Noeleen Keavey

From:

Brian Meaney

Sent:

19 May 2016 14:37

To: Subject:

Noeleen Keavey

Attachments:

FW: W0184-01 Licence Review Submission - Table 2.1 Question 2 Final.pdf; Questions 1, 2, 3, 4, 5 rev 1.pdf

From: Gareth Kelly [mailto:gkelly@enva.ie]

Sent: 18 May 2016 18:14

To: Brian Meaney

Subject: W0184-01 Licence Review Submission - Table 2.1

Dear Brian,

Unfortunately I have just noticed that a table (Table 2.1) forming part of the answer to question 2 was omitted in the final compilation of the submission provided to the Agency yesterday.

Please see attached the revised section as well as a revised pdf covering the answers to questions 1-5 (to replace the electronic document provided by CD-ROM).

Two hard copies have also been posted to you for the hard copy files.

I do apologise for this small omission.

Regards

Gareth Kelly
Chief Operating Officer
Enva Ireland Ltd.

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"Every Day a Safe Day"

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Question 2: Provide a set of up to date drawings and maps that illustrate clearly:

- The installation boundary;
- The licensees site ownership boundary;
- Location of all unit processes employed at the installation;
- Location of all emission points and monitoring points;
- Location of oil storage and treatment tanks

Response:

Please find attached the following drawings:

Figure 2.1: Installation Boundary and site ownership map.

Note: installation boundary and site ownership are indicated by the same line marking.

Figure 2.2: Unit processes; Emissions and monitoring:

Figure 2.3: Proposed RTO and Vapour Balancing system.

Table 2.1: Storage and Treatment tanks

Question 2 Page | 1

Table 2.1 Storage and Treatment tanks

The state of the s	Tank No.	Current Contents (subject to change)	Process, Storage, Blend/.	Tank can be heated (Yes/No)	Operating (Current)	g Temperatur	es°C	Capacity (litres)
40	j.,-	4	Finish)	-	Max	·Min //	Avg	
\$27	1	Finished product	Storage	No	60	Ambient	Ambient	-54,000
	2	Finished product	Storage	No.	60	Ambient	Ambient,	- 54,000
	3 _{presented}	Finished product	Storage	Yes	60	Ambient :	30 - ::11	54,000
, [4	Finished product	Storage	No	, 60	Ambient	Ambient	To be replaced
	5	Finished product	Storage	No	'60	Ambient'	Ambient	108,000
	6	Finished product	Storage	No	60	Ambient	Ambient	140,000
	7	Waste Oil	Precipitation Process	Yes	80. any othe	40	60	60,000
	8	Waste Oil	Precipitation Process	Yes purpose	80	40	60	60,000
	9	Waste Water	Storage	Yes Hose	60	Ambient	Ambient	60,000
-	10	Waste Oil	Storage	Yes	60	Ambient	Ambient	60,000
	11	Waste Oil	Storage Storage	Yes	Ambien t	Ambient	N/A	54,000
	12	Waste Oil	Storage	Yes	Ambien. t	Ambient	N/A	54,000
	13	Waste Oil	Pre filtering heating	Yes	55	40	45	100,000
	14	Waste Oil	Pre filtering heating	Yes	55	40	45	100,000
	15	Waste Oil	Pre-filtering heating	Yes	55	40	45	100,000
	16	Waste Water	Storage	Yes	55	40	45	140,000
	17	Waste oil	Storage	No	Ambien t	Ambient	Ambient	54,000
	18	Waste Oil	Preliminary water separation	Yes	80	30	65	900,000
	19	Waste Oil		Yes	80	30	65	900,000
	20	Waste Oil	Storage	Yes	50	Ambient	25	2,000,000

