

INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER 140-1

Nurendale Limited (t/a Panda Waste Services), Rathdrinagh, Beauparc, Co. Meath.

Recommendation: The recommended PD as submitted to the Board be approved

(1) Introduction:

Nurendale Limited have applied to operate a new waste transfer station and recycling facility near Rathdrinagh Cross-roads, about 5km to the south of Slane. Nurendale Ltd. have operated an unauthorised waste transfer/disposal operation for commercial and industrial companies and also for domestic skip hire for over eleven years at this location.

Waste is currently processed in an open yard area and there is no infrastructure except for some surface water protection measures, in place to minimise the impact of its operations on the environment. The waste activities **currently being carried out** are **not permitted nor do they have planning permission** from the Local Authority.

A decision to grant planning permission for the **proposed new development** was issued in January 2002. **The proposed development will replace the current unauthorised waste transfer activities. The new facility boundary will encompass a portion of the existing yard where waste activities are currently being carried on (Figure 4.2). The applicant is required to cease current operations at the facility as the recommended Proposed Decision states that the processing of all wastes shall take place indoors within the waste transfer building.**

The waste management facility will have a total site area of approximately 3.24 Ha including landscaping buffers etc. The existing access is directly off the National Primary Route, N2 southbound carriageway.

The site of the proposed facility will be located to the rear of a filling station/shop which is also owned by the applicant but leased to a third party. A dairy farm is located approximately 100-200m to the east of the site. There are approximately 15 residences located within 250m radius of the site. Water supplies in the area are provided by a local authority water supply scheme. Domestic/Foul water in the area is discharged to the ground via septic tanks and percolation areas. The land in the immediate area of the proposed development is predominantly in pasture or used for grass production.

The applicant has requested that the hours of operation of the facility to *be from 08:00-18:00 Monday to Friday and 09:00 to 14:00 on Saturday*. These hours have been included in the recommended PD.

A plan showing the location of the facility to which the application relates is provided in Appendix 1.

The following are the classes of Activity that the applicant has applied for:

The Third Schedule

Class 11.	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
Class 13.	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the

waste concerned was produced.

The Fourth Schedule

Class 2.	Recycling or reclamation of organic substances, which are not used as solvents (including composting and other biological transformation processes).
Class 3.	Recycling or reclamation of metals and metal compounds.
Class 4.	Recycling or reclamation of other inorganic materials.
Principal Activity	
Class 13.	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

Maximum quantity of waste to be accepted	44,653 tonnes
Environmental Impact Statement Required	Yes. I have assessed it in accordance with the European Communities (Environmental Impact Assessment) Regulations 1999 and it complies with these regulations.
Number of Submissions Received	14

SITE VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
31/07/01	Site Notice ^{Note 1}	D. Shannon	Deemed to be compliant at that time.
14/05/01	Site & Environs check	B. Foley	Site Check
24/08/01	Check New Site Notice (Applicant as Nurendale Ltd. t/a Panda Waste) and environs	B. Foley	Compliant
1/10/01	Site & Environs Check	K. McDonnell	Site Check.

^{Note 1} The waste licence application was originally submitted under the name of Panda Waste Services. However, the name of the applicant was changed to Nurendale Ltd (t/a Panda Waste Services) to satisfy the requirements of the regulations for the provision of adequate financial information.

(2) Facility Development

The main infrastructure proposed by the applicant includes the Central Waste Handling Building, a reception/office building, weighbridge, a vehicle truckwash area, waste quarantine area (internally in the materials recovery building), parking/skip storage areas, and an 18,000 litre diesel fuel tank /refueling pumps within a bunded area which will be monitored by a continuous on-line tank-gauging system. The proposed truck wash and diesel fuel tank shall not be used for any purpose other than for the washing and fueling of trucks and vehicles associated with the proposed transfer and recycling operations on site. The recommended PD makes provision for this infrastructure.

Compactor trailers will be used to transport unrecoverable waste to landfill and recovered materials to their respective recycling industries. The following items of waste processing plant are proposed: grab, Powerscreen 820 Trommel Screen, Intake hopper with associated conveyors, mobile shredder, baling machine, loading shovel vehicles, articulated vehicles, compaction trailers and compactors. The recommended PD requires the applicant to have adequate duty and standby capacity for all items of plant deemed critical for the processing of waste.

