Midland Waste Disposal Company Ltd.,

Waste Licensing
Waste Recovery/Disposal Activities
(Other than Landfill Sites)

Section A

Non-Technical Summary

Midland Waste Disposal Company Ltd., operate a waste transfer station at Clonmagaddan, Proudstown, Navan, Co. Meath (grid reference: E2868 N2698). The facility currently operate under a Waste Licence Reg. No. 131-1. Under the conditions of the existing waste licence Midland Waste Disposal Company Ltd., are licensed to handle a maximum tonnage of 32,000 tonnes per annum. This waste licence review application is being made to increase the maximum tonnage to 95,000 tonnes per annum. In addition, Midland Waste Disposal Company Ltd., wish to make changes to the following:

- Extent the hours of operation;
- Increase the number of waste containers held outside over night at the facility.
- Introduce Class II of the fourth schedule "Use of waste obtained from any activity referred to in a preceding paragraph of this schedule"

Midland Waste Disposal Company Ltd., were established at the facility since 1991 and became part of the Advanced Environmental Services (AES) group in 2000.

The facility is located in a former limestone quarry, located on the northern outskirts of the town of Navan in County Meath. The site is situated within an industrial area of the town with industrial premises located to the north of the facility. There are agricultural lands situated to the east and west of the facility. There is a residential area located ca. 300 m south of the facility. The site is located off a cul-de-sac from the main R162 Navan-Kingscourt Road with other industrial units of the roadway.

There is no surface water features located within the immediate vicinity of the facility, with the nearest water coarse located ca. 500m north of the site. This stream is a minor tributary of the River Blackwater.

The facility is located within a historical quarrying and as such there is limited overburden/subsoils coverage. As such, the site is set in an area with an extreme vulnerability classification. It is noted however, that all operations are carried out on hardstanding areas. Additional information obtained revealed that the surrounding area is generally underlain by glacial till deposits with sand and gravels and glaciofluvial gravel. Reported thickness of the overburden materials is generally <10m with several bedrock outcrops observed in the vicinity of the site. The bedrock geology in the vicinity of the site is documented as being dominated by Lower Palaeozoic Metasedimentary and Metavolcanic Bedrock units.

The majority bedrock units underlying the site and surrounding area are classed by the Geological Survey of Ireland as poor aquifers except in localised zones (PI) with locally important aquifers which are moderately productive only in local zones to the south (LI). On-going groundwater monitoring have indicated that the quality of the groundwater beneath the site is clean.

The area in general is dominated by a general increase in elevation North of the site towards the townland of Antylstown located 2Km north of the site and an apparent 28m difference in elevation. To the South, East and West the site environs outside the enclosure of the disused quarry is the dominant topographical feature. The remaining hill not subject to any excavation to the South of the site is some 10 m OD above surrounding areas. The site is located in an industrial setting, with a number of industrial premises located along the cul-de-sac. The facility is situated between agricultural lands to east and the west with quarrying activities occurring to the north of the site. The site itself was established within a disused quarry, which acts as visual shields of the all site buildings and activities to the East, West and in particular to the South. Additional screening is afforded by an established tree-line/shrubbery to the East and West. To the North, the site is exposed to an operational quarry. A row of ornamental trees of Cypress cultivars were planted along the northern boundary of the site and this provides screening of the facility from the roadway.

The application has been made in accordance with Part V of the Waste Management Act, 1996 and supporting documentation: Waste Management (Licensing) Regulations, S.I. No. 185 of 2000 (and subsequent amendments) and EPA Guidance Notes for Applicants – Waste Licensing: Waste Disposal Activities (Other then Landfill Sites).

The licenced waste disposal and waste recovery activities that take place at the site as per the Waste Management Act, 1996, are outlined as follows:

Third Schedule -Waste Disposal Activities

Class 11: Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this schedule.

Class 12: Repackaging 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 is produced.

Fourth Schedule -Waste Recovery Activities

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

Class 12: Exchange of waste for submission to any activity referred to in

a preceding paragraph of this schedule.

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

In is proposed to include the Class 11 of the Fourth Schedule "Use of waste obtained from any activity referred to in a preceding paragraph of this schedule" as part of the licence review.

The nature of the waste is that of domestic household waste, industrial (non-hazardous), commercial and construction and demolition. It is proposed that when the facility is operating at full capacity that it will accept 95,000 tonnes of waste per annum.

Facility Design

The following infrastructure is existing at the facility:

- Site security at the facility consist of 810m of 8 ft continuous palisade fencing along the entire boundary; 3 no. entrance ways into the site
- Hardstanding area over all operational areas of the site;
- Site accommodation consists of office building, port-a-cabin for canteen facilities and a mobile home for site security
- Workshop
- Weighbridge connected to computerised system

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- Recycling Plant Building with leachate collection system; Trommell with picking line, Composting unit, in-floor baling system, waste storage areas;
- Glass storage bay;
- Fuel storage areas
- Waste Segregation Area
- Silt-trap and oil interceptor;

It is proposed to install the following;

- Increase area of hardstanding to 3500m²;
- Second composing unit.