Tank No.	Current Contents	Current Use	Tank can	Operating (Current)	g Temperati	ures °C	Capacity (litres)
	(subject to	Process,	heated	(current)			(110.23)
	change)	Storage,	(Yes/No)				
		Blend/					
		Finish)			i		
			500 (8°) TO TOTAL .	Max	Min	Avg	The second second
22	Finished product	Storage	Yes	60	Ambient	Ambier	
23	Finished product	Blend/Finish	No	60	Ambient	Ambier	nt 100,000
24	Waste Oil	Storage	Yes	80	40	60	100,000
25	Finished product	Dewatering Process	Yes	80	Ambient	60	100,000
26	Waste Oil	Storage	Yes	60	Ambient	Ambier	nt 140,000
32	Finished product	Storage	Yes .	80	Ambient	60	100,000
33	Finished product	Storage	No	Ambien t	Ambient	Ambier	nt 54,000
34	Finished product	Storage	No	Ambien t	Ambient	Ambier	nt 54,000
35	Finished product	Storage	No :	Ambien 1	Ambient	Ambier	nt 54,000
36	Waste Oil	Storage	No c	Ambien t	Ambient	Ambier	nt 50,000
37*	Waste Oil	Storage/ Transfer	Yes pure require	80	Ambient	Ambier	nt 140,000
42	Gas Oil/	Storage 💉	MO	Ambien	Ambient	Ambier	nt 54,000
	Kerosene	Storage Form		t			
43	Gas Oil/	Storage	No	Ambien	Ambient	Ambier	nt 54,000
44	Kerosene	Ct of Oto	N.	t Ambian	A mala i a ma	Amahian	F 4 000
44	Gas Oil/ Kerosene	Storage	No	Ambien	Ambient	Ambier	nt 54,000
45	Gas Oil/	Storage	No	Ambien	Ambient	Ambier	nt 54,000
F4	Kerosene	DI- 1/5: : !	N	t			100.000
51	Finished product	Blend/Finish	No	60	Ambient	Ambier	
52	Gas Oil	Storage	No	Ambien t	Ambient	Ambier	54,000
53		of commission (t	o be replace				
54	Gas Oil/ Kerosene	Storage	No .	Ambien t	Ambien t	Ambien t	54,000
55	Gas Oil/ Kerosene	Storage	No	Ambien t	Ambien t	Ambien t	54,000
SS 1	Finished product	Blend/Finish	No	60	Ambien t	30	190,000
SS 2	Waste Oil	Blend/Finish	Yes	60	Ambien t	40	190,000

77	u i i de la companya	and the second	Linus States			i de de la compansión d	and I was seen	Salar Sed
	Tank No.	Current Contents	Current Use	Tank can be	Operating (Current)	g Temperat	ures °C	Capacity (litres)
		(subject to change)	Process, Storage, Blend/ Finish)	heated (Yes/No)				
,					Max	Min	Avg	
¥	SS 3	Waste Oil	Blend/Finish	Yes	60	Ambien t	40	190,000
	Decante	Waste Water	Storage	No	80	Ambien	60	10,000
	r Tanks (2)	· · · · · · · · · · · · · · · · · · ·				t		
-	Reactors	Treatment/	Storage/	No	70	40	50	10,000
-	1 & 2	Interim	Lime	•				
	ggs, rg - r - g	storage of	addition.	,	<i>;</i>			
	1() 3.345.	effluent	· 'f.//.					
	WW 3 &	Interim '	Storage	No	70	40	50	50,000
	4	storage of effluent	;	·				
	WW1	Treated effluent for	Storage	No	55	Ambien t	30	60,000
		discharge				use.	<u> </u>	
	WW2	Treated	Storage	No	55 other	Ambien	30 ₃	60,000
	3 : 1	effluent for discharge	18.	్లు క్రాల్	55 offer	t	••	

Question 1: Provide a non-technical summary of the activity and associated emissions, existing and proposed.

Response

Please overleaf for Non-technical Summary

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INDUSTRIAL EMISSIONS LICENCE REVIEW

Enva Ireland Ltd Clonminam Industrial Estate Portlaoise Co. Laois

NON-TECHNICAL SUMMARY DOCUMENT

May 2016

1. INTRODUCTION

Enva Ireland Ltd. (Enva) is the holder of Industrial Emissions Licence Registration W0184-01 ('the Licence') which permits the facility at Clonminam Industrial Estate, Portlaoise, Co. Laois ('the Facility') to accept, store and process a range of primarily hazardous wastes. The EPA ('the Agency'), in accordance with sections 90(4) and 98A of the Environmental Protection Agency Act 1992 has initiated a review of the Licence.

This document sets out in non-technical terms the key elements of Envas' submission to the review.

Site Ownership

The site is owned by Enva.