The main waste transfer building is to be constructed near the centre of the site. The structure will be 70m x 40m x 11.3m high. All waste handling, transfer and recycling operations will take place within this main building. The building will house the trommel system and picking station for recycling construction/demolition waste, the baler for commercial waste and the timber shredder. All processing of waste is required to take place indoors within the waste transfer building. **No waste can be stored external to the waste transfer building unless prior approval of the Agency is sought.** Designated skips/containers will also be used within the building for the temporary storage of waste for compaction, green waste for off-site recycling, quarantined waste and recycled waste categories. Vehicles (excluding employees) will be required to check in at the reception/office building on arrival. The facility will not be open to the public and all visitors will be required to report to the reception.

The entrance to the proposed facility will be along a new access road which is to be constructed from the Third Class County Road that runs eastwards from Rathdrinagh cross-roads, approximately 60m to the west.

Security at the site shall be provided by the erection of a 2m high security steel palisade fence to encompass the perimeter and will be landscaped with trees/shrubs. There will be a steel gate at the site entrance and a CCTV security will also be installed at the entrance.

High tension ESB cables are located to the east of the proposed facility. The proposed facility complies with the necessary distance from these cables as required by the ESB.

The recommended PD requires the applicant to remove and decommission the existing septic tank system within a timeframe to be agreed with the Agency. Currently effluent from the petrol station/shop also discharges to the current system on site. The applicant has proposed that all **domestic foul water (domestic sewage and canteen wastewater)** generated on site will be treated using a combined aerobic/anaerobic system consisting of a three step process – primary treatment, aeration and clarification. The proposed percolation area has poorly percolating soil and it is likely that the water table may be close to the surface during the winter months. In order to combat these issues the applicant has proposed that the percolation area be raised by 1m and the installation of additional sub-surface drainage pipes to improve

drainage from the water table. The applicant will be required to demonstrate to the Agency's satisfaction by way of an assessment report that the proposed treatment system (or agreed equivalent) and percolation area is capable of treating the domestic foulwater from the facility (Condition 3.11.2). The discharge from the treatment system has a design BOD value of <20mg/l and suspended solids of <30mg/l. It is conditioned in the recommended PD that the domestic foulwater from the **proposed facility** will be the **only effluent** discharged to **this treatment system**. The applicant intends to divert the effluent from the petrol station/shop to another treatment system outside of the facility boundary. **Process foul water** generated on-site **from the transfer waste building and any washwaters not recycled from the truckwash facility** will be collected in an underground sump/tank and tankered to **Navan Wastewater treatment plant at Ferganstown**, Navan. The conditions outlined in Meath County Council's discharge consent have been included in the recommended PD. They have not specified volumes to be discharged or emission limits, however limits are specified in the recommended PD. These limits were based on similar licensed facilities.

The entire site will be impermeable hardstand with the exception of some landscaped areas.

(3) Waste Types and Quantities

The total quantities and types of wastes to be accepted at the facility are as outlined below.

YEAR^{Note 1}	TOTAL QUANTITY OF NON-HAZARDOUS WASTE (tpa)
Year 1	30,500
Year 2	33,550
Year 3	36,905
Year 4	40,595
Year 5	44,653

^{Note 1} From the date of commencement of waste activities at this facility.

The applicant has applied to accept 30,500 tonnes of waste per annum in the first year of operation increasing over a period of five years by between 10-15 % per annum depending on demand requirements. The applicant has stated that up to 95% of the C&D material and 90% of domestic and commercial waste material received at the facility can be recycled. The waste will be delivered by the company's fleet of skip trucks. The wastes to be accepted will consist primarily of construction and demolition wastes (22,500 tonnes) with smaller quantities of non-hazardous commercial (5,000 tonnes) and household (3,000 tonnes). The wastes will be processed within the main waste transfer building, the recyclable materials removed and the residual waste sent to landfill. The company presently dispose of their non-recyclable material to KTK landfill (Reg. No. 156) The proposed Knockharley Landfill (Reg. No. 146) facility will be located two miles to the south of the proposed facility.

(4) Emissions to Air

Monitoring requirements and an emission limit for dust deposition (350mg/m²/day) are set in order to control any fugitive dust emission from activities on site. The applicant will be required to provide and install an odour and dust abatement system with the waste transfer building. Waste for disposal is required to be stored in sealed covered containers within the transfer building and removed off-site within forty eight hours of its acceptance at the facility. Noise emission limits are specified in Schedule F of the recommended PD and limits of 45dB(A)_{L_{Aeq}} and 55 dB(A) _{L_{Aeq}} are applied for night time and daytime, respectively. The applicant has predicted that noise levels from the operation of the proposed facility to be less

than 55dB(A) Leq (max) at the nearest residence 60m away. The applicant has also proposed a number of noise mitigation measures such as the selection of a double skinned Kingspan type cladding system for the roof. All doors of the waste transfer building shall be kept fully shut with noise mitigation measures in place when the trommel or timber shredder are in operation. The trommel or shredder cannot operate together under the recommended PD. Condition 6.3 will ensure that there shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.