Bulk fuel storage at the site consists a 6000 gallon main diesel tank, a 200 L kerosene storage tank, and 2 no. 300 gallon hydraulic oil/Engine oil tanks in workshop/diesel shed. These tanks are located within fully reinforced concrete bunded area that conform to the standard bunding specification (BS8007-1987) with the capacity of holding 110% of the tank capacity. Lubricating greases, gear oils, and steering oils are also used on-site and these are held within a bunded area within the workshop. All bunds have been integrity tested under the conditions of the existing waste licence. Minor quantities of cleaning agents, and paints are maintained on-site. Waste oil generated from plant is removed by an authorised contractor (Allied Waste Oil) on an annual basis.

Water used at the facility is sourced from Kilsaran Well and rainwater run-off from roofed areas. There are no meters on either of these supplies therefore calculation of water usage is not possible. Water usage is restricted to the canteen/sanitary requirements. Energy usage on site comprises of electricity, and diesel for the on-site plant equipment.

Surface water run-off from all hardstanding areas is directed into the surface water drainage system. Currently there is one surface water drainage systems at the facility which directs all water from the site towards the north-west corner of the site where the water is discharged to the ground through a soakpit via an oil interceptor. It is proposed to install a second drainage system at the facility to divert the surface water run-off from the southern section of the site towards the eastern boundary, where the water will be discharged to the ground through a soak pit (via an oil interceptor).

A small scale treatment system (Bord na Móna PurafloTM system) is installed at the facility to services all domestic wastewaters emanating from the office buildings, canteen and site accommodation. The discharge from the treatment system discharges

into the foul water holding tanks which are emptied on a regular basis and discharged into the local authority treatment plant.

On-site Operations:

Currently, normal operational hours at the Midland Waste Disposal Ltd. facility are between the hours of 08:00 to 20:00 Monday to Saturday. It is proposed to extend the hours of operation within the facility from 06:00 to 20:00 Monday to Saturday.

Theses wastes are characterised as follows:

- Domestic household waste
- Commercial
- Industrial
- Construction and Demolition
- Hazardous material limited to batteries, fluorescent tubes & tyres

All wastes entering the site are forwarded to the weighbridge system which records the details and quantities of waste accepted on site. After weighing, each waste load is brought to the enclosed Recycle Plant Building, where it is deposited on the floor for visual inspection to ensure that all wastes comply with the requirements of the existing Waste Licence, Register No. 131-1. The Waste Segregation Manager (Mr. Bernard Kelly) is responsible for carrying out the waste visual inspections and for maintaining a written record of all inspections. Written records of each inspection is recorded.

Within the Recycling Plant Building the waste is sorted according to its recycling potential and is either deemed suitable for recycling/recovery or compacted within one of the compactors on-site and transported off-site for final disposal (non-recoverable waste). The categories of waste deemed suitable for segregation and recycling is dependent on available markets for such materials. Materials commonly accepted for recycling include Steel/ Iron, Cardboard/Newsprint, Timber, Construction & Demolition waste, Green Waste, Plastic and Glass and on occasion empty gas cylinders and tyres. All waste not deemed suitable for recycling/recovery is loaded into designated Ro-Ro Bins, or a 40 foot injector trailer or is compacted within one of two compactors on-site. All compacted wastes are sealed within specialised containers and are subsequently transported for authorised disposal. All waste being transported from the facility by Midland Waste Disposal Company Ltd. is weighed on the weighbridge. An individual weigh docket is printed for each waste load.

Construction and Demolition waste is sorted through the trommel and sorting line. All recyclable material is forwarded to off-site licenced facilities for recovery. Stone & bricks is used for the construction of roadways and soils/subsoils are used in land reclamination. Industrial & commercial waste is directed either to the trommel where recyclable matter is recovered or directly to the in-floor baler for recovery off-site. Any residual material is forward to landfill for disposal. Household waste is directed through the trommel and sorting line. Recovered organic fines are directed to the VCU unit for composting. Dry mixed recyclables are directed to the in-floor baler for bulk load to be forwarded off site for recovery.

Plant used at the facility will include a weighbridge, 2 no. Industrial compactors, 2 x Shredders, 1 no. Baler, 1 no. Bobcat, 1 no. Forklift, 1 no. Samsung grab, 1 no. Volvo loading shovel, 2 x Hitachi & grabs, 2 x Trommell & conveyor system, 1 no. Blender unit, 1 no. VCU Composting unit

Emissions/Nuisances

The facility operates for the acceptance and handling of waste and as such potential emissions to the environment during normal operation procedures could potentially include dust emanating from hardstanding areas, windblown litter, leachate generation and odours. To ensure these emissions/nuisances are minimised a number of measures have been put in place including speed restrictions, handling of waste within Recycling Plant Building, collection of dirty waters within operational areas, and regular nuisance inspections.

Environmental Impacts

In order to predict the impacts of on-site operations on the existing site and its environs an Environmental Impact Assessment was carried out by Bord na Mona Environmental Ltd.

