

INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER: 184-1

**FACILITY: Hazardous Waste Facility, Clonminam Industrial Estate,
Portlaoise, Co. Laois**

APPLICANT: Atlas Environmental Ireland Ltd

INSPECTOR'S RECOMMENDATION:

That a Waste Licence 184-1 be granted subject to conditions, in substitution for IPC Licence (472) issued on 27 January 2000.

(1) Introduction:

This report relates to an application received from Atlas Environmental Ireland Ltd for a waste licence at their facility in Portlaoise, which currently holds an IPC Licence (Reg. No. 472). The IPC Licence is for the one class 'the use of heat for the manufacture of fuel from waste'. However the licensee also refines and reuses waste oils, recovers waste oil filters, treats oily solid wastes and treats/bioremediates contaminated soils. The facility commenced operations in 1979 on a 2ha site. The infrastructure consists mainly of a tank farm (57 large scale tanks), associated process buildings, and a concrete soil remediation area with some roofing. The facility is situated in an industrial estate surrounded by a railway yard, commercial units and oil storage. The nearest residential area lies approximately 200m west consisting of terraced housing and a halting site.

Atlas Environmental applied for a waste licence in order to expand into the hazardous waste transfer business, to recover wastewater sludges by a proposed new sludge drying facility and CHP, and to treat/transfer additional materials, which derive mainly from the automotive services sector. These additional materials include: windscreen glass, batteries, tyres, solvents, brake fluids, antifreeze, mixed fuels, windscreen washer and end of life vehicles (ELVs). In addition to the above the licensee wishes to treat/transfer aerosols, waste acid / base solutions, fluorescent light bulbs, waste cooking oil, and waste electronic goods (WEEE).

The applicant, based on estimates up to 2007, has applied for a total waste intake (disposal and recovery) of 110,000 tonnes per annum (70,000T hazardous), which includes waste oil (25,000T), non-hazardous sludge waste (25,000T), and contaminated soils (which can be hazardous) of 30,000T. It is envisaged that Atlas will be processing nationally 90% of the waste oil total, 60% of the oil filter total and 44% of the contaminated soil total. Currently the facility processes approximately 35,000T of hazardous waste.

The classes of activity applied for by the applicant and for which I recommend are:

Waste Disposal Activities – 3rd Schedule

Class 6. Relates to the biological treatment and remediation of contaminated soils, hazardous contaminated soils or other associated organic material.

Class 7 Relates to the drying of non hazardous sludge, the shredding of waste tyres, separation of hydrocarbon sludges into oil, water and sludge fractions, and other waste treatment activities prior to the subsequent disposal of segregated fractions off site.

Classes 12 and 13. Relates to storage and bulking of waste prior to disposal off site and/or repackaging at the Facility prior to disposal at an appropriate facility.

Waste Recovery Activities – 4th Schedule

Class 2. Relates to the biological treatment and remediation of contaminated soils, hazardous contaminated soils or other associated organic material.

Classes 4 and 11. Relates to the shredding of tyres and collection of other wastes at the Facility and their reuse or onward recovery.

Class 5. Regeneration of acids and bases.

Class 8, 9, and 12. Recycling and treatment of waste oil and waste fuel, oil filters, and the separation of hydrocarbon sludges, into oil, water and sludge fractions, and the subsequent recovery of segregated fractions, or their use as a fuel.

Class 13. Relates to storage of recyclable and reusable wastes pending their reuse.

Site Visits:

DATE	PURPOSE	PERSONNEL
11 February 2003	Site Notice Check	M. Doak
11 June 2003	Site Visit	M. Doak

General Information:

Quantity of Waste (tpa)	110,000 tonnes per annum
EIS Required	I have assessed the EIS and I am satisfied that it complies with the EIA and Licensing Regulations.
Date of Application	29 January 2003
Date of Article 14 acknowledgement	28 May 2003
Number of Submissions received	1

A plan showing the facility layout to which the application relates is provided in Drawing No. At-Wst 1, Attachment D1 of the application, and a Site Plan is attached as Appendix 1 to this report.

