and other materials.

C&D and C&I wastes

The processing of C&D and C&I wastes, currently in building A1, will be moved to building A2, when constructed.

Processing of C&D waste includes screening using a hopper, conveyor and trommel to produce large (>150 mm) and small (<150mm) fractions to be sent off-site for further processing. This processing activity is currently suspended due to a reduction in large construction projects but may be re-started in the future. Currently in building A1 mixed wastes are manually and mechanically sorted. In particular ferrous and non-ferrous metals, WEEE, wood and bulky wastes are segregated manually and mechanically using a mechanical grab. The remaining mixed waste is bulked up and sent to the licensee's Beauparc facility (W0140-03) in Meath for processing.

Dry Recyclables

The processing of pre-segregated dry recyclables will take place in building B1, where the material will be baled.

Mixed recyclables will also be processed in this building where they will be separated manually and mechanically into the different waste streams (paper, cardboard, plastic, glass and metal) using a sorting line incorporating a combination of some or all of the following techniques:

- loading hopper, conveyor, picking line, ballistic separators and magnets.

Paper, cardboard, plastic and metal cans will be baled. Glass will be stored in a bin.

Paper & Cardboard

Paper and cardboard will be processed in building B2.

Higher value, low quantity paper will be sorted using a picking line comprising a conveyor that passes over open top bins. Each of the bins will be dedicated to a particular grade of paper. As the paper passes along the conveyor, the sorting personnel will pick out the particular grade and deposit it into the appropriate bin. Any unsorted paper will fall into an end bin (the lowest value grade). When a bin is full it will be emptied on to a conveyor and sent to a baler. Lower grades of mixed paper will not be sorted, but will be baled. All the bales will be tied with wire. Finished bales will be moved to the designated storage areas inside the building using a clamp truck.

Food Waste & Residual Waste

Residual black bin waste and source segregated food waste will be processed in building A1, when it becomes available (upon completion of construction of building A2).

Food waste will be bulked up into larger transport vehicles for transfer to approved biological treatment plants (compost/anaerobic digestion) in accordance with the Waste Management (Food Waste) Regulations 2009. This is typically to occur on the day of arrival and generally not later than 48 hours of arrival, allowing for Sundays and Public Holidays.

Residual waste will be transferred to energy recovery facilities following treatment. This will involve first shredding the bin bags that contain the waste to allow the recovery of recyclable metals (food and drink tins/cans) and food waste that are inadvertently placed in 'black bins' by householders. Depending on requirements of the energy recovery installation to which the wastes are sent, this may involve a combination of a trommell, conveyors, magnets, ballistic separators and eddy current separator, that would increase the calorific value of the material. The organic fines will be transferred to authorised biological treatment plants.

The licensee states that details of the processing line layout and the sampling protocols that will be applied to demonstrate the processed materials (i.e. RDF/SRF) meet the required customer/regulatory specification will be submitted to the Agency for approval (required under Condition 8.16).

The RDF/SRF will be compacted into bales that are wrapped in plastic and stored before being sent to waste recovery plants. The licensee states that the layers of plastic prevent liquid seepages and contain odours while the bales are being stored and transported. The average storage time for a bale will be 1 week. The RD (Condition 8.3) requires a Waste Storage Plan for the optimal and safe storage of wastes. The RD (Condition 8.4) also includes conditions regarding the wrapping and baling of waste.

Alternative Building Use

The licensee notes that waste activities proposed for each of the buildings is based on the licensee's assessment of current and likely future market conditions. They note that it is possible that future changes in the types and quantities of wastes collected by the licensee, for example if there is an increase in C&D wastes being generated, may require the reconfiguration of site operations. However the licensee states that this will not affect the handling of the food waste and residual wastes which will only be carried out in a building provided with an active odour control system, i.e., building A1.

Consideration of Best Available Techniques (BAT) and BAT Conclusions

The following reference document has specific relevance in the determination of BAT for the installation:

• BREF 'Integrated Pollution Prevention and Control (IPPC) Reference document on Best Available Techniques for Waste Treatment Industries' (August 2006)

Aspects of the following reference documents also have relevance:

- Reference document on Best Available Techniques for Energy Efficiency (February 2009);
- Reference document on Best Available Techniques on Emissions from Storage (July 2006).

The applicant submitted an assessment of the installation activity against the relevant BAT Conclusion requirements contained in the above BREF Documents. The applicant has demonstrated that the installation will generally comply with all applicable BAT Conclusion requirements specified in the Waste Treatment Industries BREF and those contained in the additional BREF documents. Regard was also had to relevant BAT Conclusion requirements for Environmental Management Systems set out in recently published Commission Implementing Decisions (CIDs).

