



**OFFICE OF CLIMATE,
LICENSING &
RESOURCE USE**

INSPECTORS REPORT ON A LICENCE APPLICATION

TO:	DIRECTORS	
FROM:	Orla Harrington	Environmental Licensing Programme
DATE:	7 th July 2010	
RE:	Application for a waste Licence from Hi-Volt Ireland Limited, Ballyduff, Thurles, Co. Tipperary, Licence Register W0267-01	

Application Details

Type of facility:	Hazardous Waste Transfer Station
Classes of Activity (P = principal activity):	4 th Schedule: Classes 2,3,4,13(P)
Quantity of waste managed per annum:	21,000 tonnes/annum
Classes of Waste:	Hazardous and Non Hazardous waste.
Location of facility:	Ballyduff, Thurles, Co. Tipperary (in the townlands of Shanballyduff and Piercetown)
Licence application received:	27/02/09
Third Party submissions:	None
EIS Required:	No
Article 14 Notices sent:	1 st April 2009
Article 14 compliance date:	16 th December 2009
Article 16 Notices sent:	18 th January 2010
Article 16 compliance date:	7 th July 2010
Site Inspection:	29 th October 2009

1. Facility

Hi-Volt Ireland Limited has applied for a waste licence for the operation of a hazardous waste facility at Ballyduff, Thurles, Co. Tipperary in the townlands of Shanballyduff and

Piercetown. The facility is located approximately 7.3Km north east of Thurles and 0.1Km west of the River Drish which is a tributary of the River Suir. The River Drish flows north along the eastern boundary of the site.

The facility has been accepting waste in the form of Lead and Ni-Cd batteries for the past three years under Waste Permit No WP/TN/53, which was issued on the 11/10/05 by North Tipperary County Council. The Waste Permit expired on 15/10/09 and therefore the facility is unauthorised at present. Due to the increased tonnages of waste envisaged to be transferred through the facility, Hi-Volt is now applying to the Agency for a waste licence.

Prior to submission of the waste licence application Hi-Volt Ireland Limited had been granted planning permission by North Tipperary County Council (07511854 – 20th August 2008), (06510427 – 28th March 2007), (03510172/03510169 – 14th November 2003), for the re-development of this site. An EIS was not required for the planning application. The re-development of this site and its infrastructure will comprise of the construction of new oil storage infrastructure, commercial waste storage area, waste quarantine area, waste tyre storage area, silt trap, a Class I oil interceptor, storm water attenuation tank, weigh bridge, car park area and associated site works. The total facility area once re-development is complete will be approximately 7,481 m². The installation of infrastructure at the facility is controlled by Condition 3 of the RD.

The boundary of the facility is delineated on three sides by a post and rail fence. The remainder of the site has a hedgeline with some mature trees. Appendix 1 contains a plan showing the existing and proposed layout of the facility.

Area A: Existing facility building used for the acceptance, sorting and temporary storage of batteries prior to off site recovery treatment.

Area B: Proposed waste oil storage infrastructure. The RD requires the applicant to cover the bunded storage area for waste oil storage with a canopy to prevent ingress of rainwater.

Area C: Existing facility building, waste separation is proposed including sorting, shredding and baling of general garage waste such as waste rags, oil filters and clutch plates. The RD requires that all waste processing shall be carried out indoors, in a designated building appropriate for the waste stream.

Area D: Existing facility building, proposed waste battery, waste metals and general garage waste storage area.

Area E: Outdoors, proposed tyre storage area. Between Area B and Area E is the proposed quarantine area of which the RD requires the applicant to cover with a canopy to prevent ingress of rainwater.

Area F: Outdoors, proposed contaminated soil storage area. The RD requires the applicant to cover the storage area for contaminated soil with a canopy to prevent ingress of rainwater.

The applicant has stated that the maximum quantity of waste to be handled at the facility when completed will be 21,000 tonnes per annum of which 9,000 tonnes will be hazardous while the remaining 12,000 tonnes will be non hazardous. The non hazardous wastes will consist mainly of tyres, waste metals and general garage waste. Hazardous wastes to be accepted at the facility will consist primarily of waste oils, batteries¹, contaminated soil, oil filters and general garage waste. *Schedule A2: Waste Acceptance of*

¹ Batteries, e.g. lead acid, Ni-Cd, mercury containing batteries are hazardous waste.

the RD specifies the wastes that may be accepted at the facility and limits the total quantity of wastes to 21,000 tonnes per annum.

