

INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER:	53-2
APPLICANT:	Noble Waste Disposal Limited
FACILITY:	Fassaroe, Bray, Co. Wicklow
INSPECTOR'S RECOMMENDATION:	That a revised licence be granted subject to conditions.

(1) Introduction:

This report relates to an application by Noble Waste Disposal Limited for a review of their existing waste licence (Reg. No. 53-1, granted 22/12/99). Noble Waste Disposal Ltd. is a wholly owned subsidiary of Celtic Waste Ltd. who acquired Noble Waste Disposal Ltd. in November 2000. The review application was received on 6/11/01.

The facility is currently licensed to operate a waste transfer station and an inert landfill although waste has not been deposited in the on-site landfill since 27/11/00. The activities being carried on at the facility have evolved considerably from those for which a waste licence was granted. The facility now involves the operation of a transfer station rather than a combination of a transfer station and landfill. The current licence has a significant number of conditions in relation to the landfill.

The primary reasons for a review are to increase the tonnage of waste accepted from 105,000 to 129,502 tonnes per year and to cease the activity of landfilling waste on-site (Class 1 of the Third schedule). A more detailed discussion on the reasons for a review is contained in Section 2 of this report.

The applicant has been granted planning permission (November 2002) for a proposed new transfer building (Phase I). The facility infrastructure has changed since the existing licence was issued. Further details are given in Section 3 of this report.

The nearest residential dwellings are located to the south eastern side of the facility. The nearest dwelling is 2 m away from the facility access road. The existing transfer station building is approximately 65 m from the nearest residence. Other areas where waste is processed are at least 100 m away from the nearest residence.

Classes 11, 12 and 13 of the Third Schedule and Classes 2, 3, 4, 11, 12 and 13 of the Fourth Schedule were applied for in the application. Class 12 of the Third Schedule is the Principal Activity.

The environmental impacts and associated mitigation measures at this facility were addressed in detail in the Inspector's report that accompanied the PD for the existing Waste Licence Reg. No. 53-1. The monitoring requirements for this recommended PD reflect those of the existing licence, any subsequent agreements during the enforcement

of the existing licence and amendments to reflect the cessation of landfilling at the site and associated changes.

Activities recommended for licensing:

It is recommended that all the above activities, be licensed subject to the Conditions contained in the attached PD.

Quantity of waste (tpa)	129,502
Environmental Impact Statement Required	No
Number of Submissions Received	1

Facility visits:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
29/11/01	Site notice compliance and inspection.	B. Rooney	Site Notice non-compliant with Art. 8.
26/04/02	Site notice compliance and inspection	P. Hermansen B. Rooney H. Maher	Site Notice complies with Art. 8

Maps showing the outline of the facility to which the application relates and the facility layout is provided in Appendix 1.

Fit and proper person

It should be noted that Noble Waste Disposal Ltd. 53-1 was convicted on 7 charges for non compliances with their existing licence on 14/06/02 under the Waste Management Act, 1996. The charges related to an audit on 12/12/00 just one month after take over of the facility by Celtic Waste Ltd. and to a site visit and a second audit carried out in February 2001 and March 2001. The total costs to the licensee amounted to: total fines € 6,000, Agency costs € 6,379 and legal costs € 3,268. Since, the date of the conviction the applicant has endeavoured to comply with the conditions of the existing licence.

(2) Reasons for the licence review as outlined by the applicant

The reasons put forward by the licensee for this review are:

- **To increase the waste intake accepted** from 105,000 to 129,502 tonnes per annum. Condition 1 of the recommended PD allows the increased tonnage.
- **To cease landfilling at the facility**, i.e. Class 1 of the Third Schedule (WMA, 1996). The applicant ceased landfilling at the site on 27/11/00. Hence, this class of activity is excluded from the activities licensed i.e. from *Part I Activities Licensed* in the PD.
- **To use C&D waste on site for restoration**, i.e. Class 11 of the Fourth Schedule (WMA, 1996).

- **To conduct trial composting of biodegradable waste and green waste.** Conditions 1, 3 and 5 of the recommended PD allows this.
- **To undertake recovery of wood and green waste including wood chipping and storage on-site.** Conditions 1 and 5 of the recommended PD allows this.
- **To extend the hours of on-site waste storage, in enclosed containers, to a period greater than 24 hours.** Condition 7 of the recommended PD requires waste stored in enclosed containers to be removed from the site within forty eight hours of arrival on site, except at bank holidays when the waste has to be removed within seventy two hours of arrival on site.
- **To increase the number of overnight waste storage containers from 3 to 10.** Condition 7 of the recommended PD does not limit the number of containers held overnight.
- **To undertake recovery of glass,** i.e. Class 4 of the Fourth Schedule (WMA, 1996)
- **To build a new transfer building in two phases.** Schedule B: Specified Engineering Works of the PD allows for this.
- **To incorporate infrastructure developments:** The recommended PD incorporates any infrastructural developments undertaken since the existing licence was granted.
- **Amend monitoring points:** This refers to the relocation of dust monitoring points DS-01, DS-03 and DS4 (Condition 3).