I consider that the applicable BAT Conclusion requirements are addressed through: (i) the technologies and techniques as described in the application; (ii) the standard conditions specified in the RD; and (iii) where applicable, the inclusion of additional specific conditions (see Table 1 below).

BREF Document for Waste Treatment Industries				
Additional Requirements:	Condition/Schedule			
Environmental policy	2.2.2.1			
Preventative Action requirements	2.2.2.6			
Auditing of the EMS	2.2.2.7			
EMS documents availability	11.7			
Requirements when choosing/designing	3.2			
plant/infrastructure				
Computer based records of waste movements	11.8			
Removing bulky waste before processing into RDF/SRF	8.16.6			
Waste storage	8.1 through 8.4 and			
	glossary			
Waste acceptance procedures	8.5.6 and Schedule E			
Labelling tanks, containers, drums and pipework	3.16.5			
Compliance testing for RDF/SRF	Condition 8.16 and			
	glossary			
BREF Document on Energy Efficiency				
Incorporating energy efficiency into EMS	2.2.1			
Maintenance and optimisation of energy efficiency	2.2.2.10			

Table 1. Additional Conditions in RD to address BAT Conclusion requirements

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached RD comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the installation is located, designed, built, managed, maintained, operated and decommissioned.

Emissions

<u>Air</u>

The main sources of air emissions at the installation are dust and odour from vehicle movement and waste storage and processing respectively. There are no boilers at the installation. The only point source emission is to be A2-1 (stack for odour control unit on building A1).

The RD requires that the odour control system be installed before any residual waste and food waste are accepted (Condition 3.12). The proposed system

comprises an upgrade to the building fabric (to achieve an air leakage rate of $< 2m^3/m^2/hour$) and the provision of the odour control unit (OCU). The detailed design of the system shall be agreed with the Agency before installation and commissioning (Conditions 3.12 and 3.23).

The building will be maintained under negative air pressure, with a minimum of two full air changes every hour and achieve an exhaust odour threshold concentration of less than 460 odour units OU_E/m^3 from the OCU. This value is designed to comply with the Agency's Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery (2011), i.e., to ensure that activities are carried out in a manner such that odour emissions do not result in significant impairment of and/or significant interference with amenities or the environment beyond the installation boundary.

The OCU's air extraction system will draw air through a dust filter and scrubber to remove particulates and then into an activated carbon treatment unit, where odorous compounds in the emission will be absorbed. Continuous monitoring of the static pressure across the filter will assess filter performance and identify when filter changes are required. Sniff ports will also be provided to allow a daily assessment of odour character. Treated air will be vented to atmosphere via a 14m high stack.

An odour dispersion model submitted by the licensee predicted the maximum odour concentration at the 98% ile value (for hourly averages over five years) at or beyond the installation boundary to be $1.2 \text{ OU}_{\text{E}}/\text{m}^3$. This is within the odour criterion of $1.5 \text{ OU}_{\text{E}}/\text{m}^3$ for a waste processing activity.

Dust deposition levels recorded for 2012 and 2013 were within the licence limits. Dust mitigation measures should ensure dust deposition levels remain within the licence limits notwithstanding an increase in traffic at the installation.

Emissions to Sewer

There is no process emission to sewer. Sanitary wastewater is collected in a concrete storage tank and the contents periodically removed off-site and transferred to the Ringsend WWTP (D0034-01), an activity regulated through Condition 3.10.

Emissions to Waters

There is no process emission to waters.

Surface Water

Rain water run-off from roofs and paved areas is collected in the surface water discharge system and directed to an attenuation tank (capacity 1,400 m³) which is connected to a Class 1 Full Retention Klargester Oil Interceptor. The outflow from the attenuation tank is regulated by a hydrobrake, which has a maximum discharge rate of 6 litres/second (l/s). Run-off passes through the interceptor before discharging to the Stadium Business Park storm water sewer at location SW-1. The attenuation tank is sized based on a 1:100 year 6 hour rainfall event.

The licensee proposes to collect rainwater run-off from the roof of the new and existing buildings and divert to a rainwater harvesting system for use as 'grey water' in the welfare facilities and the dust suppression system. Based on the annual

average annual rainfall at Dublin Airport (732mm), this would generate approximately 6,800m³ of run-off annually and its use for 'grey water' would reduce the volume discharged to the storm sewer.

With significant vehicle movements expected at the installation, the RD (Schedule C.2.3 Monitoring of Storm Water Emissions) requires monitoring for hydrocarbons and suspended solids, as wells as pH, mineral oil and electrical conductivity. Condition 6.11.2 requires the licensee to establish suitable trigger levels for these parameters where storm waters that exceed the trigger levels are to be diverted for retention and suitable disposal.