The applicant has applied under the following waste activities:

- 4th Schedule; 2,3,4,13(principal activity)
- Class 2: Relates to the collection, bulking up and storage of waste oils, grease and oil mixtures from oil/water separation and similar wastes at the facility.
- Class 3: Relates to the dismantling, shredding, and baling of waste oil filters and other garage waste
- Class 4: Relates to the baling of oily rags, packaging waste, absorbents, wiping cloths and protective material.
- Class 13: This is the principal activity, which relates to the storage of waste at the facility prior to transport off site for recovery or recycling.

The applicant requested facility operations to be confined to the hours between 07.00 and 18.00 however the applicant does not indicate whether he can meet night time limits of 45dB (A) L_{Aeq} , therefore waste acceptance hours in the RD will be limited to daytime hours only. The RD allows the applicant to operate the facility from 08.00 to 18.00 Monday to Friday and 08.00 to 14.00 Saturday, unless with the prior agreement of the Agency. The facility will employ 5 full time staff.

2. Operational Description

The RD proposes that no hazardous waste, with the exception of waste batteries, may be accepted at the facility until the licensee submits written procedures for the acceptance, handling and storage of hazardous waste, evidence of staff training on procedures and confirmation that the necessary infrastructure is in place. All wastes arriving at the facility shall be inspected and recorded at the existing site entrance. Only pre-notified and pre-classified waste is to be accepted at the facility. The RD also requires the licensee to provide and maintain a weighbridge at the facility.

Operations will include storage of waste batteries in rigid pallet plastic containers, bulking up and storage of waste oil. Oil filters will be shredded, drained of oil and baled for economic transport off site. Oily rags will be baled and bound for export, clutch/brake pads put into suitable containers for storage pending removal off site; contaminated soil and waste tyres will be accepted and stored at the facility pending removal. The RD requires that an impermeable concrete surface is installed in all waste storage areas.

The proposed waste oil storage infrastructure will include four c.25 m³ bunded storage tanks and a drum storage area with a capacity of 300 barrels (2 high). The applicant proposes to cover the drum storage area with a canopy to protect against rainwater and storage tanks will also include appropriate ventilation for oil fumes. The RD requires that all hazardous waste storage areas and all tank and drum storage areas are bunded and all drainage from bunded areas diverted for collection and safe disposal. All waste processing, except waste oil transfers to bulk tanks, shall be carried out indoors, in a designated building appropriate for the waste stream.

The RD will allow a maximum of 100 tonnes of contaminated soil at the facility at any one time pending transfer to a licensed treatment or disposal facility. The applicant states that contaminated soil will be accepted and stored at the facility in appropriately sealed, water proof and leak proof containers until removal off site. The licensee states in the application that the quantity of contaminated soil accepted at the facility will not exceed a

total of 480 tonnes per annum. No processing of contaminated soil will take place at the facility. The RD requires that any drainage from these areas shall be diverted for collection and safe disposal.

The RD requires the integrity and water tightness of all containers and resistance to water and other materials be tested and demonstrated by the licensee within 6 months of date of grant of licence.

Waste handling procedures

Waste Batteries: will be placed in rigid pallet plastic containers following acceptance on entry to the facility and exported off-site in these containers. The batteries will be removed off site for the recovery of lead and other metals. No processing of batteries will occur at the facility.

Waste oil: will be bulked up, stored in bunded oil tanks (in the proposed oil storage area) and exported in ISO container tanks (IMO 0) holding up to 24,000 litres in each and equipped with pipework connections for loading and unloading. The onsite storage tanks will be horizontal cylindrical in format and have access manholes at either end for de-sludging. The applicant states that basic characterisation of the waste oil will be carried out either at source of the waste or on entry to the facility. The licensee has developed a 'waste oil pre-acceptance procedure' that demonstrates the suitability of waste oils (for bulking up and storage) prior to acceptance at the facility. The applicant states that waste which does not fit the criteria will be refused entry. The RD requires the licensee to establish and maintain detailed written procedures for the acceptance, sampling and handling of all wastes including analysis.