Nature of the Facility

The nature of the proposed activity to be covered under this review process is largely the same as the current licensed operation. There are a number of changes to the proposed operations as well as to the air emissions abatement procedures, but the nature of the activity remains largely unchanged.

The principle change to the proposed operations is that any reversion to treating waste oil by way of high temperatures as practised prior to January 2016 will be only occur on foot of installation of appropriate emissions abatement infrastructure.

The activities at the facility will entail accepting holding and consolidating hazardous and non-hazardous wastes, waste processing and the onward shipment of the waste to licenced recycling / recovery or disposal facilities. A number of tanks within the main tank farm are also used exclusively for the distribution of virgin fuels (e.g. diesel and kerosene).

The principle elements of the facility comprise:

- An office building including the on-site laboratory;
- A large tank farm associated with the bulk storage and processing of hazardous liquids (e.g. waste oil, effluent and fuel oils) and associated plant & equipment;.
- An effluent treatment plant used to process effluent prior to discharge to sewer;
- Waste handling building (sorting, crushing, shredding and repackaging);
- Large Building used for both waste storage as well as for sorting, crushing, shredding and repacking of wastes;
- A packaged waste staging area for the receiving and inspection of waste prior to storage/processing;
- Waste storage areas;
- Soil Remediation Building;
- Tanker wash out bay (used to wash out tankers and also used to repackage wastes);
- Building for storage of suppliers (non-waste);
- Non-waste Storage/Vehicle parking areas;
- Building containing workshop, laundry and offices;
- Welfare facilities and ancillary offices (located within the Emo building)
- Two weighbridges and one wheelwash;

The normal hours for accepting waste at the facility are 07:30 to 21:00 Monday to Sunday. However, Enva also collect waste oils from ships which can occur outside of these hours. In



addition our Emergency Spill Response services may mean having to occasionally receive waste onsite outside of normal acceptance hours.

The site normally operates between the hours of 07:00 and 23:00 although the heating of tank contents occurs continuously including overnight (as it would be inefficient to stop heating outside the normal operational hours).

2. ACTIVITIES

2.1 Existing Activities

The existing activities at the Facility can be summarised as follows:

- The processing of waste oils (including engine oils, hydraulic oils, fuel oils etc.) to recover fuel products for specific applications;
- The treatment of water based effluent/waste water prior to discharge to sewer;
- The sorting, crushing, shredding and repackaging of wastes (including oil filters, fluorescent tubes, paint & surface coatings, adhesive/sealants, contaminated packaging/PPE/absorbent etc.) prior to onward shipment to third party licensed facilities for recovery or disposal;
- Processing of contaminated soil using physical, biological and chemical treatment techniques and including the recovery of store and aggregates for reuse;
- The bulking and mixing of compatible wastes for onward shipment to third party licensed facilities for recovery or disposal (both in bulk and packaged form);
- The storage of waste (in particular hazardous waste) for onward shipment for recovery
 or disposal (including batteries) aerosols, paint, wastes contaminated with residues of
 hazardous substances, contaminated soil, filtercake, sludges etc.)

The technical references to these activities are further detailed at 'Existing Classes of Licensed Activities' in Appendix 1.

2.2 New Activities

A number of new activities are proposed for the facility summarised as follows:

- The recovery of an inorganic waste stream containing useful concentrations of nitrogen and sulphate which can be used as a replacement fertiliser. Processing of the stream will only involve basic filtering of the waste stream to remove any unwanted particulate contaminants, neutralisation (e.g. pH adjustment) and the potential addition of additional micro nutrients followed by analysis to confirm the recovered material meets the desired specification.
- The biological treatment of soils that are classified as non-hazardous. This is identical to the existing remediation process operated at the facility for hazardous soils. The output of the process would facilitate disposal or recovery as inert material.
- Enva currently sorts, shreds, crushes and repackages a range of hazardous wastes and
 it is proposed to provide for the mixing of certain compatible hazardous wastes with
 non-hazardous wastes (already destined for energy recovery) together to physically
 condition and homogenise the wastes to facilitate its' direct use in a cement kiln or other



appropriately licensed energy recovery facility. Without such physical conditioning the wastes would not be in a suitable condition for direct use as fuel at these plants.

The technical references to these activities are further detailed at 'Additional Classes of Licensable Activities' in Appendix 1.