The RD includes the usual conditions regarding bunding and site drainage, and includes inspection and integrity testing of the underground wastewater storage tank.

The licensee has carried out a detailed fire risk assessment of the proposed refuse derived fuel (RDF) manufacturing process, addressing fire prevention, fire detection and firefighting measures. Under Condition 9 of the licence, the licensee will have to incorporate these measures into the Accident Prevention Policy. Given the proposal for processing and storing RDF, the RD (Condition 3.19) requires the firewater risk assessment to be updated and the appropriate control measures implemented. In particular, the licensee has stated it will install a pedestrian access gate in the fence on the southern boundary, between the site and Stadium Business Park in order to ensure permanent access to the shut-off valve for surface water run-off in the event of a fire (Condition 3.19.2). The RD (Condition 8.3) also requires a Waste Storage Plan for the optimal and safe storage of wastes.

Emissions to ground

There are no direct or indirect emissions to ground.

<u>Waste</u>

Conditions 8.1 through 8.18 identify how wastes should be treated, processed and stored, as well as providing for the development of waste acceptance and characterisation procedures.

The licensee generates small quantities of office and canteen type wastes. Plant and equipment are serviced by PANDA's mobile maintenance crew - waste oils and batteries generated during maintenance are removed off-site for disposal/recovery at licensed treatment/recovery facilities. Oil interceptor waste is also removed off-site for disposal/treatment at an appropriately licensed facility.

The licensee notes that residual MSW is amenable to mechanical treatment to produce materials suitable for recycling and energy recovery. The licensee states that the existing installation is designed and operated to maximise the recovery of recyclables from incoming wastes. They state that the proposed changes are consistent with the *waste hierarchy* as the production of SRF/RDF using non-recyclable materials will gain the maximum value from residual waste.

The licensee currently operates fifteen household waste collection trucks daily out of the Cappagh Road MRF, collecting:

– Dry Recyclables 16,200 tpa;

- Food Waste 18,900 tpa;
- Residual Waste 28,000 tpa.

The licensee now proposes to accept and transfer source segregated food waste (brown bin) and residual waste (black bin) – see Table 2 on proposed waste inputs.

Waste type	Tonnes per annum (proposed)	
Construction and demolition waste	40,000	
Mixed dry recyclables	60,000	
Paper and cardboard	100,000	
Residual waste	30,000	
Food waste	20,000	
Total	250,000	

Table 2. Proposed Waste Inputs

<u>Noise</u>

The installation is located in an industrial estate adjacent to a busy road. The licensee identified two noise sensitive locations near the installation, ANSL1 (residence at 80m from building A1, and 40m from new building A2) and ANSL2 (derelict house, about 80m from northern boundary), see site layout in Appendix I.

A noise monitoring survey carried out in 2013 reported noise levels above the licence limits at the noise monitoring locations, but identified road traffic as the main cause. Analysis of the data indicated noise emissions from the activity were not causing noise limits to be breached.

The licensee used a noise model to predict the noise levels at the two nearest noise sensitive locations (ANSL1 and ANSL2) during the construction phase of the project and the operational phase incorporating the proposed new noise emissions. The licensee has constructed a 3m high concrete wall on the south-eastern boundary to reduce noise levels at ANSL1 by 10dB(A). The noise model predicted maximum noise levels during construction of building A2 of 60 dB(A) and 58 dB(A) at ANSL1 and ANSL2 respectively, where the limit is 55 dB(A). Typical noise levels are predicted to be less than 50 dB(A). Maximum levels are expected to last for a total of two weeks over the construction period, where typical levels are to last for more than 50% of the duration of the construction project.

With the exception of the fans for the odour control system, the main new noise sources proposed for the installation will be contained within building A1. The fans for the odour control system will be housed to abate noise. The model predicted noise levels would remain within licence limits when the proposed activities are operational.

In addition to the 3m concrete wall that is in place along the southeast boundary, the licensee proposed the following additional noise mitigation measures:

- Operators of mobile equipment will be instructed to avoid unnecessary revving of machinery, and to turn off equipment / plant when not in use;
- Extraction fans, openings for cooling units/vents will be acoustically treated (by acoustic louvers or alternative);

- Housing envelope of Building A2 will also have a concrete wall with a minimum height of 3m and minimum thickness of 225mm with a finished height and roof of Kingspan cladding or equivalent;
- All doors (including roller shutter doors) to the main building will be kept shut during operations;
- Fans will be housed inside an enclosure and will be located in front of Building A1 and away from the nearest residence;
- There will be no openings on the sidewall of Building A2 which is alongside the boundary of the nearest residence.

Noise limits and monitoring in line with the *Agency's Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* are included in the RD.