(5) Emissions to Groundwater

Aside from the percolation area there will be no other discharges to groundwater. The aquifer underlying the site is locally important with a low vulnerability. The area is served by a public water supply. As stated above, the site will be surfaced with an impermeable hardstanding and all fuel tanks must be bunded. The applicant has proposed the installation of three groundwater monitoring wells at the proposed facility.

A hydrocarbon survey was undertaken by the applicant to evaluate the extent, if any, of hydrocarbon contamination of the soil and groundwater at the adjacent petrol station (in operation for approximately 50 years) and the potential impact on the land where the proposed waste transfer/recycling facility is to be developed. The investigation concludes that significant hydrocarbon contamination, as a result of activities at the filling station, on soil underneath the current transfer operations and within the area to be redeveloped for the proposed waste transfer/recycling facility is unlikely. The applicant has plans to totally overhaul and upgrade the petrol station in the near future. A fully costed environmental liabilities risk assessment for the **proposed facility** is required under Condition 12.2 of the recommended PD and the applicant will have to make financial provisions for the remediation of the site.

Monitoring for hydrocarbon compounds has been included in the recommended PD for both ground water and surface water.

(6) Emissions to Surface Waters

The design and operation of the waste transfer recycling facility will lead to a much improved control of surface water runoff, compared to the current yard operation. Surface water will discharge from the site via a debris trap and Klargester Class 1 Bypass interceptor to remove hydrocarbons (oil and petrol contaminants) and grit and will be discharged to a nearby unnamed stream. The Eastern Regional Fisheries Board have indicated that it is not an important nursery stream (Telephone conversation 28/11/01). This unnamed stream which is culverted under the N2 road to the south of the site eventually flows to the River Boyne (a Salmonoid Water) after joining a small south-bank tributary. The confluence of this tributary and the River Boyne is about 5km downstream of the development site. A cut-off valve will be installed on the surface water discharge pipe to be used in the event of an incident at the facility. This has been conditioned in the recommended PD.

Water samples were taken by the applicant from the streams and ditches (drains) at five points around the site (March 2000). The concentration of some parameters had been affected by the low flow rates and disturbance of sediment during sampling. Results suggest that water quality was contaminated in the area at that time. The water quality results of the unnamed stream show significant surface water contamination from a variety of sources such as agricultural, commercial (including the current transfer operations) and domestic adjacent to the site of the proposed transfer station. The applicant states that the '*contribution of the*

existing waste transfer operation to the reduction in water quality in the area is significantly less than some of the other sources in the locality'. The Eastern Regional Fisheries Board (ERFB) has expressed concern about the levels of contamination. The proposed development should result in a small improvement in water quality in the area. The applicant has proposed to monitor surface water discharges from the site in addition to the stream into which the surface water from the facility discharges and the recommended PD makes provision for this.

(7) Other Significant Environmental Impacts of the Development

The development will have a moderate short-term impact on the landscape and visual amenities in relation to housing to the north-east and east of the site boundary. The applicant has proposed a landscaping plan to combat this impact.

(8) Waste Management, Air Quality and Water Quality Plans

The Waste Management Plan for the North East Region recommends the provision of improved recycling facilities, greater public awareness and Local Authority support for waste minimisation and recycling. The Plan lists a number of privately operated transfer stations and has plans for new transfer stations in the larger towns in the region. Nurendale Limited is not mentioned by name in the Plan.

(9) Submissions

Fourteen valid submissions were received in relation to this application and I have had regard to the submissions in making my recommendation to the Board. If more than one submission was received from the same body or individual then both submissions are treated together in the one section e.g. Submissions 1 and 2 from the North Eastern Health Board are addressed below.

The North Eastern Health Board made two submissions.

Submission 1: M. Donnelly, Principal Environmental Health Officer/ Ms. Fildelma McCooie, Environmental Health Officer, North Eastern Health Board (NEHB) received 14 June 2000.

