

**INSPECTORS REPORT**  
**WASTE LICENCE REGISTER NUMBER 79-1**

**(1) Summary:**

National Waste Management Ltd. (NWML) operate a non-hazardous waste transfer station in Tallaght. The quantities per annum are currently 110,000 tonnes of which over 70% is recovered/recycled, the rest goes to landfill. NWML expect to increase their throughput by approximately 10% per annum. The PD allows this with the proviso that at least 70% of the throughput be recovered/recycled. The main issue of environmental concern is the high dust levels. Noise levels are high also but this may be largely due to the location of the site in an industrial estate in Dublin.

<b>Name of Applicant</b>	National Waste Management Limited (NWML)
<b>Facility Name(s)</b>	National Waste Management Limited (NWML)
<b>Facility Address</b>	Unit 41, Third Avenue, Cookstown Industrial Estate, Tallaght, Dublin 24
<b>Description of Principal Activity</b>	The storage of waste for recovery or recycling purposes
<b>Quantity of waste (tpa)</b>	Greater than 100,000
<b>Environmental Impact Statement (EIS) Required</b>	Yes
<b>Number of Submissions Received</b>	One
<b>INSPECTOR'S RECOMMENDATION</b>	The proposed decision as submitted to the Board be approved.

Notices	Issue Date(s)	Reminder(s)	Response Date(s)
Article 14 (2) (b) (i)	N/A		
Article 14 (2) (b) (ii)	02/11/98 17/12/98		16/03/99
Article 14 (2) (a)	23/08/99		
Article 16	24/08/99		15/09/99

<b>Applicant Address</b>	Unit 41, Third Avenue, Cookstown Industrial Estate, Tallaght, Dublin 24
<b>Planning Permission Status and Date Granted (if appropriate)</b>	Planning Ref: P/ 5827/ 92; P/ 0311 /93
<b>Planning Authority</b>	South Dublin Co. Co.
<b>Is the facility an existing facility</b>	Yes
<b>Date Application received</b>	30 <sup>th</sup> September 1998
<b>Confidential Information Submitted</b>	No
<b>Location of Planning Documents in Application</b>	Attachment B.3
<b>Location of EIS in Application</b>	Volumes 1, 2 and 3.

**FACILITY VISITS:**

<b>DATE</b>	<b>PURPOSE</b>	<b>PERSONNEL</b>	<b>OBSERVATIONS</b>
11/03/99	To inspect site notice and site inspection	S. Kennelly	Site notice in compliance with Regulations.
01/11/99	Site inspection	S. Kennelly	Site visit for preparation of PD

<b>(2) Class/Classes of Activity</b>
--------------------------------------

**The class(es) of activities for which the applicant has applied are marked below. The principal activity is indicated by (P).**

<b>Waste Management Act, 1996</b>			
<b>THIRD SCHEDULE Waste Disposal Activities</b>		<b>FOURTH SCHEDULE Waste Recovery Activities</b>	
1.	Deposit on, in or under land (including landfill).	1.	Solvent reclamation or regeneration.
2.	Land treatment, including biodegradation of liquid or sludge discards in soils.	2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
3.	Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories.	3.	Recycling or reclamation of metals and metal compounds.
4.	Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.	4.	Recycling or reclamation of other inorganic materials.
5.	Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.	5.	Regeneration of acids or bases.
6.	Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule.	6.	Recovery of components used for pollution abatement.
7.	Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule (including evaporation, drying and calcination).	7.	Recovery of components from catalysts.
8.	Incineration on land or at sea.	8.	Oil re-refining or other re-uses of oil.
9.	Permanent storage, including emplacement of containers in a mine.	9.	Use of any waste principally as a fuel or other means to generate energy.
10.	Release of waste into a water body (including a seabed insertion).	10.	The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.
11.	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.	11.	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
12.	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.	12.	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
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.	X	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.
			P

**Class Description:**

The applicant describes the classes as follows:

**Third Schedule:***Class 13:*

National Waste Management Limited currently handle approximately 30,000 tonnes per year of commercial and industrial waste. This constitutes approximately 30% of the total throughput through the transfer station. This waste is loaded into bulk vehicles and sent for disposal to landfill.