Waste oils are not currently being accepted to the facility. The RD requires prior to the acceptance of waste oils that written procedures and evidence of staff competence and training are in place which is controlled under Conditions 2.1.3 and 8.2. Waste oils accepted at the facility with a PCB content higher than 0.005 % (50ppm) by weight shall be classified as PCBs, placed in a dedicated PCB storage area and not mixed with any other waste.

Waste oils arriving in barrels will be fork lifted off the incoming vehicle (80 barrels – maximum truck load), the drums will be stacked in the drum storage area which has approximately 300-barrel (2 high) capacity, and is bunded sufficiently to contain any spillage. The RD requires that all containers accepted at the facility shall be whole and sound. Any leaking drums shall immediately be over-drummed and any spillage contained and collected to prevent any adverse effect on the environment (Condition 8.14.1). The applicant proposes to cover the bulk oil tanks and drum storage area with a canopy to shed rainwater and this is proposed in Condition 3.9.6

Drums fit for emptying into the bulk storage tanks will be brought by forklift to the pump out station specifically provided with barrel pumps for drum emptying. All drums will be returned to service with the waste oil provider.

In front of the oil tanks and drum storage area will be the designated area on site to collect all drainage/spillage before collection in an underground tank. All underground storage locations will be double skinned steel construction in accordance with the requirements of the RD (see Condition 3.9.10) and all drainage from bunded areas shall be treated as hazardous waste unless it can be demonstrated to be otherwise (see Condition 6.13).

Waste oil filters: Will be delivered on site in 205 litre drums. The filters will be discharged into a hopper feeding a conveyor to a shredder mounted over a reception tank for the released oil. The shredded remains will be conveyed to a metal baler and the filters baled for transport off site. The applicant states that the drained oil will be pumped to the bulk tanks (in oil storage area) on a batch basis using IBC 1 tonne (non spill) crated containers. Once the filters are drained and shredded, the metallic materials will be stored at the facility for further recovery and recycling off site.

Waste tyres: will be accepted at the facility and stored in Area E for removal and off-site recovery. The licensee shall store a maximum of 100 tonnes of tyres at the facility at any one time. No waste tyres shall be accepted at the facility until such time as a fire risk assessment is carried out by an appropriately qualified practitioner. Hi-Volt are required to implement all recommendations regarding safe storage and mitigation against fire risk/damage unless otherwise agreed with the Agency prior to acceptance of tyres (see Condition 3.23).

Contaminated soil: will be accepted in sealed containers and stored in the same containers until removed off site. The licensee shall store a maximum of 100 tonnes at the facility at any one time, stored in a designated bunded area (Condition 3.22).

The RD requires the licensee to have regard to the *BAT Guidance Note on the Waste Sector: Transfer Activities April 2003* and *BREF Document on the Waste Treatment Industries August 2006* when considering the development of designated areas.

All waste arising from the facility will be recovered where possible. *Schedule A2: Waste Acceptance* of the RD specifies which wastes may be accepted at the facility and limits the total quantity of wastes to 21,000 tonnes per annum.

3. Use of Resources

- Fuel

The annual diesel consumption at the facility is estimated by the applicant to be ca. 60,000 litres. This fuel is used for on site plant as well as facility trucks. Two bunded tanks (3,000 litres and 1,300 litres) are used to store fuel on site. The RD requires that all tanks including fuel storage tanks shall be labelled to clearly indicate their contents.

- Electricity

Electricity consumption annually is estimated to be approximately 5,500kWh. The applicant states that energy audits will be conducted to evaluate electricity usage and identify areas where savings can be made.

- Water

Water is provided from two boreholes onsite. GW-01 is located adjacent to the office in the south central area of the site and GW-02 is situated in the north-eastern corner of the site. GW-02 supplies water for the northern end of the site (i.e. cleaning) and GW-01 supplies drinking water to facility staff. There is no mains water supply to the facility.

Condition 7 includes conditions dealing with water, energy and raw material use, reduction and efficiency on site. The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this license. With regard to reducing the climate impact of the installation under IPPC, the RD requires an energy efficiency audit and an assessment of resource use efficiency.