Submission 1:

In this submission the NEHB have asked that the applicant should submit the following further information:-

Ground 1: Protocols for accepting or rejecting waste and storing of waste at the facility

Comment:

Waste acceptance and handling is controlled by Condition 5 of the recommended PD. The recommended PD prohibits the acceptance of hazardous waste at the facility and the applicant will be required to develop and implement detailed waste acceptance procedures to ensure that only those wastes deemed acceptable are taken in at the facility. In addition, all new customers will be subject to waste profiling and characterisation off-site. A waste inspection/quarantine area will be provided at the waste transfer building and only after each load of waste is inspected shall the waste be processed for disposal or recovery. Biodegradable waste not suitable for separation and recycling will be sent for disposal to an authorised landfill. Waste for disposal is required to be stored in suitably covered and enclosed containers inside the facility and removed off-site within 48 hours of its acceptance at the facility.

Ground 2: Measures to prevent illegal dumping at the site.

Comment:

The recommended PD requires the applicant to install security fencing and CCTV at the facility as a means to prevent illegal dumping taking place. All vehicles delivering waste to and removing waste and materials from the facility are required to be appropriately covered, fully enclosed and adequately secured to prevent spillage. In addition, litter which has accumulated within the facility and its environs is required to be removed on a daily basis.

Ground 3: The North Eastern Health Board has asked that the following information be submitted by the applicant:

- *Vermin control*
- *Disposal arrangements for liquid waste resulting from compaction*
- *Details on the design and capacity of the proposed liquid sumps*
- *Design specifications for; proposed dust suppression unit, the proposed trommel in relation to meeting EU legislation and noise levels, details of the vehicle wash system*
- *Details on sound insulation*
- *Sound insulation of the proposed building material*
- *Details on the number of employees using the facility and design details of the percolation area and treatment systems.*

Comment:

The applicant has addressed these issues in his application and subsequent information requested by the Agency and this information was taken into consideration when writing up the recommended PD. Environmental Nuisances are controlled under Condition 7 of the recommended PD. Emissions and Environmental Impacts are controlled under Condition 6. Condition 8 controls Environmental Monitoring and Schedule C controls Emission Limits from the facility. Compliance with the conditions of the recommended PD will ensure that no environmental pollution will arise from the licensed activities.

Submission 2: M. Donnelly, Principal Environmental Health Officer/ Ms. Carmel Lynch, Environmental Health Officer, North Eastern Health Board (NEHB) received 6 September 2001

The NEHB stated that they had no public health objections to the proposed facility subject to the following conditions:

- *Visual inspection and segregation procedures*
- *The quality and volume of surface water is suitable for discharge to the stream prior to development of the site.*
- *Drainage System and oil interceptor to be inspected*
- *Integrity of underground tanks to be checked*
- *Facility vicinity to be free from litter*
- *Measures for vermin control*
- *Dust control measures in dry weather*
- *No significant impairment of, or significant interference with amenities*
- *Noise levels/tonal components at noise sensitive locations*

Comment:

The recommended PD has taken account of these matters. Compliance with the conditions of the recommended PD will ensure that no environmental pollution will arise from the licensed activities.

Submissions 3, 4 and 5 are identical submissions sent by three separate parties and these issues are addressed below as one.

Submission 3: Christopher and Teresa Hand, Rathdrinagh, Beuparc, Navan, Co. Meath (received 22 June 2000); Submission 4: John and Marie McCann, Rathdrinagh, Beuparc, Navan, Co. Meath (received 10 July 2000); Submission 5: Chris and Marie McCluskey, Rathdrinagh, Beuparc, Navan, Co. Meath (received 10 July 2000). The submission was accompanied by the site's planning history and correspondence from the planning authority.

The submitters state *that the proposed site is totally unsuitable and in the event of a waste licence being granted, there will be significant and adverse effects on the environment.* The issues they raise are discussed below:

Comment:

The proposed waste transfer facility will be a modern fully enclosed facility. Compliance with the conditions of the recommended PD will ensure that no environmental pollution will arise from the licensed activities.

Ground 1: Noise

- *Noise especially in relation to the use of a stone crusher on-site, the emptying of and filling of skips, the dropping of skips onto concrete and other machinery in use.*

Comment:

The applicant does not intend to crush stone at the proposed facility. All processing of waste shall take place indoors within the waste transfer building. Noise emission limits are set out in Schedule C: Emission Limits of the recommended PD.

Ground 2: Air Pollution

- *Dust generation from the crusher which blows into their home and garden is causing nuisance.*
- *Odours from food waste and nuisance caused by bird droppings.*

Comment:

Potential nuisances are controlled by Condition 7 of the recommended PD. Dust deposition limits have been set in the recommended PD (Schedule C).