**Fourth Schedule:***Class 3:*

Waste arriving at the transfer station is manually sorted and all large metal items are removed. Metals are stored in skips prior to sending off-site for reprocessing. National Waste Management Limited currently recycle approximately 1,500 tonnes/year of metal.

*Class 4:*

The recycling and reclamation of other inorganic materials such as bricks, cement, ceramics, soil from construction and demolition waste. (Ref: Art 14 reply received 15<sup>th</sup> March 1999)

*Class 13: Principal Activity*

Over 70% of the waste going through National Waste Management Limited's transfer station is recycled. 73% of the waste handled is construction and demolition waste which is shredded on-site for off-site use as landfill cover or hardcore for road construction.

<b>(3) Facility Location</b>
------------------------------

**Appendix II contains a (i) Location Map showing Cookstown Industrial Estate and (ii) Site Location Map.**

The site is located in an industrial estate in Tallaght, County Dublin. This estate comprises approximately 100 industrial and commercial units. Tallaght General Hospital is approximately 200m south of the NWML facility. The nearest residential properties are approximately 300m north and 300m west of the site. The nearest school lies approximately 1km to the north east of the site and Tallaght Institute of Technology lies approximately 1km to the south east of the site.

<b>(4) Waste Types and Quantities</b>
---------------------------------------

Total quantities and types of wastes accepted by the facility are shown below. See Table B.8.1 of the application.

**Table 4.1**

YEAR	NON-HAZARDOUS WASTE (tpa)	HAZARDOUS WASTE (tpa)	TOTAL ANNUAL QUANTITY OF WASTE (tpa)
1998	106,480	0	106,480
1999	115,000	0	115,000
2000	126,000	0	126,000
2001	135,000	0	135,000
2002	145,000	0	145,000

The EIS currently predicts a 10% increase in throughput per annum (as reflected in the table above) which would give total annual quantities of 159,500 tpa for 2003 and 175,450 tpa for 2004. Table H.2 of the PD shows the maximum quantities that it is proposed the licensee be licensed to accept at the site **subject to 70% of the material being recycled or recovered every year** (see Condition 5.3) of which a minimum of 85% of construction and demolition waste must be recycled/recovered. The AER requires estimates of the coming year's quantities and percentages of waste to go for disposal and recycling/recovery (see Schedule C). Table 4.2 shows the distribution of waste types that are to be accepted at the facility (see Condition 5.2 and Table H.1 of the PD).

**Table 4.2**

Waste Type*	Distribution of waste types per Annum
Commercial and Industrial Non-Hazardous Solids	30%
Construction and Demolition	70%
<b>Total</b>	<b>100%</b>

\*The distributions of these waste types can only be changed with the prior agreement of the Agency.

## **(5) Facility Operation/Management**

- **Waste Handling**

The transfer station is an enclosed building of floor area 323m<sup>2</sup>. The contents of the Rear End Loading (REL) vehicles and skips are deposited on the floor of the transfer station. Construction and demolition waste are kept segregated from the commercial and industrial waste. Metal and timber items are picked from the waste on the floor by operatives and are sent off-site for recycling.

- **Waste Acceptance Procedures**

Only non-hazardous solid wastes are accepted at the facility (see Condition 5.2). National Waste Management Ltd. use REL vehicles to collect waste from commercial and industrial premises. They own 4 no. REL's, each capable of holding a maximum of 12 tonnes of compacted waste. They also hire out waste skips of different sizes to builders for construction and demolition waste. Before a waste skip is collected it is inspected by the driver and if it contains unsuitable waste it is taken directly to landfill for disposal and does not pass through the transfer station. Procedures for the rejection of loads are to be provided under Condition 5.7 of the PD.

