

Waste license Application – Atlas Ireland

Attachment A

Attachment A 1 – Non-technical Summary

Attachment A 2 – Atlas Brochure

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Attachment A 1

1. Nature of The Facility

Atlas Environmental Ireland Ltd. (previously Atlas Oil Laboratories Ltd) is a hazardous waste management and environmental services company, providing a range of services to the automotive sector, marine sector, industry and the public sector in Ireland. The main site activity is currently the manufacture of fuel from waste oils. The recovery of waste oil filters, treatment of oily solid wastes and bioremediation of contaminated soil is also carried out on site. Atlas Ireland is also active in the following areas-please see attachment A2 for brochure of activities carried out by Atlas:

- Emergency response (a 24 hour callout service for oil/petrol tanker rollovers and major oil spills),
- Supply of small domestic effluent treatment systems for small industry, communities and single houses.
- Supply of automotive products from cleaners to chassis straighteners.
- Supply of water treatment chemicals through or sister company Envirotech (located in Cork).
- Tank-safe ®, a tank neutralisation activity which allows petrol tanks to be made safe of by foam filling

On request from our nationwide customer base to help them properly manage their waste streams, we intend to provide a more comprehensive waste collection service to all of our customers. In particular, Atlas intend to service specific wastes that have poor infrastructural arrangements currently particularly when dealing with small businesses (garages, car dismantlers etc). Atlas Ireland therefore requires an extension of its licence to allow a range of other materials to be recovered, recycled, processed or bulked up to critical mass for recovery/recycling/disposal off the site. The Agency has decided on agreement with the company to move Atlas Ireland into the Waste Management Licensing regime and replace their existing IPC licence with a Waste Management Licence so that requests of this nature can be facilitated and administered more easily.

Atlas Ireland proposes to handle the following additional materials, which derive mainly from the automotive and small industry sectors:

- fluorescent light bulbs;
- windscreen glass;
- batteries;
- aerosols;
- tyres;
- solvents;
- brake fluids;
- antifreeze;
- windscreen washer;

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- Cooking Oils (already approved under IPC license);
- Waste Electrical and Electronic Equipment;
- Non-hazardous sludges from treatment plants;

2. Classes of Activities Concerned

The class or classes of activity concerned, in accordance with the Third and Fourth Schedules of the Act are as follows;

Class of activity	3rd Schedule
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.
Licensable activity	The Biological degradation of contaminated soils or other organic material.
7	Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) 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).
Licensable activity	The drying of sludge prior to final disposal/re-use The shredding of waste tyres for disposal. Thermal treatment of contaminated soil/organic materials.
12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
Licensable activity	Repackaging of waste oil, contaminated soil/organic material, Oil filters, ELV's, Brake fluid, antifreeze, acids/bases, fluorescent tubes, windscreen washer, solvents/mixed fuels, aerosol cans, windscreen glass, batteries, waste electronic and electrical equipment, waste cooking oil, tyres, oily wastes and other wastes as approved by the agency for disposal off site.
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.
Licensable activity	The storage of waste oil, contaminated soil/organic material, Oil filters, ELV's, Brake fluid, antifreeze, acids/bases, fluorescent tubes, windscreen washer, solvents/mixed fuels, aerosol cans, windscreen glass, batteries, waste electronic and electrical equipment, waste cooking oil, tyres, oily wastes and other wastes as approved by the agency for disposal off site.

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Class of activity	4 th Schedule
2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
Licensable activity	The recycling or reclamation of contaminated organic substances and soils for further re-use.
4.	Recycling or reclamation of other inorganic materials.
Licensable activity	The shredding of Tyres for recycling.
5.	Regeneration of acids or bases.
Licensable activity	The reconditioning of acids or bases for re-use
8	Oil re-refining or other re-uses of oil. (P)
Licensable activity	The recycling of waste oil into a fuel. The generation of biodiesel from waste cooking oils.
9	Use of any waste principally as a fuel or other means to generate energy.
Licensable activity	The use of recovered oil as a fuel for the generation power or steam.
11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
Licensable activity	Where waste may be taken from the preceding activities in this schedule for onward recovery on or off site.
12.	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
Licensable activity	The recovery of Oily solid wastes and used filters for further re-use/recovery.
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.
Licensable activity	The storage of waste oil, contaminated soil/organic material, Oil filters, ELV's, Brake fluid, antifreeze, acids/bases, fluorescent tubes, windscreen washer, solvents/mixed fuels, aerosol cans, windscreen glass, batteries, waste electronic and electrical equipment, waste cooking oil, tyres, oily wastes and other wastes as approved by the agency for recovery.