(3) Facility Development

The installation of infrastructure at the facility is controlled by Condition 3 of the recommended PD.

The following infrastructure has been put in place since the existing licence was granted: A tipping ramp and waste inspection area for C&D waste and non-putrescible commercial/industrial waste, a bunded fuel storage area, a waste quarantine area, a staff car parking area, two weighbridges, ramp and truck wash, vehicle access road to transfer building and the concrete pad adjacent to the existing transfer building has been enclosed to house vehicle and container maintenance and waste recovery activities.

A permanent gas monitoring system has been installed in the on-site office buildings.

Since the granting of the existing licence, three groundwater/landfill gas monitoring boreholes (BH-5, BH-6 and BH-7) and two leachate boreholes (L01 and L02) have been installed on site. Two groundwater/landfill gas monitoring have been removed due to construction works on site.

Additional infrastructure required

The applicant has been granted planning permission by Wicklow County Council for certain construction works. The works consist of a proposed new transfer building (Phase I), truck marshalling area, road works, proposed new wastewater treatment

system, trial composting area, truck parking area, trailer parking area, skip storage area, glass storage area and wood processing/storage area.

New Transfer Building (Phase I and II)

The applicant proposes that the new transfer building be built in two phases. The applicant anticipates that the transfer building (Phase I) should be complete by October 2003. Condition 3 and Schedule B requires the approval of the Agency before using the new transfer building (Phase I and II). The applicant proposes to construct phase II in the latter half of 2003 or in 2004.

Trial Composting Unit

The applicant proposes to install a trial biodegradable composting unit at the facility to compost biodegradable and green waste. The PD limits (Condition 5) the quantity of waste to be composted to 2000 tonnes of biodegradable and green waste per annum. The unit is a fully enclosed composting unit fitted with an exhaust air treatment section with a biofilter attached (dimensions 2m x 2m x 0.8m). The leachate generated by the composting process will be collected in a sump and recirculated into the composting unit to aid the composting process (Condition 3). Schedule C of the PD sets ELVs from the biodegradable composting unit. Schedule D of the recommended PD outlines the monitoring to be carried out on emissions from the biodegradable composting unit. The level of monitoring required reflects that trial composting has been applied for and agreed in this PD.

The applicant proposes installing a composting building if the trial composting is successful. The results of this trial composting may not be available for a year or so. Hence, the PD does not allow for this activity as the applicant has only supplied details on a possible location at the western boundary of the facility and has not specified when they propose installing this building or any details as to what amount of waste are to be composted.

Civic Waste Facility

The applicant proposes installing a Civic Waste Facility at the eastern side of the facility (Condition 3). The design of the Civic Waste Facility has not yet been fully determined as the applicant wishes to consult with the Local Authority before installing the facility. Condition 3 of the recommended PD requires that a proposal on the design of the civic waste facility be agreed with the Agency prior to commencement of operations at the Civic Waste Facility. The types of waste to be accepted have not yet been determined. Condition 5 of the PD requires the licensee to submit a proposal on proposed waste types to be accepted as well as the waste acceptance procedures for the civic waste facility prior to commencement of operations at the Civic Waste Facility.

Final Capping

The landfill gas monitoring results submitted by the applicant showed exceedances of gas trigger levels, indicating that historical landfilling of biodegradable waste has taken place at the facility. Hence, the PD (Condition 4) requires the applicant within four months to submit a report on the extent of capping and landfilling at the site, including recommendations for implementation of appropriate capping at the landfill based on the findings. Unless otherwise agreed with the Agency, Condition 4 of the PD stipulates the final capping system required.

Wood Chipper

The applicant has applied for a wood chipper and a wood storage area to be installed outdoors at the western boundary of the facility. Condition 5 of the recommended PD requires the applicant to assess the dust and noise emissions from the wood chipper prior to use. The licensee is required to submit a report with recommendations on the hours of operation of the unit and noise and dust control measures necessary to comply with the licence. If required, the abatement measures for noise and dust are to be implemented prior to installation of the wood chipper on site. Wood will be stored in stockpiles at the wood storage area. The PD requires the wood stored in stockpiles at the facility to be removed within two months (Condition 5).

Glass storage

The applicant has applied for the installation of a glass storage area outdoors at the western boundary, where glass accepted at site will be stored before transfer off-site for recovery. The closest residencies are located at the south eastern boundary. Condition 5 of the recommended PD allows for the storage of glass outdoors.

