Waste Licence Application – Atlas Ireland
Attachment B6
Classes of activities from the third and fourth Schedules of the Waste management Act 1996 to be carried out by Atlas Ireland.
Brief description of each activity.

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Attachment B6

The following classes of activities have been selected in accordance with the 3rd and 4th Schedules of the waste management Act 1996.

Class of activity	3 rd 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
į	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.
<u> </u>	Thermal treatment of contaminated soil/organic materials.
12	Repackaging prior to submission to any activity
4	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,
1	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
i	a preceding paragraph of this Schedule, other than
i	temporary storage, pending collection, on the premises
	where the waste concerned is produced.
Licensable activity	The storage of waste oil, contaminated soil/organic material,
1.	Oil filters, ELV's, Brake fluid, antifreeze, acids/bases,
	fluorescent tubes, windscreen washer, solvents/mixed fuels,
4)	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/metals, 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.

The following explanations are a brief description of the activities to be carried out on site:

(a) Waste Oil/Oily liquids are accepted on site in accordance with site waste acceptance procedures as described in Attachment E3. Waste oil is collected by Atlas tankers, when oil is returned to the site where it is processed and recovered into a fuel (see attachment D3). Waste oils will also be sent to other licensed facilities for reprocessing. Waste oil will be accepted on site as the class 8 of the 4th Schedule, Oil re-refining of or other re-uses of waste oil.

- (b) Glass will be collected in the same manner as our existing collection system. The glass will be stored on site in a designated area until such time as there is a sufficient quantity for disposal. The manner of recovery/disposal will be agreed with the agency in writing. The collection of glass by Atlas for onward recovery/disposal.
- (c) Batteries (wet & dry cell) will be collected by Atlas in plastic acid resistant boxes and stored on site in a designated bunded area until such time as there are sufficient quantities for disposal. The disposal route will be agreed with the agency in writing. Batteries will at all times be in their whole state and will be handled in accordance to the approved waste acceptance procedure. Batteries may be drained of their acid in the future prior to shipment. Storage of this bulk acid would be in an acid resistant bunded tank. The collection of batteries for further recovery off site will be classified under class 13 of the 4th Schedule, where batteries may not be fit for recovery, they may be disposed of under class 13 of the 3rd Schedule.
- (d) Brakefluid being brought on site will be sourced from customers of Atlas and other commercial sources. The brakefluid will be collected in a similar manner to the collection systems already in place and stored in bunded tanks, until such time that there is sufficient quantity to remove for recovery. Disposal/recovery wilk be by means of an agreed route with the agency. Recovery of brakefluid will be under class 13 of the 4th Schedule. Where brakefluid cannot be recovered it will be disposed of under class 13 of the 3rd Schedule.
- (e) Antifreeze, will be collected in a similar manner to the brakefluid and will also be stored in a bunded tank on site. Disposal/recovery will be by means of an agreed route with the agency. The recovery of antifreeze to

produce glycol and water may be introduced on the site at a later stage and in agreement with the agency. The recovery of antifreeze by onward shipment to a disposal/recovery facility will be classed under the 13^{th} Class of the 4^{th} Schedule.

- (f) Waste Cooking oils, Spent cooking oil will be collected from customers and bulked up on site within a bunded area and stored until such a time as there is sufficient quantity to ship off site for recovery. Preliminary processing will be carried out on site using the same process as is used for other waste oils (water removal/filtering) prior to shipment. The recovery method involves the production of a biofuel from the cooking oil. The full recovery process (producing biodiesel) will be introduced on our site at a later stage with the agreement of the agency. The re-refining of waste cooking oil will be classified under class 8 of the 4th Schedule.
- (g) Oily solid wastes (including sludges, greases and other non-chlorinated petroleum based solvent wastes.) are collected from customers or generated on site from oil reprocessing and are re-drummed/packaged on site into UN approved containers as necessary. These containers are stored prior to shipping on concrete surfacing which drains through an interceptor. Disposal will be by means of an agreed disposal route with the agency. Some oily wastes (tanks/containers/containment booms etc) can be processed on site by washing or physical separation of the hazardous fraction, prior to disposal/recovery as non hazardous wastes, disposal methods may include recycling of plastics where feasible. The hazardous fractions are packaged for export or treated on site as per our licensed activities. This activity will be classed under class 12 of the 3rd Schedule.