Use of Resources

- Fuel the licensee estimates it will use 780,000 litres diesel and 120,000 litres gas oil annually.
- Electricity the licensee estimates it will use 340,000 kWh electricity annually
- Water the licensee estimates it will use 311 cubic metres of water annually
- Materials diesel and gas oil are the main hazardous materials that will be used at the installation.

Greenhouse gas emissions and Climate Change impact

With regard to reducing the Climate impact of the installation under IE licensing, the RD requires an energy efficiency audit and an assessment of resource use efficiency. The EMP objectives and targets include use of cleaner production (including production related carbon footprint).

Compliance with EU Directives

Industrial Emissions Directive (2010/75/EU)

This installation falls within the scope of following category of Annex I of Council Directive 2010/75/EU concerning industrial emissions:

Category 5.3 (b) 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, and excluding activities covered by Directive 91/271/EEC:

(ii) pre-treatment of waste for incineration or co-incineration

As a <u>new activity</u> the IED requires that the competent authority take account of the general principles set out in Article 11 when determining the conditions of a permit. These require that

- all the appropriate preventive measures are taken against pollution;
- that best available techniques (BAT) is applied;
- no significant pollution is caused;

- --- the generation of waste is prevented in accordance with Directive 2008/98/EC;
- where waste is generated, it is, in order of priority and in accordance with Directive 2008/98/EC, prepared for re-use, recycled, recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;
- energy is used efficiently;
- the necessary measures are taken to prevent accidents and limit their consequences;
- the necessary measures are taken upon definitive cessation of activities to avoid any risk of pollution and return the site of operation to the satisfactory state defined in accordance with Article 22.

The Recommended Determination (RD) as drafted takes account of the relevant requirements of the IED.

Baseline Report

As part of the licence application Nurendale submitted a baseline report (as required by the Industrial Emissions Directive (IED)). This is required so as to allow for the making of a quantified comparison of the state of the soil and groundwater upon definitive cessation of activities.

The only hazardous substances currently used at the installation are diesel, gasoil and "adblu" (a diesel additive) stored in bunded units.

The site was initially developed by the licensee as a waste facility in 2006. Prior to this the site had been used for agricultural purposes. The licensee stated there have been no incidents with a potential to cause soil or groundwater pollution since operations began in October 2006.

A site investigation carried out in 2005 identified approximately 25 cm of top soil overlying a boulder clay that ranges in thickness from 0.8 to 1.35 m and is underlain by the bedrock. There was no visual evidence of any soil contamination identified during the site investigation and groundwater was not encountered. The underlying bedrock locally comprises nodular muddy limestone and shale.

The bedrock is classified as being Moderately Productive only in local zones (LI). There is one on-site well that supplies water for the welfare facilities and dust suppression system. The baseline report also states that the vulnerability of the bedrock aquifer ranges from High to Extreme across the site.

A site investigation was carried out in 2014 to get site specific information. Soil samples from three locations were taken and analysed for total petroleum hydrocarbons (TPH), methyl tert-butyl ether and benzene, ethylbenzene, toluene and xylene. Theses parameters were not detected in the soil samples.

The groundwater body name is Dublin Area Groundwater Body (IE_EA_G_005). This water body is categorised as being of 'Good' status and the overall objective is to 'protect'. The overall risk is 1a 'at risk of not achieving good status'.

While there are no groundwater monitoring wells within the licensed area, there is an off-site abstraction well just to the northwest of the site that is used to supply water

to the installation's sanitary services and dust suppression system. The well extends into the bedrock and a sample was analysed for BOD, COD, chloride, ammonia, nitrate and TPH. All parameters analysed were within the threshold values included in S.I. No. 9 of 2010 (European Communities Environmental Objectives (Groundwater) Regulations 2010) or the Agency's interim guideline values, as relevant.

The baseline report concluded that there is no evidence of any impacts by the hazardous substances used at the site on either soil or groundwater quality.

The Baseline Report is considered to adequately identify the state of the soil and groundwater contamination by relevant hazardous substances at the site of the installation. Where the installation causes significant pollution of soil or groundwater by relevant hazardous substances compared to the state established in the baseline report, the operator shall take the necessary measures to address that pollution so as to return the site to that state.

Due to the requirements of groundwater and soil monitoring in the IED and due to the nature of the substances processed at the installation, the RD requires (Schedule C.6 Ambient Monitoring) the continuation of groundwater monitoring on an annual basis and soil monitoring to be carried out every ten years.

Seveso Directive (96/82/EC) as amended by 2003/105/EC

The activity is not classified as a Seveso site under S.I. 74 of 2006 (European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations) which gives effect to European Directive 96/82/EU as amended by 2003/105/EC (Seveso II Directive).