Wastewater treatment system

The applicant proposes to maintain two wastewater treatment systems at the site. The recommended PD requires a wastewater treatment system dedicated to the treatment of toilet and canteen wastewater and another treatment system for treatment of all vehicle wash and floor wash wastewater and contaminated surface water run-off (Condition 3).

Waste Quarantine Area

The current licence required the applicant to submit a proposal regarding installation of a waste quarantine area. The proposal was agreed by the Agency subject to the area being secured, bunded and surfaced to deal with spillages. The waste quarantine area currently drains to the septic tank and the surface area is not impervious. Condition 3 of the recommended PD requires that the waste quarantine area is installed in accordance with the aforementioned requirements.

Monitoring Boreholes

Landfill gas monitoring boreholes:

The recommended PD requires five landfill gas monitoring boreholes to be installed at the western and southern boundary of the facility where there are currently no boreholes. The additional boreholes are required to facilitate the monitoring of landfill

gas migration at the facility as the final capping is now to be installed and it is proposed that the new transfer building will be built on top of an area with historical landfilling.

Leachate monitoring boreholes:

Condition 3 of the recommended PD requires the applicant to install an additional leachate borehole within the waste body downgradient to the existing leachate boreholes to monitor leachate in this area.

Nuisance Control

Measures to control possible nuisances at the facility are specified in Condition 7.

(4) Waste Types and Quantities

The recommended PD allows the facility to accept up to 129,502 tonnes of waste per annum of household waste (25,000 tonnes), commercial waste (69,500 tonnes), C&D waste (35,000 tonnes) and hazardous waste (2 tonnes) as detailed in Schedule A. The PD allows for an increase in the tonnage of construction and demolition waste to be accepted at the facility for restoration purposes at the facility provided that the total annual tonnage of waste is not exceeded. Condition 1 of the PD prohibits the acceptance of hazardous waste (except machinery batteries) and liquid waste.

It is proposed that the C&D waste accepted at the facility will be processed to produce restoration material for onsite use. Condition 5 and Schedule A of the recommended PD ensures that only inert waste that is uncontaminated and suitable for restoration of the landfill on site shall be used for restoration. The PD (Schedule A) requires the waste used for restoration on-site to comply with the waste acceptance criteria and limit values for pollutant content for inert waste listed in the *Draft Commission Decision establishing criteria and procedures for the acceptance of waste at landfills* of 1 May 2002.

The current hours at the facility as agreed with the agency are as follows:

Monday to Saturday inclusive: Waste acceptance: 7.30 – 19.00

Operation hours: 7.30 – 21.00

The applicant has applied to have the Civic Waste Facility open from 7.30 – 21.00.

The recommended PD requires the current hours to be maintained and restricts the hours of the Civic Waste Facility to the same opening hours.

(5) Restoration and Aftercare

The applicant states that all inert waste will be used for site reclamation. It is anticipated that the reclamation programme will be completed within three years. The PD requires that the landfill facility be restored within three years of the date of grant of this licence (Condition 4 of the PD). Condition 4 of the recommended PD requires the licensee to submit a restoration and aftercare plan for the facility within six months of the date of grant of licence. Noble Waste Disposal Ltd. detailed that they may wish to process construction and demolition waste for resale, after the landfill has been

restored. Condition 10 requires records to be maintained of processed C&D waste moved off-site.

Soil contamination:

The groundwater monitoring results from the borehole BH/GS-04 (now removed) located adjacent to a previously unbunded oil storage area indicated oil contamination on a number of occasions. Visual inspection of the borehole also indicated oil contamination. Condition 4 of the recommended PD requires the licensee to investigate the extent of the hydrocarbon contamination and to implement remedial measures.

(6) Emissions to Air

Emissions to air from the facility include landfill gas, odours, dust and noise.

Landfill Gas

The landfill gas monitoring locations required in the PD vary from the monitoring locations applied for as one of the boreholes has been removed and replaced with a new borehole. Condition 8 and Schedule D of the Recommended PD sets out the monitoring programme for landfill gas.

There have been exceedances of trigger levels on occasions. The existing transfer building is currently not permanently monitored for gas. The PD requires that permanent gas monitoring systems are maintained and installed in all enclosed existing and proposed structures on site (Condition 3).

The trigger levels for landfill gas are set out in Condition 6 of the PD. The landfill gas concentration limit values in buildings are set out in Schedule C of the PD.

Odours

Since the date of the grant of the current licence there has been one odour complaint. Since 17/02/02 daily odour inspections have been carried out at the facility.

Weekly nuisance monitoring for odours is required under Condition 8 of the recommended PD. Condition 7 of the PD requires the licensee to ensure that odours do not give rise to nuisance at the facility or in the immediate area of the facility. Schedule D of the PD requires the operator of the biocomposting unit to carry out daily subjective odour monitoring for the first three months of operation of the trial biodegradable composting unit and thereafter as required by the Agency.