Ground 3: Effluent

- *Soil is not suitable for effluent disposal by way of percolation. The proposed treatment system is inadequate and the effluent will accumulate in the percolation trenches*

Comment:

Prior to acceptance of waste at the facility the applicant will be required to carry out percolation tests in order to demonstrate that the constructed percolation area is suitable for the disposal of wastewater. The applicant has proposed the installation of a sewage treatment system. Compliance with the conditions attached to the recommended PD will ensure that this facility will have no impact on groundwater supplies. It is considered that the monitoring specified in the recommended PD is adequate for the control of all emissions from this facility.

Ground 4: Valuation of property

- *Facility will cause properties to be devalued in the area and should be located in a more greenfield site.*

Comment:

The issues of planning raised here are outside the scope of the recommended PD and are a matter for the planning authority. The recommended PD will ensure that the proposed facility will not impact significantly on the environment.

Submission 6: Duchas the Heritage Service (Mr. Damien Mc Weeney, Countryside Protection Unit) submitted 15 June 2000.

- *Duchas state that they have no objection to granting the licence and where possible that any hedgerow removal should not take place during the bird nesting season, that is between 15 of April and 31 of August.*

Comment:

The applicant is required under his grant of planning permission (Planning Reg. No. 01/4304) from Meath County Council to preserve all existing hedgerows, trees and shrubs on-site.

Submission 7: Mr. Donal Wall, Rathdrinagh, Beauparc, Co. Meath submitted 28 July 2000.

Mr. Wall enclosed a copy of the decision made by an Bord Pleanala refusing planning for a similar development at the facility under a **previous** application. No other comment was made.

Comment:

The applicant received planning for the proposed facility in January 2002.

Submission 8, and Submissions 9 and 10 (same submission, different dates): The Eastern Regional Fisheries Board (ERFB) (Noel McGloin, Snr. Fisheries Environmental Officer) submitted 13 August 2001, 25 September 2001 and 27 September 2001.

The ERFB made three comments on the EIS in Submission 8 and a final general comment in Submission 9 and 10.

- *That the stream to the south of the site (i.e.) sample points SW1,SW3,SW5 flows to the River Boyne.*
- *Concerned about the levels of contamination in Table 5.4.1 of the application (surface water monitoring) and they will be carrying out their own investigations. Any deleterious matter present may leave various parties open to prosecution under the Fisheries and Water Pollution Act*
- *ERFB believe a lot of work is required to ensure that there is no contamination of nearby ground and surface water from the site and ask the EPA to ensure all necessary measures are taken to decontaminate the site before any waste licence is granted*
- *The ERFB has expressed its reservation to Meath Co. County Council regarding the application from the restaurant adjacent to the site for a Section 4 discharge licence (which involves a discharge to the Boyne tributary to the North of the site) under the Water Pollution Act.*

Comment:

I note the ERFB comment regarding the stream to the south of the site. This has been addressed in Section 6 (surface water) of this report. The contamination levels in the surface water ditches/drains and stream has also been addressed in Section 6. Compliance with the conditions attached to the recommended PD will ensure that this facility will have no impact on surface water and groundwater.

I also note the ERFB comment in relation to a Section 4 discharge licence to cater for effluent from the restaurant adjacent to the site but this is a matter for Meath Co. Council as they are the permitting authority in this case.

Submission 9 and 10(same submission)

- *The ERFB express their concern regarding the contamination in Boreholes 1 and 2 as well as diesel contamination in the surface water sample and for the Agency to ensure that these sites are decontaminated as soon as possible and the source of contamination removed.*

Comment:

This issue has been addressed in Section 5 (Groundwater) of this report. Investigations into hydrocarbon contamination concluded that significant hydrocarbon contamination is unlikely. BH 1 and 2 are located outside the facility boundary and any contamination in groundwater as the report states is likely to have been caused by activities within the service station, including delivery, storage and retail of petroleum products and repairing cars. No physical evidence of contamination was observed in the remaining boreholes. The report also concluded that it was possible that surface run-off from the road into the stream had caused the very slightly elevated concentrations in surface water samples.

Submissions 11,12,13 and 14: Teresa Hand, Christopher Hand, Marie McCluskey, Chris McCluskey Rathdrinagh, Beauparc, Co. Meath submitted 27 September 2001.

In this submission the above named submitters state that *‘with reference to an application for a waste licence by the above named (i.e. the applicant) in respect of a facility at Rathdrinagh, Beauparc, please note that we do not now object to an application for same in this area’*.

Comment:

The submitters’ comments are noted.

Signed _____

Dated:

Mr. Brendan Foley
Inspector, Environmental Management & Planning

APPENDIX 1
LOCATION MAP & LAYOUT PLAN