4. Emissions

4.1 Air

There are no direct emissions to air. There is potential for fugitive emissions from the acceptance and handling of waste proposed for the facility in Area D and Area C due to the sorting of general garage waste, batteries and oil filters in these two buildings. The RD requires that all waste processing, except bulk waste oil transfers, will be carried out indoors. The licensee proposes control measures such as appropriate ventilation, occupational mitigation and dust masks worn inside the buildings. No elevated dust emissions are envisaged from the facility. The RD requires the licensee to provide adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the facility. The licensee shall prepare a programme for the identification and reduction of fugitive emissions from the waste oils storage area using an appropriate combination of Best Available Techniques to be included in the EMP. In the design and operation of storage tanks the licensee shall have regard to the EPA guidance note on *Storage and Transfer of Materials for Scheduled Activities (2004)*.

The applicant states that the main source of air emissions arising from the facility will be from the use of plant vehicles and have outlined the following mitigation measures to minimise any risk:

- Vehicles using the facility shall maintain a maximum speed of 5km/h; and
- All vehicles will be serviced regularly to reduce combustion gases.

4.2 Emissions to Sewer

There are no process emissions to sewer. Sewage treatment is by septic tank and percolation area.

4.3 Emissions to Surface Waters

There are no proposed emissions to surface water.

4.4 Storm Water Runoff

Storm water runoff from the roofs, hardstanding and concrete yard areas will flow to the on-site drainage system; pass through a 10m³ storm water attenuation tank, silt trap and a Class 1 full retention oil interceptor prior to being discharged to ground via an on-site soakaway (Condition 6.15). Storm Water discharged from the Class 1 oil interceptor shall be tested as set out in *Schedule C.2.3. Monitoring of Storm Water Emissions*.

The RD requires the licensee to set warning and action levels for pH, COD, mineral oils and visual inspections, whereby an exceedance of warning levels would trigger an investigation of the cause and require corrective action, and an exceedance of the action levels would preclude the discharge being sent to stormwater.

The RD requires that storm water that is unsuitable for discharge to the soakaway shall be stored in on-site storage tanks prior to being tankered off for disposal at an authorised facility. On exceedance of a trigger level the licensee shall not discharge contaminated storm water to the soakaway. The applicant states that the soakaway has been designed to accept runoff from an area up to 8000 m², which is in excess of the total facility area of 7,481m².

All waste handling and processing will take place within the facility buildings except bulk transfer of waste oils and loading/ unloading of waste will take place in dedicated

bunded areas. The site buildings will be fully contained and all process tanks will be bunded. The RD requires appropriate containment measures (e.g. bunding) to prevent contamination of surface water due to leaks, spillages. The RD specifies that three-yearly testing of pipes, bunding structures and tanks shall be undertaken.

The RD requires the licensee to carry out a risk assessment within six months of date of grant of license to determine if the facility should have a firewater retention facility.

However the RD requires that no waste tyres shall be accepted at the facility until such time as a fire risk assessment is carried out and independently verified by an appropriately qualified and registered practitioner.

4.5 Emissions to ground/groundwater:

There are no direct emissions to ground water

All storm water runoff will be collected and directed via the storm water attenuation tank to the Class 1 full retention oil interceptor already installed within the facility.

Once the water has passed through the interceptor it is discharged to the soakaway. The point of discharge from the interceptor to the soakaway is considered an emission point (SA01). There are two groundwater wells (GW-01 and GW-02) within the facility boundary. GW-01 is used for drinking water in the facility. Monitoring was carried out on the two boreholes on 20/01/09. The abstraction well GW-01 indicated slightly elevated levels of ammoniacal nitrogen. The RD requires that there shall be no direct emissions to groundwater and Condition 6.16 requires the licensee to engage a suitably qualified person to carry out an assessment of groundwater monitoring results. Any recommendations from this report must be implemented within a timeframe agreed by the Agency. GW-02 did not record any elevated parameters.

The vulnerability rating for the aquifer underlying Hi-Volt Ireland Limited is considered to be poorly productive bedrock aquifer. Groundwater protection is provided by the on site bunds for waste storage. The on site well arrangement is sufficiently representative and should provide for sufficient indication of any site-sourced groundwater contamination.

