

## INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER 131-1

**Facility Name:** Midland Waste Disposal Company Limited Transfer Station

**Name of Applicant:** Midland Waste Disposal Company Limited

**Inspectors Recommendation:** To grant a waste licence subject to conditions

### (1) Introduction

<b>Quantity of waste (tpa)</b>	32,000 (maximum)
<b>Environmental Impact Statement Required</b>	Yes
<b>Number of Submissions Received</b>	Three
<b>Date of Application</b>	01 December 1999

### Site Visits

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
04.05.00	Site notice inspection	D. Shannon P. Crawley	Site notice complies with Article 8.
01.08.00	Visit site and surrounds	D. Shannon	

The applicant runs a waste collection service in the Meath/Dublin area and has operated a waste transfer station at the Clonmaggadan site since 1991. A site location map and a drawing illustrating the layout of the facility are presented in Appendix 1. The transfer station is situated within a disused quarry some 2 km north of Navan town centre and approximately 500m west of the R162 Navan to Kingscourt road. Access to the facility is gained via a cul-de-sac roadway leading from the R162. The waste licence application was received after the relevant prescribed date and unauthorised licensable activities have been carried out at the facility.

The site is in a rural setting, with land to the south, east and west primarily used for agricultural grazing. An operational quarry is located immediately north of the facility. The site comprises a total area of 2.4 hectares, half of which is built upon. The nearest residential development is approximately 300m south of the facility buildings and infrastructure, and 200m south of the site boundary. Local topography affords complete screening of the site buildings and activities from this development. A sports field is situated approximately 200m north east of the facility.

The floor of the disused quarry in the southern portion of the site has been backfilled with an estimated 7m to 10m of imported C&D material.

The provision and maintenance of infrastructure at the facility is set out in Condition 4. Waste acceptance and handling is controlled by Condition 5. The facility accepts commercial, industrial, domestic and C&D waste and the applicant proposes to accept hazardous waste for recovery, in the form of batteries and fluorescent tubes. The application indicates that waste acceptance procedures will be upgraded and this is formalised by Condition 5.2, which requires the submission of detailed written waste acceptance and handling procedures. Wastes entering the facility are to be weighed, documented and brought to the Recycle Plant Building where they are to be unloaded and inspected prior to processing. All waste processing is conducted indoors. Waste handling is restricted to the hours of 08:00 to 20:00 Monday to Saturday inclusive.

At present approximately 17% of all waste accepted at the facility is segregated for recovery. Most of the recovered material is C&D waste suitable for use as backfill. The current recovery rate for C&D waste is approximately 47%. Metal, timber, cardboard and paper are also recovered and sent off-site for further treatment. The PD proposes to allow future composting and recovery of glass, subject to the prior agreement of the Agency and the provision of infrastructure. Waste deemed unsuitable for recovery will be compacted on site and then transported to a landfill facility agreed in advance by the Agency. Prior to transport off-site waste may only be stored indoors or within fully enclosed containers outdoors. A maximum of six enclosed containers of waste may be stored overnight at the facility.

Potential nuisance from vermin, birds, flies, mud, dust, odours and litter are controlled by Condition 6.

In the event of a partial or complete closure of the facility the applicant proposes to undertake an exit and due diligence audit and to remove all hazardous substances and items of equipment likely to pose a threat to the environment. Condition 8.1 requires this plan to be updated at the request of the Agency. Financial provision for closure, restoration and aftercare is controlled by Condition 11.2.

Meath County Council granted planning permission for the facility in 1991 (P90/1370). In April 2000 planning permission was granted for an extension of the Recycle Plant Building and for the retention of works on-site (99/1518). The extension of the Recycle Plant Building is included in Schedule D - Specified Engineering Works and is subject to the agreement of the Agency.

<b>(2) Waste Types and Quantities</b>
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21,000 tonnes of domestic, industrial, commercial and C&D wastes were accepted at the facility in 1999. The applicant anticipates an increase of 5% to 15% per annum in the throughput of waste over the next 4 years and proposes to accept some 32,000 tonnes of waste per annum by 2003. Condition 5 controls the quantity and type of waste to be accepted.

Condition 5.14 permits the acceptance of up to 2 tonnes per annum of hazardous waste in the form of batteries and fluorescent tubes. This material may be segregated and stored on site pending transport off-site for recovery at an appropriate facility.