2.3 Proposed Waste Types and Quantities

			**	4
WASTE TYPES.	en e	·	Propos	ed Maximum 🔭 .
7 · 14.34 · 4:	id (i) of Garage		Tonne	speriannum:
Waste Oil/Hydroca	rbons (including in	iterceptor wastes.	and tank	30.000
Waste Oil/Hydroca bottoms, solvents a	ind other flammabl	e liquids)::		4
Bilk wastes includ	ling ຮູ້ຄູ່ໃນ ເຄືອນ ໄດ້ຄຸ້ນ ຄຸ້ນ ຄຸ້ນ ຄຸ້ນ ຄຸ້ນ ຄຸ້ນ ຄຸ້ນ ຄຸ້ນ	ajed soil fille cake	si drilling:	40.000
· · · · · · · · · · · · · · · · · · ·	other bulk wastes)			
Other hazardous w	astes (including a			
Other hazardous w wastes, civic ameni	ity wastes)			R · E · Sa · · · ·
Inorganic Waste (fo	or frecovery)	Grand Maria	A A CONTROL OF THE PROPERTY OF	-10.000 × ·
Non-hazardous wa	astes (aqueous: i	effluents. aRDE lo	r similar	W20.000
combustible waster	streams);	4		a weta it is
Total Waste (Unch		5.77447546	eretaŭ veta di 1940	4110:000

<u>Note</u>: Additional wastes (hazardous or non-hazardous) may be also handled or processed and volumes interchanged between categories subject, however, to the prior receipt of agreement from the Agency as required by the Licence.

3. EMISSIONS

- 3.1 The potential emissions from activities at the site include:
 - 1. Air Emissions (e.g. hydrocarbons, odour & dust);
 - 2. Noise;
 - 3. Discharges to surface/storm water; and
 - 4. Discharges to sewer;

3.2 Current Air Emissions:

RPS Environmental Consultants were engaged in the early 2016 to carry out a series of source tests at stacks and vents as well as fugitive emissions across the site to inform the ongoing air emissions abatement improvement programme.

There are a number of sources of air emissions at the facility including from:

- steam raising boiler;
- tankers offloading/loading
- storage & process tanks
- -- processing of oil (e.g. filtering, centrifuging)
- processing of wastewater;
- soil remediation;
- storage of waste (eg soil, filtercake etc);
- sorting, crushing/shredding and repackaging of waste;



<u>Steam raising boiler</u>: The existing steam raising boiler is fuelled by either natural gas or oil. The boiler has an associated emissions stack (approx. 19m high) through which the combustion gases are emitted to atmosphere. This is subjected to annual monitoring (of combustion gases) in accordance with the existing licence.

<u>Tanker Loading/Unloading</u>: The loading/unloading of tankers is not considered a significant source of air emissions as the majority of products handled are not particularly volatile. Where potentially odorous wastes are being offloaded the tankers are then fitted with vacuum valves to prevent air emissions but allow air into the tanker as it is offloaded. Tankers loading volatile liquids (e.g. solvents, petrol etc) use a vapour recovery system to return displaced air from the tankers as it fills back into the storage tank.

Storage and Processing Tanks: Since January 2016, the company has ceased to use the oil drying technique where oil was heated to ~100°C and air sparged to drive off the remaining water. Since then this technique has been replaced with one where the oil is chemically dewatered at a lower temperature (~80°C) with the tank vent ducted to an air filter. Furthermore all waste storage and oil/wastewater processing tanks now have their vents ducted to air filters rather than directly discharging to atmosphere. These filters now include an activated carbon filter to abate odours and volatile organic compounds (VOCs) such as benzene. Activated carbon is active effective and commonly employed technique to remove odours and VOCs.

Processing of oil. The processing of waste oils include filtering and centrifuging steps which are carried outlinear enclosed area. Since March 2016, the filtering area has been further enclosed and had an extraction system installed which draws air from the filtering area through an activated carbon filter to remove odours and VOCs before discharging to atmosphere. The discharge from this carbon filter is a new emission point procluded in this application (A2-1). Furthermore it is planned to vent emissions from all waste oil tanks vents through this emissions point (which may be relocated to an adjacent area).