(2) Issues arising from this Application for a Waste Licence

- I The main aspect arising from this application is the proposal to accept non-hazardous treated sewage and industrial sludge to the quantity of 25,000T per annum, with treatment on a continuous basis in a package type sludge treatment unit (thin film evaporator and belt dryer) powered by two 1.2 MW CHP generators. These generators will be fuelled mainly by reprocessed waste oil from the Atlas site. This will form a thermal input to less than 3MW and will therefore comply with Article 8 of the EU Disposal of Waste Oil Directive (87/101/EEC). There will be a single exhaust from the units. Sludge acceptance is limited to the types specified in **Condition 5.5.1** and will be delivered to the site by tanker and

transferred to a proposed 50,000L underground holding tank which will act as the feed tank to the sludge unit. Ultimately sludge cake (90% solids) will be disposed to licensed landfill in accordance with [Condition 5.5.2](#), and the recent EU Council Decision 2003/33 (Criteria for Acceptance of Waste at Landfills). Emissions from the holding tank and sludge drying unit will be drawn through an odour abatement unit, and a negative air pressure system is to be utilised also. These proposals are adopted and controlled through [Conditions 3.10.2, 3.11, and 7.8.3](#) of the recommended Proposed Decision.

- II The second feature is the installation of two new 30,000L underground storage tanks (USTs) in the south east corner of the site to store incoming waste solvents (separate chlorinated and non-chlorinated tanks) and mixed fuels in the third existing UST for onward disposal to a maximum of 2,750T per annum. The tanks and associated fixtures will be of double skinned steel construction in accordance with the requirements of [Condition 3.13.6](#). Waste solvent acceptance is specified in [Condition 5.2.2](#), and Attachment E.3(e) of the application.
- III The third element is the installation of an integrated waste recovery and transfer facility for miscellaneous automotive derived wastes to include batteries, tyres, waste oil filters, ELVs, and WEEE, as discussed in this report's introduction, handling approximately 20,000T per annum. This will involve the construction of an extension onto the existing stores on the east side of the facility adjacent to the main offices, with a roofed area, new drum storage area and steel cladding, as specified in [Condition 5.1, and Schedule B - SEW](#). The new building will also house a fluorescent tube crusher, an aerosol can degassing unit, a waste battery transfer area and a small acids / bases mixing and conditioning tank, IBCs for the storage and transfer of contaminated liquids and waste oil from ELVs. The building will incorporate an enclosed area to store drummed oily solid wastes awaiting shipment. Tankage issues are dealt with in [Condition 5.7 \(Operational Controls\)](#) and battery handling aspects are specified in [Condition 5.4](#). The licensee is required to submit a waste recovery report to the Agency regarding *inter alia* waste oil and cartridge recovery, given that the facility intends to double the handling of these items to approximately 750T per annum ([Condition 11.3 \(d\)](#)). [Condition 3.10.5](#) requires a proposal on air extraction systems for worker safety in addition to an overall air handling and abatement system. A separate enclosure is to be developed adjacent to the tank farm to hold ELVs.
- IV The acceptance and processing of waste oils and contaminated soils waste will continue at the facility. As a result many of the conditions for both these activities remain the same with similar language to the existing IPC licence (472). The condition for waste oil processing is identical ([Condition 5.3](#)), as is the relevant [Schedule G: Reprocessed oil Quality](#). However some of the conditions for the soil remediation activity have been amended to reflect the recent USA guidance of handling and processing hazardous waste (USEPA guidance, January 2002) at specific locations and human health issues ([see Condition 3.14.1 \(f\) and Condition 5.6.1](#)), and to reflect Agency procedures¹ on soil classification, both for waste acceptance and waste disposal/recovery.

¹ *The Remediation of Contaminated Land in the Republic of Ireland*. M.Doak, G. Carty, & D. Lynott. Ninth International Waste Management and Landfill Symposium. 6-10 October 2003. (Cagliari), Sardinia , Italy

(3) Facility Development

Infrastructure

Existing infrastructure includes 24 hour CCTV security cameras and fencing, a car park area, facility offices, weighbridge, haul roads and access roads to the tank farm, soil remediation area, and gantry areas, a wheelwash, and detailed wastewater/surface water management system (with SCADA). The applicant proposes new waste handling infrastructure and buildings as discussed in Section 2 above. The fire control system is as per the IPC Licence (**Condition 3.16**) The provision and maintenance of all infrastructure is controlled by **Condition 3 Facility Infrastructure**.

Restoration & Aftercare

Condition 4 sets out requirements for Restoration and Aftercare at the facility and shall be as described in the Residuals Management Plan report submitted to the Agency in February 2002.