### **(3) Emissions to Air**

Emissions to air include dust, odours and noise. Condition 6.8 requires that dust and odours do not give rise to nuisance at the facility or the immediate area of the facility. Condition 7.3 requires that noise emissions do not result in significant interference with the environment beyond the facility boundary.

Airborne dust may be generated through the sorting and processing of waste and by traffic movements on site. Dust deposition rates ranging from 550 mg/m<sup>2</sup>/day to 823 mg/m<sup>2</sup>/day were reported along the northern perimeter of the facility, but it is noted that the applicant considers that much of the dust may have originated from an adjacent operational quarry. Condition 9.5 establishes the dust monitoring programme and includes a requirement for monthly directional dust monitoring to establish the source of dust fallout. Dust control is required by Condition 6.7. The processing of waste indoors (Condition 5.6) will reduce the potential for dust emissions.

An odour assessment submitted with the application identified a dominant odour, attributable to municipal waste, at the entrance to the Recycle Plant Building. The removal of waste for disposal within forty eight hours of its arrival on site, or at Bank Holidays within seventy two hours of its arrival on site (Condition 6.1), the processing of waste indoors (Condition 5.6) and the storage of waste either indoors or within fully enclosed containers (Condition 5.11) will assist in the reduction of odour emissions from the facility.

Noise emissions from the facility are associated with site traffic, waste loading and deposition, mobile plant and the operation of the compactors and baler. Noise levels to the south of the Recycle Plant Building ranged between 46.6dB(A) and 52.3dB(A). Noise levels at the nearest residential property were 51.3dB(A). Elevated noise levels of 58.7dB(A) and 66.3dB(A) were reported along the northern perimeter of the site, adjacent to the roadway. Vehicle traffic outside the facility and activities at an adjacent quarry contributed to these elevated noise levels.

The local topography, which includes an elevated rock face some 2m to 4m high in the southern portion of the site, affords effective screening of noise between the facility and the nearest residential property, and it is considered that noise impacts from the facility are likely to be insignificant. Noise monitoring required by Condition 9 includes monitoring at noise sensitive locations to the south and north east of the facility.

Emission limits for both dust and noise are established in Schedule F. Condition 10.7 requires further action to be taken in the event of these emission limits being exceeded.

#### **(4) Emissions to Groundwater**

The application indicates that the site is underlain by a massive, faulted, unweathered syenite. Groundwater movement within the bedrock appears to be concentrated along faults and joints and the bedrock is classified at best as a Locally Important Aquifer. Overburden in the immediate vicinity of the facility is reported to be around 2m thick, indicating an extreme aquifer vulnerability rating. It is noted however that protection of the aquifer is afforded by the impermeable hardstanding that covers all areas where vehicles are parked and where waste is handled and stored (Condition 4.4).

Run-off from all areas where waste is handled or processed is prohibited from entering the groundwater by Conditions 4.14 and 7.6 which require such run-off to be discharged to and stored in a holding chamber prior to transport off-site for disposal at Navan Waste Water Treatment Plant.

Vehicle washwater and surface water run-off from areas other than roofs and those areas discussed in the preceding paragraph currently passes through oil interceptors/sedimentation tanks prior to discharge to ground via two soak pits. The soak pits are not considered best available technology and Condition 4.13 requires that they be replaced, within six months of the date of grant of the licence, with a secondary wastewater treatment system or equivalent that satisfies the guidance document "Wastewater Treatment Manuals – Treatment Systems for Single Houses". Condition 9 provides for monitoring of the discharge from the secondary wastewater treatment system or equivalent and Schedule F establishes emission limit values for such discharge.

Sewage treatment works at the facility were recently upgraded such that sewage is now treated in a septic tank and Puraflo biofiltration unit prior to discharge to ground. Condition 4.15 requires compliance of the treatment works with the recommendations of the Agency's guidance document referred to in the previous paragraph, and submission of a report on the installation of the treatment works.

The groundwater monitoring programme currently undertaken at the facility comprises monitoring of a single abstraction well to the immediate north of the facility. Elevated levels of Ammonia-N (1.4mg/l) were recorded in this well. It is not conclusively known if the well is upgradient or downgradient of the facility, the well construction details are unavailable and this well alone is deemed insufficient for groundwater monitoring purposes. Condition 9.2 requires the installation of two additional boreholes to provide a more comprehensive monitoring network. Condition 9 and Schedule E set out the groundwater monitoring requirements.

#### **(5) Emissions to Surface Water**

There are no emissions to surface water and this is formalised by Condition 7.4.