<u>Processing of Wastewater</u>: The handling and processing of wastewaters at the facility can present the potential for odours and other fugitive emissions. To manage this wastewaters are treated as required with agents to neutralise the potentially odorous compounds. In addition the wastewater system is enclosed to prevent uncontrolled releases to atmosphere. Since April 2016, an extraction system has been installed on the main effluent transfer point to draw air from this point through a scrubber and an activated carbon filter to remove potential odours and VOCs. The discharge from this carbon filter is a new emission point included in this application (A2-2).

<u>Soil Remediation</u>: Soil Remediation activities are carried out within the soil remediation building. Potential emissions include dust, odour and VOCs from contaminants within the soil. Existing measures to control dust, odour and VOC emissions include use of a mobile water/odour abatement aerosoling unit. In February/March 2016 we enclosed the building on two sides (i.e. the northern & eastern elevations). It is now proposed to fully enclose the building and planning permission has been applied for in this respect. To date the soil remediation activities have not presented any significant odour or air emission source and it is not considered necessary to install any further mitigation measures other than to complete enclosure of the building.

Storage of Waste: Wastes are stored in both bulk and packaged form at the site. All wastes are stored within buildings except for the storage of packaged low flashpoint liquids (e.g. solvents, mixed fuels etc.) and the tanker wash out bay. While not considered to present a significant source of air emissions it is now proposed to roof these areas. While the storage area for packages containing low flashpoint waste will be open at the sides to provide necessary ventilation, the tanker wash out bay will be fully enclosed and provided with an air extraction system discharging through a carbon filter to control VOC and the potential for odours.

<u>Sorting, Crushing, Shredding and Repackaging of Waste</u>: A variety of handling and physical processing activities are carried out on wastes all of which occur within buildings. Monitoring within these areas has shown the levels of VOC emissions to present no significant impact.

3.3 Air Emissions Monitoring & Improvement Programme

Vapour Balancing

Currently the vents from both process and waste storage tanks are ducted to a number of individual activated carbon filters. Works currently underway intend to duct each tank vent to a central ring duct which would serve to interconnect the vapour space of each tank. This would provide a means of balancing the vapours between tanks and reduce the volume of air displaced as liquids are pumped from one tank to another. The vapour balance system allows vapours being displaced from one tank as it is being filled to return to the tank being emptied via the ducting. The ducting will vent as necessary through an activated carbon filter or alternative abatement process (e.g. Regenerative Thermal Oxidation (RTO) – see 'Proposed RTO' below).

Tank Cleaning

A new large activated carbon filter is proposed to facilitate the cleaning of large oil storage/processing tanks. The new carbon filter will be capable of handling ~10,000m³/hr of air flow and thereby providing 5-10 air changes per hour to the largest oil processing tanks in use at the facility (tanks 18, 19). This carbon filter will also provide abatement for the tanker wash out bay as outlined below.

Additional Enclosure Measures

It is proposed to provide increased enclosure to a number of waste handling areas across the site, specifically:

- i) Soil Remediation Area it is proposed to enclose his on all four sides to provide better control of fugitive emissions associated with soil handling/processing activities;
- ii) Tanker Wash Out Bay currently this is not enclosed and it is proposed to fully enclose this which will reduce the volume of contaminated rainwater generated in the area as well as provide better control of potential odour emissions from tanker cleaning operations. The new building will be fitted with an air extraction system connected to a new activated carbon fitter for use when odorous materials are being handled.

3.4 Proposed RTO

Enva will not recommence the previous form of thermal drying technique where oil, heated in batches to ~100°C, was air sparged to remove residual water. Therefore the requested monitoring of air emissions to ensure the correct sizing of the Regenerative Thermal Oxidiser ('RTO') was not progressed.

However, notwithstanding the amended process since January, 2016 under which chemical deemulsification alone has been used to remove water from waste oil, consideration is being given to introduce an alternative thermal drying technique which would be carried out in a continuous manner rather than the previously employed batch mode. This process would be more thermally efficient than the previous batch mode and would also provide greater operational efficiencies. The thermal drying process currently under consideration is a process whereby the oil would be heated in a pipeline by means of a steam powered heat exchanger and placed under pressure prior to entry into an expansion vessel where the more volatile components would become gaseous and be removed from the liquid oil stream. The gaseous fraction (mainly water but including VOCs) would be routed to an RTO for treatment before discharging to the atmosphere via a new chimney stack adjacent to the existing stack associated with the sites boiler.