- **Nuisance Control**

**Dust**

Dust deposition was found to be extremely variable ranging from 110 mg/m<sup>2</sup>/day at the site entrance during 19<sup>th</sup> January to 19<sup>th</sup> February 1999 to a level of 4140 mg/m<sup>2</sup>/day at the site entrance during 19<sup>th</sup> March to 19<sup>th</sup> April 1999. A Dust Monitoring and Control Plan is required to be submitted as a matter of priority i.e. within three months of the date of grant of the licence (see Condition 7.5). Present mitigation measures include a water sprinkler system which is fitted to the waste shredder, a metal fence around the western corner of the site (where the shredder is located) which must be maintained under Condition 4.7, and regular hosing down of the yard.

**Fire**

The factory is fitted with a fire alarm, smoke detectors and fire extinguishers as shown in Attachment K of the application. Firewater retention would be in the interceptor sumps. There are three three-stage interceptors with a total capacity of approximately 500 gallons and one one-stage interceptor with a capacity of approximately 150 gallons.

**Litter**

All vehicles entering the facility are covered, minimising the occurrence of litter (see Condition 6.6). Waste is tipped onto the floor of the transfer station and is not to be unloaded or stored in the open (see Condition 5.8). Windblown litter is not an issue as long as good housekeeping measures are employed (see Conditions 6.3 and 6.5).

**Traffic**

NWML operate 27 waste collection vehicles of varying sizes and capacities. There are an average of 20 vehicle movements per hour into and out of the facility with each vehicle taking an average of 5 minutes to unload before leaving the site. Approximately 12 vehicles are parked overnight at the site in the main yard with the rest parked off-site. NWML are required to submit a report under Condition 6.9 to provide proposals for the management of vehicles and traffic into and out of the transfer station due to the throughput of waste quantities increasing on a yearly basis if this happens as predicted.

**Vermin**

Vermin control at the facility is undertaken by Rentokil (see Condition 6.7). Putrescibles are not stored at the site overnight (see Condition 5.13).

- **Hours of Operation**

Monday to Friday 6:00 am to 8:00 pm and Saturday 6:00 am to 5:00 pm. The facility is closed on Sundays and Bank Holidays. These hours can only be changed with the prior agreement of the Agency (see Condition 5.9).

<b>(6) Facility Design</b>
----------------------------

There are four buildings on the site as follows: the administration building, the main transfer building, the vehicle maintenance warehouse and the metal fabrication and assembly warehouse. The site is a hardstanding area covered with a 9-inch thick reinforced concrete slab.

Security measures at the site are to be reviewed within three months of the date of grant of the licence under Condition 4.3. There are 5 CCTV cameras with two TV screens in the offices. The site alarm system is connected to a central monitoring system which is operated by a private security firm. A security guard patrols the site each night from 7pm to 6am with two dogs.

A weighbridge is to be installed at the site under Condition 4.6. At present the quantities of waste are estimated and the wastes going for disposal are known from the landfill weighbridge records. NWML are only to deposit waste at agreed landfill sites and are only to send material to authorised recycling and recovery facilities (see Condition 5.14).

There is a large waste shredder on site which is used to shred construction and demolition waste with the product sent off-site for use as landfill cover or as hard core for use in road construction.

There is a bunded 25,000 litre white diesel storage tank inside the main yard which is filled twice a month. NWML use approximately 40,000 litres of diesel per month for the collection vehicles. There is a separate bunded 9,000 litre agricultural diesel tank next to the white tank, this diesel is used to power the site machinery. The integrity of the bunds are to be tested under Condition 4.4 of the PD. The vehicle maintenance warehouse contains some fuel and oil and is to either be a complete bunded area or the fuel and oil are to be stored in a bunded tank/container (see Condition 4.4.7).

<b>(7) Decommissioning and Aftercare</b>
------------------------------------------

There are no plans for decommissioning and aftercare as the site was built in 1993. See Condition 8.