**(6) Other Significant Environmental Impacts**

None

**(7) Waste Management, Air Quality and Water Quality Plans**

Consideration was given to the Draft Waste Management Plan for the North East Region and the Draft River Boyne Water Quality Management Plan. The Draft Waste Management Plan identifies the need for a transfer station at Navan, but the facility is not included in the list of privately operated transfer stations outlined in the plan.

**(8) Submissions/Complaints**

There were three submissions made in respect of this application and these are dealt with as follows:

**Submission 1:** Received from the North Eastern Health Board on 11 August 2000.

**Issue:**

The submission stated that the applicant should be asked to submit further information on the eight items outlined below.

1. *Water supply for the facility. The facility must provide for its own water supply.*
2. *Proposals for the prevention, control and eradication of vermin, pests and insects.*
3. *Disposal of wastewater from the truckwash. Concern about the use of a soakpit.*
4. *Volumes of water intended for use (for truck washing etc.)*
5. *Composition of domestic waste accepted at the facility.*
6. *Formulae used to establish the capacity of the leachate tank.*
7. *Dust controls.*
8. *Details for minimising odours from the leachate drains.*

**Response 1:**

Water supply details are given in the application. A requirement for the facility to provide for its own water supply was considered to be outside the scope of the waste licence.

**Response 2:**

Waste processing shall be conducted indoors (Condition 5.6) and any waste stored outside of buildings shall be in fully enclosed containers (Condition 5.11). A maximum of six such containers shall be stored overnight at the facility (Condition 5.13). These procedures will limit the attraction for vermin, pests and insects. The facility and its immediate surrounds shall be inspected on a weekly basis for vermin, pest and insect nuisance (Condition 6.2). Condition 6.8 specifies the control of such nuisance.

**Response 3:**

Condition 4.13.1 requires the soak pits to be decommissioned and replaced with a secondary wastewater treatment system or equivalent. Wastewater from the truckwash must pass through a suitable oil interceptor/sedimentation tank and the secondary wastewater treatment system prior to discharge to ground.

**Response 4:**

The application states that water usage at the truck wash area is restricted to essential washing activities and that the final volume of wastewater from the truckwash discharged to ground is considered low. The quantity of domestic sewage generated at the facility is estimated at 0.65m<sup>3</sup>/day.

**Response 5:**

Condition 5.1 specifies the types of waste that may be accepted at the facility.

**Response 6:**

To prevent possible overflow of the foul water holding chambers Condition 7.6 requires that a minimum of 10% spare capacity be maintained in the chambers at all times. The foul water holding chambers must be fitted with a high level visual alarm.

**Response 7:**

Dust controls are specified in Condition 6.7. The facility and its immediate surrounds shall be inspected on a weekly basis for dust nuisance (Condition 6.2). Condition 6.8 requires that dust does not give rise to nuisance at the facility or the immediate area of the facility.

**Response 8:**

Condition 4.16 requires the drainage system to be properly maintained at all times, inspected weekly and desludged as necessary. Condition 6.2 specifies weekly inspections for odour nuisance at the facility and its immediate surrounds. Condition 6.8 requires that odours do not give rise to nuisance at the facility or the immediate area of the facility.

**Submission 2:** Received from the Eastern Regional Fisheries Board on 09 August 2000.

**Issue:**

The protection of fisheries interests and the prevention of deleterious matter entering local waters.

**Response:**

Condition 7.4 requires that there shall be no emissions to surface water.

**Submission 3:** Received from Dúchas on 09 August 2000.

**Issue:**

Dúchas have no objection to granting of the licence.

**Response:**

None required.

No complaints were received with respect to the facility.

Signed \_\_\_\_\_

Dated:

David Shannon

**APPENDIX 1**  
**LOCATION MAP & LAYOUT PLAN**



## **APPENDIX 2**

### **LIST OF PERSONS MAKING SUBMISSIONS**

1. Ms. Caitriona Walsh  
Environmental Health Officer  
North Eastern Health Board  
Community Care Services  
County Clinic  
Navan  
Co. Meath
2. Mr. Damien McWeeney  
Countryside Protection Unit  
Department of Arts, Heritage, Gaeltacht and the Islands  
7 Ely Place  
Dublin 2
3. Mr. Alan McGurdy  
Chief Executive Officer  
Eastern Regional Fisheries Board  
Balnagowan  
Mobhi Boreen  
Glasnevin  
Dublin 9