Air Quality Directives (2008/50/EC and 2004/107/EC)

The air impact assessment undertaken indicates that emissions from the facility will not result in a breach of the statutory air quality limits as specified in S.I. No. 180 of 2011 (transposed CAFÉ Directive).

Environmental Liability Directive (2004/35/CE)

The licensee has not yet agreed a Decommissioning Management Plan (DMP), an Environmental Liabilities Risk Assessment (ELRA) and financial provisions with the Agency under the existing licence.

The RD requires the licensee to prepare a revised Decommissioning Management Plan (Condition 10) and Environmental Liabilities Risk Assessment (Condition 12), in line with the most recent Agency guidance and which addresses the proposed developments, and to agree financial provisions to the satisfaction of the Agency (Condition 12).

Water Framework Directive [2000/60/EC]

European Communities Environmental Objectives (Surface Water) Regulations, S.I. No. 272 of 2009

European Communities Environmental Objectives (Ground Water) Regulations, S.I. No. 9 of 2010

There are no process emissions to surface waters/groundwater from the installation.

A number of measures have been included in the RD to prevent any significant impact on water quality, as described above and presented in the RD.

Waste Framework Directive (2008/98/EC)

The RD takes account of the legislative provisions of the *European Communities (Waste Directive) Regulations 2011 (SI. No. 126 of 2011),* which transposed the Waste Framework Directive into Irish law. The following activities (under the Waste Framework Directive) will be carried out at the installation:

- R3 Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes;
- R4 Recycling/reclamation of metals and metal compounds;
- R5 Recycling/reclamation of other inorganic materials;
- R13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced). Temporary storage means preliminary storage according to point (10) of Article 3;
- D14 Repackaging prior to submission to any of the operations numbered D 1 to D 13;
- D15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced.

Appropriate Assessment

There are six Natura 2000 sites within 13 km of the installation, South Dublin Bay SAC (site code: 000210), North Dublin Bay SAC (site code: 000206), North Bull Island SPA (site code: 004006), South Dublin Bay and River Tolka Estuary SPA (site code: 004024), Baldoyle Bay SPA (site code: 004016) and Baldoyle Bay SAC (site code: 000199).

Site Code	Designation	Description	Distance
004016	Baldoyle Bay	Features of Interest:	13.5 km
	SPA	Wetlands and Waterbirds	
		Species:	
		Light-bellied Brent Goose (Branta bernicla hrota)	
		Shelduck (Tadorna tadorna)	
		Ringed Plover (Charadrius hiaticula)	
		Golden Plover (Pluvialis apricaria)	
		Grey Plover (Pluvialis squatarola) Bar- tailed Godwit (Limosa lapponica)	
000199	Baldoyle Bay	Features of interest:	13 km
	SAC	Annex I habitats:	
		Mudflats and sandflats not covered by	

Table 3. Natura 2000 sites within 13 km of the installation and in same hydrometric area.

			I
		seawater at low tide	
		Salicornia and other annuals colonizing mud and sand	
		Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	
		Mediterranean salt meadows (Juncetalia maritimi)	
000210	South Dublin Bay SAC	Features of interest:	11.5 km
		Annex I habitats:	
		Mudflats and sandflats not covered by seawater at low tide	
000206	North Dublin	Features of interest:	11.5 km
	Bay SAC	<u>Annex I habitats</u> :	
		Mudflats and sandflats not covered by seawater at low tide	
		Annual vegetation of drift lines	
		Salicornia and other annuals colonising mud and sand	
		Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	
		Mediterranean salt meadows (Juncetalia maritimi)	
		Embryonic shifting dunes	
		Shifting dunes along the shoreline with Ammophilia arenaria (white dunes)	
		Fixed coastal dunes with herbaceous vegetation (grey dunes)	
		Humid dune slacks	5
		Annex II species:	
		Petalwort Petalophyllum ralfsii	1
004024	South Dublin	Features of Interest:	11.5 km
	Bay and River Tolka	Wetlands and Waterbirds	
	Estuary SPA	Species:	
		Light-bellied Brent Goose (Branta bernicla hrota) – wintering	
		Oystercatcher (Haematopus ostralegus) – wintering	
		Ringed Plover (Charadrius hiaticula) – wintering	
		Grey Plover (Pluvialis squatarola) –	