Dust

The dust monitoring carried out at the facility in 2000 and 2001 show that the dust deposition limits have been exceeded at two of the monitoring points (DS-01 and DS-04) for 3 out of 4 monitoring events.

The applicant proposes to relocate three of the monitoring points DS-01 (due to construction works), DS-03 (due to vandalism) and DS-04 (due to the current location not being representative of waste management operations). DS-04 is currently placed next to an exposed sand and gravel face. Condition 3 of the recommended PD requires these changes.

Provisions for dust control are required under Condition 7. Condition 5 prohibits the operation of the shredder at the C&D waste recovery area at wind speeds above 14 m/s (Force 7). Dust monitoring is required under Condition 8 and Schedule D. Dust emission limit values are set out in Schedule C.

Noise

Noise monitoring carried out by both the applicant and the Agency shows exceedances of the noise emission limit values at three monitoring locations (N1, N2 and N3) during the daytime on three monitoring occasions. The exceedances are attributed to vehicle movements on site.

If necessary, the applicant will be required to install noise abatement measures at the wood chipping area if the required report shows that it is needed (see Section 2). The processing of C&D waste and non-putrescible commercial/industrial waste is required to be moved indoors when the proposed new transfer building (Phase II) has been constructed (Condition 5 of the PD).

Noise monitoring is required under Condition 8 and Schedule D of the recommended PD. Noise emission limits to be measured at any noise sensitive locations are set under Schedule C. Condition 6 requires that there shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.

(7) Emissions to Groundwater

The Inspector's Report that accompanied the existing waste licence 53-1 outlines the geology and hydrogeology of the facility.

The groundwater monitoring boreholes required in the PD vary from the monitoring boreholes applied for as some of the groundwater boreholes have been removed and replaced at the facility. Groundwater monitoring is required by Condition 8 and Schedule D of the recommended PD. Condition 6 of the PD requires that there is no direct emission of groundwater.

Leachate

Leachate monitoring is required by Condition 8 and Schedule D. The applicant is required to carry out leachate analysis once off and thereafter as required by the Agency. The leachate has not been analysed under the current licence due to low levels of leachate in the wells.

(8) Emissions to Waters

It is proposed that there will be two wastewater treatment systems to treat wastewater and contaminated surface water run-off.

The PD (Condition 3) requires the following:

- 1) An existing wastewater treatment system with a new percolation area to treat toilet and canteen wastewater.
- 2) A proposed new wastewater treatment system to treat vehicle wash and floor wash wastewater and contaminated surface water run-off. The new treatment system is designed to handle a daily flow of 20 m³.

Results from the groundwater monitoring borehole (BH-05) downgradient of the existing septic tank indicates contamination from the existing septic tank. As detailed above the PD requires a new percolation area to be installed.

Emission to Surface Waters

There is no direct emission of surface water from the facility. The site is close to the Glenmunder stream which drains to a designated salmonid river, the Dargle River. Condition 6 ensures that there is no discharge of contaminated surface water, wastewater or leachate into the Glenmunder River.

Surface water monitoring results from the Glenmunder River submitted by the applicant indicates possible contamination from the landfill site with elevated ammoniacal nitrogen and suspended solids at downstream monitoring locations. The ammoniacal nitrogen values have slightly exceeded salmonid standards on two occasions over the last two years. Surface water monitoring is required by Condition 8 with the parameters, frequencies and locations outlined in Schedule D.

The PD requires that biological assessment of the river be carried out until the landfill has been restored (Condition 8).

Condition 3 of the PD ensures that effective surface water management is provided and maintained at the facility.

(9) Other Significant Environmental Impacts of the Development

The applicant states that landfilling has been carried out at the site since 1947. In December 1999 the facility was granted a licence for the operation of a transfer station and an inert landfill. Landfilling ceased in November 2000. Prior to 1995 no records were kept of the waste disposed at the site. The landfill gas monitoring results indicate that some biodegradable waste has been landfilled at the site.

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

1. The County Wicklow Waste Management Plan 2000 – 2004 (adopted April 2000) states that recovery activities in County Wicklow are mainly carried out by Noble Waste Disposal Limited.

2. There is no Air Quality Management Plan for County Wicklow.
3. There is no Water Quality Management Plan for County Wicklow.

(11) Submissions

One valid submission was made in relation to this application as set out below.

1. Catherine Buchanan, Site Protection, Duchas, 7 Ely Place, Dublin 2.

The letter states that they have no objections to the granting of this licence.

Signed _____

Dated:

Name Pernille Hermansen

APPENDIX 1

LOCATION PLAN

Refer to Waste Admin Office files for location of the following maps:

1. Ownership Plan, Figure B.1.0
2. Civil Existing Operations Layout, Drawing No. B7498-C0101-B
3. Civil Site Layout Plan with Drainage, Drawing No. B7498-C012-C