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3. Quantity and Nature of Wastes To Be Recovered / Disposed

The following table outlines the types and quantities of wastes to be processes/recovered or disposed off. All wastes are recovered unless otherwise indicated, some recovery operations are operated elsewhere and only use the Portlaoise facility as a transfer station;

Proposed Wastes To Be Handled At The Atlas Site

Waste Type	Quantity Per Annum	Handled Currently
*Waste Oils/ /Oily liquids (Recovery)	25,000 MT	Yes
Oily Filters (Recovery)	800 MT	Yes
Contaminated soils (Recovery/Disposal)	30,000 MT	Yes
Solid oily wastes (Recovery/Disposal)	5,000 MT	Yes
Mixed Fuels (Recovery or Disposal)	250 MT	Yes
Cooking Oil (Recovery)	5,000 MT	Yes
Glass (Recovery)	7000 MT	No
Batteries (Recovery)	3000 MT	No
Aerosols (Recovery/Disposal)	20 MT	No
Tyres (Recovery/Disposal)	4000 MT	No
Solvents (Recovery or Disposal)	3000 MT	No
Brakefluids (Disposal)	25MT	No
Antifreeze (Recovery/Disposal)	25MT	No
Fluorescent Tubes (Recovery)	50 MT	No
Windscreen Washer (Disposal)	70 MT	No
End of Life Vehicles (Recovery/Disposal)	1800 MT	No
Acids/bases (Recovery/Disposal)	100 MT	No
Sludge (Non-Oily) (Drying)	30,000 MT	No
Waste Electrical and Electronic Equipment (Recovery/Disposal)	6,000 MT	No

4. Raw Materials & Products

The principal raw materials brought on to site consist of waste oils accepted for reprocessing into a fuel (11LS), boiler fuels (gas or Light Fuel Oil), water softening chemicals (for boiler feed water - Oxytreat 310, Phostreat 241 and Streamtreat 435) and laboratory chemicals (Toluene, Petroleum Ether, hydranal, n-Heptane, n-Hexane) All Laboratory Chemicals used in relatively small quantities used in the analysis of oil and effluent.

Atlas supplies a range of products which are stored on the site for sale/distribution. These include waste compactors, distillers, parts washers primarily aimed at vehicle maintenance garages, body repair workshops, industrial workshops etc.

5. Operational Information

The principal activity on site is the processing of waste oils, from oil spills, interceptors, ships and from motor vehicle garages, to produce fuel products. The waste oil is delivered to the site in road tankers and contains varying amounts of water and small quantities of inorganic solids. The water and solids are removed and the finished product is sold as a fuel. Each batch of fuel is manufactured to a specification agreed with the Agency under IPC licensing.

The following unit operations are carried out at the site:

1. Segregation of waste oil, separation of water from oil, filtration, drying of waste oil, blending processed oils to produce a fuel and storage of final product. Solid wastes are disposed off/recovered off site and effluent generated is discharged to municipal sewer. Cooking oils are also subjected to the preliminary processing (water removal & filtering) prior to being exported for recovery into a biodiesel. It is intended to carry out biodiesel production at the Portlaoise facility in the future.
2. The compaction of waste oil filters is also carried out on site and oil generated from this is recovered as part of on site processes. Metals are sent for recovery off site. The shredding of filters is being considered to facilitate metal recyclers requirements.
3. The bioremediation of contaminated soil on site is carried out in a purpose built area and cultured bacteria/nutrients plus compressed air are added to the mixture as part of the remediation process. The programme of remediation and end uses for the remediated soil product are as agreed with the Agency under IPC licensing. Contaminated soils are also exported for treatment/disposal at off-site licensed facilities.
4. The acceptance of non-liquid oily wastes for repackaging into UN approved containers and onward shipment under TFS for recovery or disposal at off site licensed facilities.
6. The storage of materials and equipment for sale or distribution (including parts washers, detergents, wastewater treatment chemicals). This is a non waste activity, other than packaging wastes generated prior to distribution.
7. Emo Oil lease storage for about a 500 tonne quantity of Kerosene and Gas Oil/Diesel on the site. The operations carried out on-site by Emo Oil are the loading and unloading of road tankers and fuel tanks under the supervision of Atlas staff.

8. It is proposed to operate a sludge drying plant for the processing of non-hazardous sludges. These sludges, which are currently being landfilled would originate from sewage/industrial wastewater treatment plants.