		wintering	
		Knot (Calidris canutus) – wintering	
		Sanderling (Calidris alba) – wintering	
		Dunlin (Calidris alpina) – wintering	
		Bar-tailed Godwit (Limosa lapponica) – wintering	
		Redshank (Tringa totanus) - wintering	
		Black-headed Gull (Croicocephalus ridibundus) – wintering	
		Roseate Tern (Sterna dougallii) — passage	
	-	Common Tern (Sterna hirundo) – breeding and passage	
		Arctic Tern (Sterna paradisaea) – passage	
004006	North Bull	Features of Interest:	9 km
	Island SPA	Wetlands and Waterbirds	
		Species:	
		Light-bellied Brent Goose (Branta bernicla hrota) – wintering	
		Shelduck (Tadorna tadorna) – wintering	
		Teal (Anas crecca) – wintering	
		Pintail (Anas acuta) – wintering	
		Shoveler (Anas clypeata) – wintering	
		Oystercatcher (Haematopus ostralegus) – wintering	
		Golden Plover (Pluvialis apricaria) – wintering	
		Grey Plover (Pluvialis squatarola) – wintering	
		Knot (Calidris canutus) – wintering	
		Sanderling (Calidris alba) – wintering	
		Dunlin (Calidris alpina) – wintering	
		Black-tailed Godwit (Limosa limosa) – wintering	
		Bar-tailed Godwit (Limosa lapponica) – wintering	
		Curlew (Numenius arquata) – wintering	
		Redshank (Tringa totanus) – wintering	
		Turnstone (Arenaria interpres) –	

	wintering	
	Black-headed Gull (Larus ridibundus) – wintering	

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the proposed activity, individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s). In this context, particular attention was paid to the following European sites:

- South Dublin Bay SAC (000210);
- North Dublin Bay SAC (000206);
- North Bull Island SPA (004006);
- South Dublin Bay and River Tolka Estuary SPA (004024);
- Baldoyle Bay SPA (004016);
- Baldoyle Bay SAC (000199).

The Agency considered, for the reasons set out below, that the proposed activity is not directly connected with or necessary to the management of those sites as European Sites and that it can be excluded on the basis of objective information, that the proposed activity, individually or in combination with other plans or projects, will have a significant effect on a European site, and accordingly the Agency determined that an Appropriate Assessment of the proposed activity is not required.

It has been determined that this facility does not have the potential for significant effects on any European site due to the nature and scale of the operations, the absence of a process emission to water and the distance between the installation and the designated sites.

Environmental Impact Assessment Directive(85/337/EEC)

The applicant submitted an Environmental Impact Statement (EIS), which was prepared in support of the IE licence application. An Environmental Impact Statement was prepared in support of planning application Ref. No. FW13A/0135. Planning permission was granted for this development by Fingal County Council on 12th May 2014.

<u>Content of EIS</u>

I have considered and examined the content of the EIS and other material (information submitted in the licence application, the planning permission, planning inspectors report, correspondence between the Agency and the planning authority carried out under Section 87 of the EPA Acts and submissions made by third parties in relation to the EIS). I consider, having examined the relevant documents and with the addition of this Inspector's Report, that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as required in Article 3 and in accordance with Articles 4 to 11 of the EIA Directive as respects the matters that come within the functions of the Agency. I consider that the EIS also complies with the Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013, S.I. 137 of 2013, as amended.

• <u>Environmental Impact Assessment (EIA)</u>

An assessment, as respects the matters that come within the functions of the Agency, has been carried out as detailed below.

An assessment as regards the functions of the planning authorities was carried out by Fingal County Council when granting planning permission for the development (planning file ref. FW13A/0135). The planning authority's EIA was considered as part of the Agency's assessment.

Consultation was carried out between Fingal County Council and the Agency in accordance with Section 87(1D)(a) of the EPA Acts, as follows:

Notice under Section 87(1D)(a) (request for observations) issued:	30 th April 2014 to Fingal County Council
Response to Section 87(1D)(a) Notice received:	5 th September 2014

As part of the consultations, Fingal County Council confirmed that planning permission reference FW13A/0135 was the applicable grant of permission relating to this development. In regard to the application for a licence and the EIS, Fingal County Council requested that the Agency take full cognisance of the planning permission granted on 12th May 2014 for the proposed development (planning register reference FW12A/0135) and the conditions attached to this planning permission. They also provided a copy of the EIA report relating to planning permission FW13A/0135.

The assessment outlined in this report considers the submissions and observations exchanged between Fingal County Council and the Agency. All third party submissions/observations received which are relevant to impacts on the environment have also been considered and taken into account.

The submitted EIS and the assessment as described in this Inspectors Report address the likely significant direct and indirect effects arising from the activity, as respects the matters that come within the functions of the Agency.

• <u>Likely significant effects</u>

The following section identifies, describes and assesses the main likely significant direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following factors: human beings, flora, fauna, soil, water, air, climate, the landscape, material assets and cultural heritage. The main mitigation measures proposed to address the range of predicted significant impacts arising from the activity have also been outlined.