Potential air emissions were examined under two separate headings:

- Odour
- Dust

Odour: Due to the nature of the development the generation of odours may occur through the handling of waste, mainly the household municipal waste faction, at the facility. The generation of odours and the associated nuisance it can potential cause depends of the (i) dispersion of the odours, (ii) the prevailing wind and (iii) the distance to the nearest sensitive receptors i.e. nearest residential dwelling. An odour assessment at the facility concluded that the upwind and downwind odour concentrations were

similar on the day of sampling and visual observations on the site indicated that the potential odorous emissions from the Midland Wastes Disposal Company Ltd's facility did not contribute to increased odour levels downwind of the site facility. On-going good operational practises at the site and inspections will ensure no odour nuisances are caused as a result of the activities at the facility.

Dust: Dust may be generated at the facility through the movement of HGV's within the site boundary and the movement of friable material within the site. The results of the dust monitoring at the facility indicate that levels of dust are higher along the northern boundary along the roadway, and close to an adjacent industrial site. Dust directional gauges at these monitoring stations predominantly indicate that dust is being generated from the east and west (traffic movement) and from the north (off-site activities), rather than from the working areas of Midland Waste Disposal Company Ltd. On-going good operational practises at the site and inspections will ensure no dust nuisances are caused as a result of the activities at the facility.

Any surface water run-off from hardstanding areas at the facility, is currently directed towards the front of the site, where it is collected in the surface water drainage system. This collected water is discharged through a soakaway (via a siltration trap and oil interceptor) to ground. There are no discharges to surface water and no surface water bodies within the vicinity of the site. A leachate collection system is in place in order to collect leachate emanating from the recycling plant. Leachate is conveyed via dedicated drains to the foul water storage tank. The foul waters are temporarily stored within the tank for subsequent collection when required by tanker. Final disposal is through Navan wastewater treatment plant. There are no discharges of foul waters or leachates from the facility to groundwaters.

A preliminary investigation of the Cultural Heritage of the site and surrounding environs was carried out. There are no historically important sites within the immediate vicinity of the facility. It is anticipated that the operation of the waste transfer facility will not impact on the Cultural Heritage of the area.

A baseline ecological survey was conducted at the site. All the species identified within the site are common throughout the Irish countryside and neither the site nor its surrounds are designated as a conservation area, it is deemed that the site is of low conservation value. Hedgerows are located along the site boundary. Species composition in the area are relatively common and as such on-site activities would not be expected to impact in any way on current habitat conditions. The existing environment is not designated as a Natural Heritage Area or a Special Protection Area under the Birds Directive or as a Special Conservation Area in accordance with the

Habitats Directive, nor, is it designated under any of the other nature conservation designations currently used.

Noise emissions from the facility are generated through the operation of equipment on-site and the movement of vehicles within the facility. Noise predictions on the impact of the facility at the nearest sensitive receptor has been carried out and these indicate that the noise will remain below the emission limits as stipulated in the existing waste licence. The results of the on-going monitoring at the facility indicate that noise within the area is resulting predominantly traffic noise. The levels of noise coming from the facility at the noise sensitive receptor were insignificant in comparison to traffic noise and these locations. Good operational practises at the facility will be maintained to ensure no noise nuisances are caused as a result of the workings of the facility. These will include Proper maintenance of vehicles and equipment, waste handling operations carried out indoors and on-going monitoring of site noise levels.

It is considered that the proposed waste handling procedures will not visually impact on the surrounding areas. Visibility of the site (from the south east, & west) is prevented by a local topography and the northern boundary is planted with trees which prevents a view of the facility.

The facility is located within an Industrial area and as such is in keeping with the existing land usage. Furthermore, current procedures e.g. continued enclosure/covering of waste material, efficient/immediate sorting and recycling ensure that potential nuisances from e.g. odours, dust and pests are not likely. Since the commencement of operations at the facility were have been no complaints or grievances expressed by any member of the public with relation to onsite activities.

Contingency arrangements at the site are considered sufficient to deal with any unexpected/uncontrolled event. If a situation arises that has not been foreseen, then the appropriate arrangements and actions will be decided by the Facility Manager at the time of the occurrence. Furthermore, an emergency response procedure is in place to ensure the quick response to any potential emergency.

Environmental Monitoring

It is proposed to continue environmental monitoring at the facility in compliance with the existing waste licence:

- Dust
- Noise

- Groundwater
- Groundwater emissions

Midland Waste Disposal Company Ltd., or any of the personnel employed at the facility have never been convicted of any offence under the Waste Management Act, 1996. Midland Waste Disposal Company Ltd., employ only experienced staff to oversee and operate the facility, and they provide sufficient training to all relevant staff as required.

Restoration and Aftercare

Midland Waste Disposal Company Ltd., have set out plans in the unlikely event of facility shut down, or a planned cessation for a period of greater than six months of all or part of the site involved in the licensed activity. Should either of the above conditions occur Midland Waste Disposal Company Ltd., will decommission, render safe or remove for disposal/recovery, all materials, waste, ground, plant and equipment that may result in environmental pollution.

Following implementation of the plan, Midland Waste Disposal Company Ltd., will produce a validation report that demonstrates its successful implementation. This report will confirm that there is no continuing risk of environmental pollution to the environment from the site.