9. It is proposed to install a unit on site for the separation and off site recovery of materials from fluorescent light bulbs. However initially the site would only act as a transfer station for these wastes to be sent for recovery at an off site licensed location.

10. It is proposed to install a unit on site for the treatment of used aerosol cans. Aerosol cans would be processed (puncturing container and carbon filtration of off gases) to remove the residual waste and the container crushed prior to being sent off site for recovery. However initially the site may only act as a transfer station for these wastes to be sent for recovery at an off site licensed location.

11. It is proposed to accept waste acids and bases on site for either regeneration through our sister company Envirotech or for neutralisation. Initially neutralisation would be carried out off site at a licensed facility however it is intended to carry out neutralisation at the Portlaoise facility in the future. In addition wet cell batteries may be drained of acid prior to removal off site.

12. It is proposed that tyres will be recovered by shredding them for re-use/disposal. Tyres shredding will be carried out in an enclosed area in order to reduce noise levels from this process. It is envisaged that landfilling of the shredded crumb will be required until industry develops appropriate routes of reuse.

13. It is proposed to handle, bulk up and temporarily store the following materials on site prior to shipment for recovery/disposal; glass, batteries, aerosols, solvents, brake fluids, antifreeze, mixed fuels, light bulbs, Waste Electronic and Electrical Equipment (WEEE), windscreen washer fluid and End of Life Vehicles (ELV).

14. The dismantling and segregation of WEEE is also envisaged as a future activity to be carried out on site. The relevant wastes components would be segregated for onward recovery or disposal as required.

15. Tank neutralisation is carried out in conjunction with Tanksafe by Atlas. This is where tanks can be rendered gas free by using a foam to expel gases from the tank. Tanks can be left in situ or taken off the customer's site for approved disposal.

6. Agency Determination Information

Atlas intends to meet the requirements of Section 40(4) paragraphs (a) to (d) of the Waste Management Act, 1996 through the following principal means;

-Atlas currently has in place and intends to maintain an Environmental Management System accredited to ISO14001 which will be extended further to include the additional activities proposed by Atlas. This system ensures that all environmental legislation relevant to the site is complied with and that there is continuous improvement in environmental performance at the site.

- Identifying BATNEEC for the process conducted on site and to set aside adequate resources to provide for the implementation of BATNEEC where possible.
- Ensuring the control of any emissions to land, air and water.
- The activity is not carried out on, or will be carried out on, and is not located such that it is liable to have an adverse effect on the integrity of:
 - (a) a site placed on a list in accordance with Chapter 1 of SI 94 of 1997, or
 - (b) a site where consultation has been initiated in accordance with Article 5 of the EU Habitats Directive (92/43/EEC), or
 - (c) a European site as defined in Article 2 of SI 94 of 1997

The activity is not likely to have an adverse effect on water quality in light of SI 258 Local Government (Water Pollution) Act, 1977; Water Quality (Standards for Phosphorous) Regulations, 1998.

7. Activity Emissions & Effects

Emission Source	Emission Details	Emission Effects
1.Air Emission	(All 2000 Data)	
Ref. A-01 Boiler Emission	SO _x = 25023 Kg p.a NO _x = 13242 Kg p.a CO = 73 Kg. P.a 84% Combustion efficiency	Emissions monitoring and air dispersion modelling have revealed that the boilers do not have a significant impact on local air quality
Existing plant operations	Fugitive emissions	Levels of BTEX and VOC's measured and modelled. Existing and increased levels not deemed to be significant.
Proposed Sludge	Flow rate: 6,000m ³ /hr	Air vent only with no process

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drying plant Air vent		related contaminant emission.
Sludge reception/	Fugitive Emissions only	Fugitive emissions only . Odour modelling and proposed abatement equipment only required if residential properties develop nearby.
2.Sewer Emission	(All 2000 Data)	
Ref. FS1	Flow Rate: 6115 m ³ p.a Suspended Solids: 992 Kg p.a COD: 25230 Kg p.a Ammonia; 230.4 Kg p.a	Impact assessed by Laois co. Co. and deemed not significant. Effluent has a positive effect by acting as a nutrient supply and flow stabiliser at Portlaoise STW.
3.Surfacewater Culvert		
Ref. SW-01	Only surface-water run off is discharged to the municipal surface-water drain. Levels of COD and Oils, fats, Grease have been detected in the surface-water which passes through an oil interceptor prior to discharge.	Surface water is passed through a Class 1 oil/water interceptor prior to discharge in order to minimise effects. Atlas surface water is mixed with surface water from other area's in the industrial estate prior to discharge.
4. Noise		
8 x Minor Sources mainly from enclosed process area's	All sources emit intermittently Noise contained within localised area's	Noise Survey has revealed that the noise impact is minimal as much of the noise is screened by tanks and building facades

8. Monitoring & Sampling

The following sampling and monitoring is currently undertaken at the site and will be maintained.