1. Human Beings

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or IE licence application ^{Note 1}
Odour	Odour nuisance from handling residual and food	Residual and food wastes to be handled in building

	wastes.	A1 which will operate under negative pressure and with an odour abatement system. Odour impact assessment (using odour dispersion model) indicated this would not cause odour nuisance. Odour control is required by RD Conditions 3.12 and 6.16).
Vermin and pests	Vermin and pests potentially attracted by residual and food wastes.	The RD requires the licensee to ensure that vermin and pests associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the facility or beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary. The RD also requires monitoring for vermin and pests.
Noise and dust	Disamenity from noise and dust emissions due to licensed activities. Mitigation measures required.	Installation of noise barrier at south-east boundary. The RD sets noise and dust deposition limit values and requires noise and dust deposition monitoring. Noise impact assessment indicates installation, during normal operation, will comply with noise limits. Dust suppression system in place which should ensure dust deposition levels remain within the licence limits notwithstanding an increase in traffic at the installation.

2. Flora & fauna

Likely	Description of effect	Mitigation measures
significant		proposed by applicant in
effect		EIS or IE licence

		application Note 1
Impact on any flora and fauna in the area.	Extension of period of noise emissions with extension of operational hours.	The site has low ecological value, and no significant flora and fauna in vicinity of installation. Noise assessment indicates emissions will not have any impact on nearest noise sensitive locations.
Impact on water quality and designated habitats.	Reduction in water quality due to storm water run-off.	There are no significant aquatic habitats within 500m of the site boundary. The RD requires treatment and monitoring of yard run- off prior to discharge.
		Appropriate Assessment screening indicated no adverse impact on any Natura 2000 site.

3. Soil

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or IE licence application ^{Note 1}
Contamination of soil/groundwater.	Accidental spillage, leak or discharge to ground.	Residual and food wastes to be handled inside building A1 with impermeable concrete floor.
		The RD includes requirements for safe storage and handling of wastes, fuels and materials.
		The RD requires accident prevention policy and emergency response procedure.

•. .

Note 1: and/or as outlined above in this report

4. Water

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or IE licence application Note 1
Contamination of	Discharge of potentially	There are no process

surface water.	contaminated yard run-off (e.g., from spills, leaks, firewater) ultimately leading to the River Tolka.	emissions to surface water. No significant alterations to surface water and foul water drainage systems are proposed. Provision of oil interceptor and storm water attenuation with shut off device on outfall. The RD includes requirements for safe storage and handling of wastes, fuels and materials. The RD requires control and monitoring of yard run-off. The RD also requires regular cleaning of paved areas and emptying of oil interceptor (Conditions 6.10 and 3.5).
Flooding	Storm events.	No historical flooding. No increase in impervious area. The provision of storm water attenuation and shut off valve.
Contamination of groundwater.	Contamination of groundwater due to accidental spillage or discharge to ground.	There is no direct discharge to groundwater. The RD requires all areas of the facility associated with the movement, processing, storage and handling of waste to be hardstanding. See also section 3, Soil.

5. Air

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or IE licence application ^{Note 1}
Dust	Vehicle movements and processing of wastes cause dust emissions.	Daily cleaning of roads, including use of water sprayers. Waste processing to be indoors. Dust suppression sprayers within

		building A1 and to be installed in building A2. The RD sets ELVs on emissions to air and dust deposition limits.
Air quality	Impact on air quality due to vehicle emissions.	Increase in on-site traffic movements/emissions will be offset by reduction in off-site traffic movements/emissions. Negligible impact due to change.
Odour	Processing of residual and food wastes.	See section 1. Human Beings
Note 1: and/or as outlined above in this report		

6. Climate

0. Climate		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or IE licence application ^{Note 1}
Increase in traffic emissions	Traffic and its associated emissions	Traffic will be diverted from other Nurendale sites to this one, so the increase in traffic emissions associated with extra vehicles operating at this site will be offset by a reduced number of vehicles operating at other Nurendale sites.
Increase in greenhouse gases.	Increase in emissions of greenhouse gases due to energy used in plant operations. Imperceptible negative impact predicted.	The RD requires an energy efficiency audit and the implementation of identified measures. The RD also requires energy efficiency be incorporated into design and procurement of equipment.

Note 1: and/or as outlined above in this report

7. Landscape, Material Assets & Cultural Heritage

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or IE licence application Note 1
Quality of local	Dust, odour, noise nuisance or other	Mitigation measures described in Sections 1

environment/amenities	impacts on air quality.	and 5.
Waste recovery infrastructure	Facility is important infrastructure for recycling.	The RD includes conditions regarding the handling and management of wastes accepted and generated at the facility.
		The RD requires recovery/recycling data to be reported on an annual basis.
Resource/energy use	Demand for electricity, water, space heating, fuels and raw materials.	The RD includes conditions on energy, water and raw material efficiency.
		Traffic will be diverted from other Nurendale sites to this one, so the increase in fuel use associated with extra vehicles operating at this site will be offset by a reduced number of vehicles operating at other Nurendale sites.
		Reduction in demand on groundwater supply with use of rainwater in dust suppression system and staff toilets will offset increase in demand from more staff.