## **(8) Emissions to Air**

The principal source of dust deposition is the waste shredder. Dust monitoring at the site showed that in general the dust levels exceed the recommended dust deposition limits i.e. 350 mg/m<sup>2</sup>/day. In one case the dust level at the site entrance was measured at 4140 mg/m<sup>2</sup>/day. Condition 7.5 requires that a Dust Monitoring and Control Programme be submitted to the Agency for its agreement within three months of the date of grant of the licence. This is to include a proposal for the relocation of the waste shredder indoors or for it to be enclosed in its current location. Emission limit values for dust have been set for this facility and under Condition 9.6. will have to be met from twelve months after the date of grant of the licence onward. Dust emissions monitoring is to be carried out monthly under Condition 9.1 with the objective being to examine the effectiveness of the Dust Monitoring and Control Programme. The results are to be reported to the Agency on a quarterly basis.

## **(9) Emissions to Groundwater**

There are no emissions to groundwater.

## **(10) Noise Emissions**

Noise monitoring was undertaken at four locations around the facility and at a noise sensitive location near Tallaght Hospital, 200m away from the site. The site is located in an industrial estate and the noise emissions were found to range in  $L_{A_{eq}}$  from 48.8 dBA to 82.5 dBA. Noise monitoring was carried out during the hours of 5:00 am to 10.25 am with the highest level being recorded at 07:40 am with an  $L_{A_{eq}}$  of 82.5 dBA beside the waste shredder. At the nearest noise sensitive location (Tallaght Hospital) the levels were 52.4 and 52.5 dBA at 5:40 am and 6:00 am respectively. It is difficult to ascertain whether these emissions are based on the activities at NWML.

There have been no emission limit values for noise set for this facility in the licence as it would not be practicable to do so given the site location. However, a Noise Minimisation Study is to be carried out within three months of the date of grant of the licence (see Condition 7.6). Monitoring of noise emissions is to be undertaken quarterly with a noise survey to be reported to the Agency bi-annually.

## **(11) Emissions to Sewer**

The Sanitary Authority, South Dublin County Council have stipulated the conditions under which emissions to sewer are acceptable (see Condition 7.7). Monitoring is to be



carried out at the three three-stage interceptors located around the site (E1, E2 and E3 on Figure 7 of the EIS) and at the on-stage interceptor (E4 on figure 7 of the EIS). Washings, spillages and rainwater drain into these interceptor sumps before discharge to the sewer network. Condition 4.9.1 requires the interceptor sumps to be cleaned out every six months as a minimum. Condition 4.9.2 requires the manhole covers of the interceptors to be painted for their clear identification and accessibility. Foul water from the transfer station drains into a large silt trap. This is to be cleaned out every six months under Condition 4.9.1. Domestic effluent goes to the local authority foul sewer.

#### **(12) Emissions to Surface Waters**

There are no emissions to surface waters.

#### **(13) Other Significant Environmental Impacts of the Development**

None.

#### **(14) Waste Management, Air Quality and Water Quality Plans**

The Dublin Waste Management Plan has been adopted and represents common regional action by the four Dublin Authorities including South Dublin County Council. The Plan aims to use the principles of procurement, proximity and polluter pays. Private sector involvement and public/private partnership is encouraged under the Plan. National Waste Management Ltd. are in a good position with regard to the Plan as they are recovering the majority of the waste going through the transfer station.

#### **(15) Submissions/Complaints**

**Appendix 2 contains a list of all submissions received relating to the application. The dates received and the details of the individual, department, group or organisation making the submission are provided.**

**An overview of all submissions received in relation to the waste licence application is provided. This includes a summary of issues raised in the submissions and shows how these issues are dealt with in the proposed decision.**

**One submission was received from Duchas, The National Heritage Service :**

**1. Date received:** 18<sup>th</sup> October 1999

**From:** Deirdre Byrne, Countryside Protection Unit, Duchas, The Heritage Service, 7 Ely Place Dublin 2.

**Issue:** Duchas have no objection to the granting of this licence.

Signed \_\_\_\_\_  
Sara Kennelly

Dated: \_\_\_\_\_

## **APPENDIX 1**

**(i) Location Map showing Tallaght, Dublin 24 (not to scale)**

**(ii) Site Location Map (not to scale)**

## **APPENDIX II**

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

- 1. Deirdre Byrne, Countryside Protection Unit, Duchas, The Heritage Service, 7 Ely Place Dublin 2.**