Emission Point	Monitored For	Frequency
A-01 Boiler Emission	SO _x , NO _x , CO Comb. Efficiency	Annually
FS1 Sewer Emission	Flow. pH, Temp, COD, Suspended Solids, Ammonia. Sulphates, Chlorides, Total P, Ammonia, Phenols, Copper, Zinc, Lead, Cadmium, Fats / Oils / Grease. Metals Scan Respirometry Test	Continuous Daily Weekly Quarterly Bi-annually
SW-01	Fats, Oils & Grease,	Flow proportional

	COD. Visual Inspection.	sample tested weekly Daily
Noise from Site	Sound Pressure Levels	Annually
Groundwater	Mineral oil PAH's	Annually

9. Off Site Treatment / Disposal

While the Atlas site acts as a waste recovery facility for oil based wastes generated throughout the country a small quantity of wastes are generated by the site's activities as follows;

- Hazardous waste (oily sludges/absorbents/rags etc) from oil processing/interceptor cleaning, spill cleanups etc these are drummed prior to export under TFS for recovery.
- Laboratory Waste (COD waste, Toluene, Petroleum ether, Hydranal, n-Heptane, n-Hexane) which are disposed of through disposal agents agreed in writing with the Agency.
- General non-hazardous waste is disposed of off-site by Landfill, which is operated by Laois County Council.

Atlas intends to continue providing our existing services but also extend the company's range of recycling, recovery and disposal operations, it is anticipated that there will be off site recovery/disposal of the following waste streams received from customers:

1. mixed fuels (petrol/diesel/waste oil mixed);
2. solvents (chlorinated and un chlorinated);
3. solid oily wastes, greases and oily sludges;
4. End of Life Vehicles (ELV's);
5. ELV derived wastes:
 - a. windscreen washer fluid;
 - b. Brake fluid,
 - c. antifreeze,
 - d. batteries,
 - e. tyres,
 - f. windscreen glass
6. Non ELV derived glass;
7. acids/bases;
8. fluorescent tubes and light bulbs;
9. Used aerosol cans,
10. Batteries (non-ELV derived);
11. waste electronic and electrical equipment (WEEE);
12. waste cooking oil,
13. and other wastes as approved by the agency

All facilities to be used for the off-site processing of wastes will be appropriately licensed and notified to the Agency in advance of use. It is currently envisaged that the majority of wastes will have to be exported under Trans-Frontier Shipment license.

10. Emergency Procedures

As part of the company's certified ISO14001 Environmental Management System there is an Emergency Response Plan operational at the site which provides for minimising the environmental impact of any emergency situation which could potentially occur on the Atlas site.

In addition to procedures, there are a number of controls in place on the site which ensure that the potential environmental impact of any emergency on the environment is minimised as follows;

- Secondary Containment on all tanks containing materials other than fire water;
- Boiler temperature control, pressure relief valve and remote alarm system;
- Tank heater set point temperature controller with electronic (SCADA) back up;
- Electronic tank gauges with high level alarms and Hi-hi level overfill prevention systems (SCADA).
- The surface water discharge is alarmed for the presence of oil. The discharge will automatically be stopped once free phase oil is detected and a 24hr monitoring station is notified and they contact on-call staff.
- Daily checks and routine maintenance carried out on equipment.
- The Fire Brigade have inspected the facility and provided with site plans detailing location of Fire hydrants, foam generating equipment etc.
- A Fire Water Retention study has been carried out and previously been agreed with the Agency under IPC licensing.

11. Site Closure & Aftercare

The company will take decommissioning into consideration at the design phase of any new developments at the site. All existing plant will be evaluated and handled appropriately in order to ensure that there will be no emissions as a result of decommissioning and that any wastes generated are

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handled in accordance with best practice. Following closure of the site there will be a site investigation and any necessary measures identified will be given the necessary attention through consultation with the Agency.

A Residuals Management Plan detailing site closure and decommissioning and an Environmental Liabilities Risk Assessment have previously been submitted to the EPA under the IPC licensing regime. The additional activities proposed do not materially change the proposals.

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