Assessment of parts 1 to 7 and the interaction of effects and factors

The assessment detailed throughout this Inspector's Report fully considers the range of likely significant effects of the activity on human beings, flora, fauna, soil, water, air, climate, landscape, material assets and cultural heritage, as respects the matters that come within the functions of the Agency, (as identified in parts 1-7 above), with due regard given to the mitigation measures proposed to be applied. The assessment also has regard to the assessments carried out by the planning authority and all relevant observations and submissions made on the licence application and EIS.

The potential significant interactions of impacts, as detailed in Chapter 16 of the EIS, consist of the following:

- Human beings/air;
- Human beings/traffic;
- Human beings/landscape.

I have considered the interaction between the factors referred to in parts 1-7 above and the interaction of the likely effects identified (as well as cumulative impacts with other developments in the vicinity of the activity). I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects of the activity

I am satisfied that the proposed mitigation measures identified above are adequate and will also address any potential significant interactions or cumulative effects. The RD includes conditions as considered appropriate to to address any likely significant effects or interactions associated with the licensable activity.

• Reasoned Conclusion on Environmental Impact Assessment

I consider that having examined the relevant documents, and on foot of the assessment carried out throughout this Inspector's Report, that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as respects the matters that come within the functions of the Agency, and as required by Section 83(2A) and Section 87(1G)(a) of the EPA Acts.

It is considered that the mitigation measures as proposed will adequately control any likely significant environmental effects from the activity.

It is also considered that the proposed activity, if managed, operated and controlled in accordance with the licence conditions included in the RD will not result in a significant detrimental impact on the environment.

Cross Office Liaison

I have consulted with the OEE inspector (Carol O'Sullivan) regarding enforcement issues relating to the current licence W0261-01. This has informed how the RD proposes to regulate financial provision and the requirements for ELRA and DMP, as well as the CCTV system, firewater and surface water monitoring.

Compliance Record:

Nurendale Ltd has been prosecuted by the Agency for the operation of its waste transfer station at Ballymount Cross, Tallaght, Dublin 24 (waste licence register number W0039-02) for tonnage exceedance in July 2014.

At the most recent site inspection of the Cappagh Road installation (26 April 2013), the OEE identified the licensee had exceeded the amount of waste it is authorised to accept at this installation. The OEE currently have no compliance investigations or compliance issues with the licensee. Since January 2013, the OEE have received one complaint (subsequently closed out) and recorded no incidents.

Fit & Proper Person Assessment

The Fit & Proper Person test requires three elements of examination:

- Technical Ability
- Legal Standing

- Financial Standing

Notwithstanding the prosecution of Nurendale in July 2014 for the operation of its waste transfer station at Ballymount Cross, Tallaght, Dublin 24, it is my view that the applicant can be deemed a Fit & Proper Person for the purpose of this Review. The licensee has not yet agreed financial provisions with the Agency. In view of the proposed changes at the installation, the RD requires the licensee to review and maintain the Environmental Liabilities Risk Assessment, the Decommissioning Management Plan and the financial provisions to the satisfaction of the Agency (Conditions 10 and 12.2).

Complaints

There was one complaint made against the licensee since January 2013, in relation to dust and rats, but which has subsequently been closed out.

Submissions

One submission was received in relation to this review application.

(i) Health Service Executive (HSE), Dublin North East, received 6 June 2014

The HSE stated they did not have any submission/comment to make in relation to this licence review.

Response: No response is required to the submission.

Recommended Determination (RD)

In preparing this report and the Recommended Determination I have consulted with Agency technical and sectoral advisor Mr Brian Meaney. The RD permits the applicant to increase the quantity of waste it can accept and to expand the types of wastes it can accept. The RD gives effect to the requirements of the EPA Acts 1992, as amended.

Charges

The 2014 annual fee invoiced by OEE is **€5,596.50**. The RD recommends an annual charge of **€5,869** which takes account of the inspection, audit, report evaluation, sampling and analytical costs associated with enforcement of the RD.

Recommendation

I recommend that a Proposed Determination be issued subject to the conditions and for the reasons as drafted in the RD.

Signed

He May 2

John McEntagart Procedural Note

In the event that no objections are received to the Proposed Determination of the application, a licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992, as amended, as soon as may be after the expiration of the appropriate period.

Appendix I – Site Layout



Figure 1.Proposed site layout for installation (ANSL1 and ANSL2 are noise sensitive locations).