- (h) Tanksafe Operations, Associated with the foam filling of redundant underground storage tanks (Tanksafe operations) is the storage of resin (amino based) and hardener (Dilute Phosphoric acid). Atlas do provide a service where these tanks (foam filled) can be removed to our facility and cut open. Any oil contaminated foam is then removed and may be added to the contaminated soil for treatment or drummed for disposal/recovery as solid oily waste. The remaining uncontaminated foam can be disposed of to landfill as non hazardous waste or shredded and used as a bulking agent in the soil remediation process. The activity encompasses class 2 of the 4th Schedule (if foam is treated on site), class 13 of the 3rd and 4th Schedules (for the disposal/recovery of oily solids and metal wastes).
- (i) Aerosols will be received on site and depressurized as they are received with the off gases passed through a carbon filter. The remaining metal will be disposed of in the approved metal recycling channel. Aerosols will accepted on site under class 13 of the 4th Schedule. Where aerosols are not de-pressurised on site they will be sent off site for disposal or recovery under class 13 of the 3rd or 4th Schedule.
- (j) Oil Filters are collected by Atlas as part of its garage services. The filters are crushed on site to remove the oil. Waste oil is recycled through the main process and the crushed filters are stored on site until such time as there is a sufficient quantity for removal off-site. Crushed filters are sent for recycling through the approved metal processor. It is envisaged that the process may be modified to a shredding operation to facilitate improved segregation of the materials in line with metal processors requirements. The crushing of filters on site will be classified under class 13 of the 4th Schedule.

- (k) Solvents will be stored on site in underground tanks. The storage of chlorinated and unchlorinated solvents will be separate. The solvents will be disposed by means of an agreed route with the agency. The recovery/disposal of solvents is to be classed under the 13th class of the 3rd or 4th Schedule.
- (I) Mixed fuels will be received on site and will be stored in underground tanks. Once there is a sufficient quantity for disposal the mixed fuels will be moved off site in accordance with the agreed recovery/disposal route. If possible depending on the nature of the mixed fuels they may be blended into the 11LS fuel under the existing IPC specification. Mixed fuels may be removed off site under class 13 of 3rd or 4th Schedule depending on the agreed disposal or recovery option.
- (m) Waste electrical and electronic equipment. Waste electrical and electronic goods/wastes will be collected in accordance with our waste acceptance procedures and stored on site for onward shipment to an approved disposal/recovery operator. The processing of WEEE may be carried out on the site in the future (segregation of waste components to allow for recovery/disposal). Waste electronic goods will be accepted on site under Class 13 of the 4th Schedule for further recovery.
- (n) Windscreen Washer will be collected in conjunction with existing garage services. It will then be stored on the until such time as there is sufficient quantity to remove off site to Disposal/Recovery. Windscreen washer will be classed under class 13 of the 3rd Schedule.
- (o) Fluorescent tubes will be handled on site in phased stages, the initial phase will be to store the fluorescent tubes on site for onward recovery. Storage of the tubes will be by means of a plastic heavy wearing coffin.

The tubes will be sourced from existing commercial sources and other industrial bases.

The second phase will involve recovery of the various components of the tubes (glass, mercury, metal etc). Fluorescent tubes will be processed under the Class 13 of the 4th Schedule

- (p) Tyres will be accepted on site and housed in a designated storage area. Tyres will be recovered by shredding them for re-use/disposal. Tyre 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. Classification for waste tyres will be under Class 13 of the 3rd or 4th Schedule depending on the disposal route, which is available at the time.
- (q) Contaminated Soil and other organic material received on site is weighed in by means of a weighbridge. It is stored in designated bays prior to treatment. These bays are constructed of concrete and drain through an interceptor. Treatment is carried out on soil treatment pads to remediate it. Treatment includes the addition of bacteria and nutrient broth in addition to aeration to increase the efficiency of remediation. Once this is complete and the contamination reduced to the approved levels it is independently verified and shipped off-site for re-use. Typically reuse involves that dscaping in golf courses, roadside landscaping and use in landfills as engineering material. The treatment of contaminated soil on the will be processed underclass 2 of the 4th Schedule.

Some soils will not be treated on site and will be sent off site to other licensed facilities for treatment or disposal.

Thermal oxidation of contaminated soils may be considered at a later stage. This would involve volatilization of the hydrocarbon contaminants through heat conduction followed by thermal oxidization of the off gases. In addition the composting of municipal/industrial/sewage sludges for volume reduction prior to landfilling or other method of disposal (sale of compost etc) is also to be considered for future operations. The existing soil remediation area would be easily converted to such a use. Further details would have to be submitted to the Agency for agreement prior to the commencement of either of these activities.

(r) Sludge will be received on site from a number of industrial/sewage sources including Food-processing / Pharma-chem / Sewage-treatment industries currently landfilling the sludges as non-hazardous waste. It will be received on site in sealed containers discharged to a recessed holder/hopper recess area before entering a sewage/sludge drying plant. Dried sludge pellets of approximately 95% dry solids content will be stored before transfer to an energy recovery plant or approved disposal route. The treatment of sludge into a dried form will be classified under the 7th class of the 3rd Schedule.

(s) Acid Reconditioning.

Acids will be accepted on site in accordance with the waste acceptance procedures. Once on site they will be stored in bunded tanks awaiting transport off site to a licensed treatment/disposal route. In addition waste acids/bases may be reused where suitable for onward sale (eg as water treatment chemicals) or neutralised through pH adjustment and disposed of through any approved route. These processes will be carried in conjunction with our sister company Envirotech (manufactures of water