Due to the hazardous properties of the waste to be recovered at the facility, the RD outlines the groundwater monitoring to be carried out in *Schedule C.6 Groundwater monitoring*, within one month from the date of grant of this licence. The RD requires the licensee to notify the Agency of any incident with the potential for environmental contamination of groundwater as soon as practicable after the occurrence.

4.6 Wastes Generated:

All waste arising from the operation of the facility will be recovered where possible. All other wastes will be disposed of off-site at an appropriately licensed facility.

4.7 Noise

The applicant undertook a noise survey during normal daytime operating hours on 20th January 2009. This survey indicated that the current noise from the facility can meet the limit in the *Guidance Note for Noise in Relation to Scheduled Activities 2nd Edition*, 2006, published by EPA, of 55dB (A) L_{Aeq}. This guidance document specifies 8.00 till 22.00 as daytime hours. The applicant does not indicate whether he can meet night time limits of 45dB (A) L_{Aeq}, therefore waste acceptance hours in the RD will be limited to daytime hours only. Potential noise impacts from the expansion of the facility are the use of a shredder and baler for garage waste. Both will be operated indoors with noise abatement implemented within the building.

The RD requires the licensee to carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.

Noise emissions limits are specified in *Schedule B4*: Noise emissions of the RD and limits of 45dB (A) L_{Aeq} and 55 dB (A) L_{Aeq} are applied at noise sensitive locations for nighttime and daytime, respectively.

4.8 Nuisance:

The applicant has proposed measures to control potential nuisances that may arise as a result of the on-site waste activities.

These include litter management, pest control contractor and good house keeping. Condition 5.6 of the RD specifies that measures be put in place to ensure vermin, birds, flies, dust and litter do not impair the environment at the facility or beyond the facility boundary.

5. Restoration:

Hi-Volt Ireland Limited have a decommissioning plan in place, the RD requires that this be updated to account for changes at the facility.

6. Cultural Heritage, Habitats & Protected Species

The facility is not located within a designated area. There will be no significant environmental emissions from the facility which could give rise to adverse effects in designated sites.

7. Waste Management Plan

The Waste Management Plan for the Midlands Region covers counties Laois, Longford, Offaly, North Tipperary and Westmeath. The first formal review of the plan was undertaken in 2004-2005, culminating in the 'Waste Management Plan for the Midlands Region 2005-2010'. The aim of the Plan is to set out a framework for the sustainable management of waste within the five local authority areas and covers all non-hazardous waste arising in the Region. The Plan also has regard to the management of hazardous waste in accordance with the National Hazardous Waste Management Plan, prepared by the EPA. The EPA's National Hazardous Waste Management Plan recommends further action by local authorities to collect hazardous wastes such as batteries and waste oils from household and small business. Hi-Volt's proposed expansion involves the storage of batteries and mixing of waste oils. The measures proposed by Hi-Volt are not in conflict with the objectives of the National Hazardous Waste Management Plan.

8. Best Available Techniques (BAT)

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached Recommended Decision comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

9. Compliance with Directives/Regulations

The facility does not fall under the scope of the landfill or IPPC directives. The facility will have no direct emissions to groundwater or to surface waters.

10. Fit & Proper Person Assessment

The legal, technical and financial standing of the applicant qualifies them to be considered Fit and Proper Persons. The RD requires in advance of the commencement of acceptance of waste oils the licensee shall provide a report for the agreement of the Agency detailing the training and technical expertise of all personnel involved in the acceptance, handling, bulking up and storage of waste oils.

11. Proposed Decision

I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of the activities in accordance with the conditions will not cause environmental pollution.

12. Submissions

There were no submissions made in relation to this application.

13. Charges

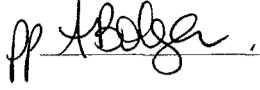
The RD requires that the applicant shall pay an annual contribution of € 6,034. This charge is based on the predicted enforcement effort required,

14. Recommendation

In preparing this report and the Recommended Determination I have consulted with Agency technical and sectoral advisors.

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached PD and for the reasons as drafted.

Signed

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Orla Harrington

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996 to 2008.