Once design of the proposed new thermal oil drying process is completed it will include further details of the composition and flow rates of the airstream to be treated by the RTO and ensure the RTO is adequately sized to meet BAT (See 'Best Available Techniques Reference' below). Emissions from the RTO unit will meet the BAT emission limits for VOCs of 20mg/Nm³.



This new process for thermal drying of oils will not be deployed until an RTO plant of sufficient capacity is approved and installed.

3.5 Other Emissions

Noise:

Noise emissions may arise from operational plant and traffic to and from the site. However, the majority of waste operations take place under enclosed conditions (excluding tanker/truck offloading). The site has adjacent industrial activities as well as being bounded by a mainline railway line. The site undertakes noise monitoring surveys as part of the existing licence conditions and these surveys have not indicated any noise issue of concern emanating from the facility.

Discharges to Surface Water:

Surface water run-off from internal roadways and yard pavement, is collected in the surface water drainage system. In addition water building up within the main tank farm is also discharged to the surface water system after inspection. The surface water drainage system includes guilly traps, silt traps and Class 1 interceptors to control discharges to the municipal surface water drainage system.

All surface water discharges are subjected to a routine monitoring programme under the Licence and have a high level of conformance with the existing scharge parameters.

Discharges to Sewer:

Process wastewater generated at the facility arises largely from the processing of waste oils and effluent. Some additional effluent is generated from run off from soil remediation areas, tanker washing and container washing. All effluent arising is treated as necessary to meet the discharge limits in the Licence prior to discharge to sewer. Discharge of process wastewater is via a flow proportional auto sampler and includes the ability to electronically control the timing and rate of discharge.

In addition domestic type discharge associated with the on-site tea/coffee room, sanitary facilities are also discharged to sewer.

The Company has engaged with Irish Water with a view to exploring the potential to amend the existing discharge parameters for discharges to sewer. Irish Water is carrying out a review of the Drainage Management Area Plan for Portlaoise and is unable to progress any review until this work is completed. It is expected that this review will be completed by August 2016.

4. BEST AVAILABLE TECHNIQUES REFERENCE (BREF) DOCUMENTS

As part of the Licence review the relevant pan European reference documents associated with the Industrial Emissions Directive were reviewed. These documents list the Best Available Technology ('BAT') to be used as reference guidance for facilities licenced under the Directive.

The relevant BREFs were identified as:

- i) Waste Treatment Industries (2006);
 - ii) Emissions from Storage (2006);

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NON TECHNICAL SUMMARY DOCUMENT INDUSTRIAL EMISSIONS LICENCE REVIEW

iii) Energy Efficiency (2009);

No other BREFs were considered to be materially relevant to the activities at the facility that are not already covered by the BREFs reviewed above. These were reviewed and while not constituting legal requirements it was confirmed by the review that the facility applies a high level of the Best Available Techniques across the various site activities. BAT can be demonstrated by the following non-exhaustive list:

- Operation of an independently accredited Environmental (and Safety) Management system;
- Use of waste acceptance procedures to control waste accepted at the site;
- Use of enclosed tanks and vessels to store and process waste with abatement provided by means of adsorption filters on such tanks & vessels;
- Provision of secondary containment for all tanks and waste storage areas;
- Utilisation of sealed containers for storage and transportation of waste;
- PC/SCADA control of oil & effluent processes to provide automated controls of the process (e.g. control temperatures, prevent overfills etc.);
- Use of adsorption filters to control emissions to atmosphere (i.e. activated carbon).
- Monitoring of all significant emissions to air, sewer and storm water;
- Effective waste tracking systems;

However, as outlined above, a number of improvement measures are planned or underway to improve the level of compliance with BREF documents including:

- Introduction of vapour balancing ducting to reduce the sevel of emissions to atmosphere from tanks and also the loading on abatement systems
- Enclosure of Soil remediation building
- Enclosure of tanker wash out bay to reduce contaminated water generation and provide extraction system for odour abatement when required (including waste repackaging);
- Roofing of packaged flammable liquids stored reduce rainwater build up;

5. RECOVERY OF FUEL OILS

The facility recovers a range of fuel products from waste oils for use in a number of limited industrial applications (asphalt production & steam raising boilers). A technical and legal review was carried out which re-confirms that the recovered fuel oils are no longer considered waste based on the relevant legislation and a technical assessment of the recovered products produced at the facility.