Facility Waste Handling Operations

Much of the detail on these aspects has already been identified in Section 2, above. **Condition 5** sets out the many waste handling practices required at an Agency licensed hazardous waste transfer station, particularly with regard to operational controls (**Condition 5.7**), and off-site disposal and recovery (**Condition 5.8**).

(4) Waste Types and Quantities

Condition 1.4 of the recommended PD restricts the waste types to be handled at the facility to a specified range of hazardous wastes and non-hazardous waste (mainly sludge treatment). **Schedule A: Waste Categories and Quantities** limits the annual quantity of waste to be accepted at the facility, to a total of 45,125T hazardous and 10,415T non-hazardous for 2004. Providing there is new infrastructure and Agency agreement the proposed decision allows for an increase in tonnage to a total of 70,000T hazardous and 40,000T non-hazardous, for 2007.

(5) Management and Control of Emissions to the Environment

The environmental impacts and mitigation measures associated with this facility were addressed in detail in the Inspector's Memorandum which accompanied the Proposed Decision for the existing IPC Licence 472 (10/12/1999) attached. Requirements for facility management and the EMS, requirements for the control of emissions to air, noise, surface water, sewer and groundwater, and requirements for restoration and aftercare of the facility, reflect those set out in the existing IPC Licence.

Similarly, the ELRA and proposal for Financial Provision (both very comprehensive and concise reports) also stand, arising out of Agency agreement in mid 2002. However, an environmental fund will need to be agreed within three months of licence grant (**Condition 12.2.2**). The Agency received a Section 52 Discharge Consent from Laois Co Co on 13 May 2003 for the waste licence and these aspects appear as **Schedule C4** of the licence.

There are some new monitoring measures to be implemented particularly with regard to:

- groundwater monitoring, refer to **Conditions 3.13.7, and 3.15**. (A report on possible aquifer contamination by the existing sludge bay is required due to the poor condition of the unit, which I noted on site; the installation of three limestone aquifer monitoring wells are required due to the conclusions of a recent URS report (April 2003) that a regional shallow limestone aquifer lies at c. 7m below groundlevel which is directly connected to site surface via gravel soils; and the expansion of the UST capacity);
- odour emissions monitoring, refer to **Conditions 3.10.2, 7.8.3**. (at proposed Sludge Plant as discussed in detail in Section 2 of this report).

Monitoring locations and frequencies as specified in the relevant schedules of the recommended PD reflect the current monitoring regime as agreed with the Agency during the enforcement of the existing IPC licence.

(6) Compliance History

See attached IPC stats in Appendix 3.

(7) Waste Management Plans

The Midlands Regional waste plan, which covers counties Laois, Longford, Offaly, Tipperary (N.R) and Westmeath County Councils, was formally adopted by Laois County Council in September 2001. All municipal non hazardous wastes generated within the functional areas of the five local authorities are considered under the plan. The Atlas proposed expansion involves the processing of two waste streams which come under the plan, namely waste tyres and wastewater treatment plant sludges. The measures proposed by Atlas will contribute to the achievement of the overall plan.

(7) Submissions

A total of one valid submission was received in relation to the licence application. I have had regard to this submission in making this recommendation to the Board.

1. Duchas

Duchas (2/4/2003) has no objection to the waste application from a nature conservation perspective.

(8) Recommendation

I recommend the grant of a licence for the waste activities at the facility as listed and described in Part I: Activities Licensed for the following reasons:

1. I am satisfied that the activity concerned, carried out in accordance with the conditions attached will not cause environmental pollution.
2. I am satisfied that the best available techniques will be used to prevent or eliminate underlying groundwater contamination, and prevent air emissions/nuisances from the activity, if carried out in accordance with the conditions as attached to the licence.

In coming to this recommendation, I consider that the waste activities and works to be carried out at the Atlas Environmental Ireland facility would, subject to the conditions of the recommended Proposed Decision, comply with the requirements of Section 40(4) of the Waste Management Act 1996.

Signed _____

Malcolm Doak

Inspector, Environmental Management & Planning.

Dated: 3 September 2003

APPENDIX 1

LOCATION MAP & SITE PLAN (At-Wst1)

APPENDIX 2

- (i) Inspector's Memorandum which accompanied the Proposed Decision for the existing IPC Licence 472 (10/12/1999)
- (ii) IPC Licence 472 issued on 27/1/00. PL

APPENDIX 3

IPC Licence 472. Compliance Statistics.