6. BASELINE REPORT SUMMARY

A baseline report has been prepared for this application in line with the guidance presented in the "European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions" (reference 2014/C 136/03). This guidance sets out a standard eight stage process that includes highly prescriptive requirements to complete a baseline. This report is included in the application and identifies the "relevant hazardous substances" on the site and their associated risk along with a summary of the historic groundwater quality.

7. SCREENING REPORT SUMMARY

An Appropriate Assessment Screening was carried out in respect of the facility and its activities. Appropriate Assessment is a process whereby a comprehensive ecological impact assessment is carried out of the sites activities, examining its implications (on its own or in combination with other plans and projects) on one or more designated European Sites taking into account the conservation objectives of any relevant designated sites, as referred to in Article 6(3) of the EU Habitats Directive.

The Screening process identified four Special Areas of Conservation (SACs) and two Special Protection Areas (SPAs) within a 15 kilometre zone of influence of the facility. The Enva facility itself is not situated within a European Site; the nearest is the Slieve Bloom Mountains SPA, which is approximately 8 kilometres to the west of the facility.

Given the distance between the Enva site and the European Sites, the Screening exercise concluded that there is no potential for significant effects on the identified European Sites and a Stage 2 Appropriate Assessment is not required.

For further details relating to this Non Technical Summary Document, please refer to the full Enva submission which can be found at www.epa.ie

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NON TECHNICAL SUMMARY DOCUMENT INDUSTRIAL EMISSIONS LICENCE REVIEW

Appendix 1

Existing Classes of Licensed Activities

Enva wish to retain all existing classes of activities currently licensed (as listed below). It is no longer proposed to operate a sludge drying plant as currently permitted under the Licence.

- The recovery or disposal of waste in a facility within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required;
- 11.2 (a) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment;
- **11.2 (b)** Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment;
- 11.2 (c) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving blending or mixing prior to submission to any of the other activities listed in paragraph 11.2 or 11.3;
- 11.2 (d) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging prior to submission to any of the other activities listed in paragraph 11.2 or 11.3;
- 11.2 (g) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving regeneration of acids or bases;

 While this has not commenced it is to be retained to facilitate proposed recovery of an acidic stream for reuse in an industrial production process currently under negotiation;
- 11.2 (j) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving re-refining or other reuses of oil.
- 11.4 (a)(ii) Disposal or recovery of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical realment;
- Temporary storage of hazardous waste, (other than waste referred to in paragraph 11.5) pending any of the activities referred to in paragraph 11.2, 11.3, 11.5 or 11.7 with a total capacity exceeding 50 tonnes, other than temporary storage, pending collection, on the site where the waste is generated;

Additional Classes of Licensable Activities being sought:

- 11.2 (f) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving recycling or reclamation of inorganic materials other than metals or metal compounds;

 This is to facilitate the recovery of liquid wastes suitable for reuse as a beneficial fertiliser;
- **11.4 (b)(i)** Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment;
- 11.4 (b)(i) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving biological treatment;

 These two classes are to facilitate the recovery or disposal of non-hazardous soils grits and other similar non-hazardous wastes using bioremediation;
- **11.4 (b)(ii)** Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration:

This is to facilitate the preparation and mixing of suitable non-hazardous wastes with hazardous wastes to condition the wastes for handling at a third party incineration or co incineration plant;

Question 2: Provide a set of up to date drawings and maps that illustrate clearly:

- The installation boundary,
- The licensees site ownership boundary;
 - Location of buildings, tanks and major pieces of equipment;
 - Location of all unit processes employed at the installation;
- Location of all emission points and monitoring points;
- Location of oil storage and treatment tanks

Response:

Please find attached the following drawings:

Figure 2.1: Installation Boundary and site ownership map.

Note: installation boundary and site ownership are indicated by the same line marking.

Figure 2.2: Unit processes, Emissions and monitoring.

Figure 2.3: Proposed RTO and Vapour Balancing system.

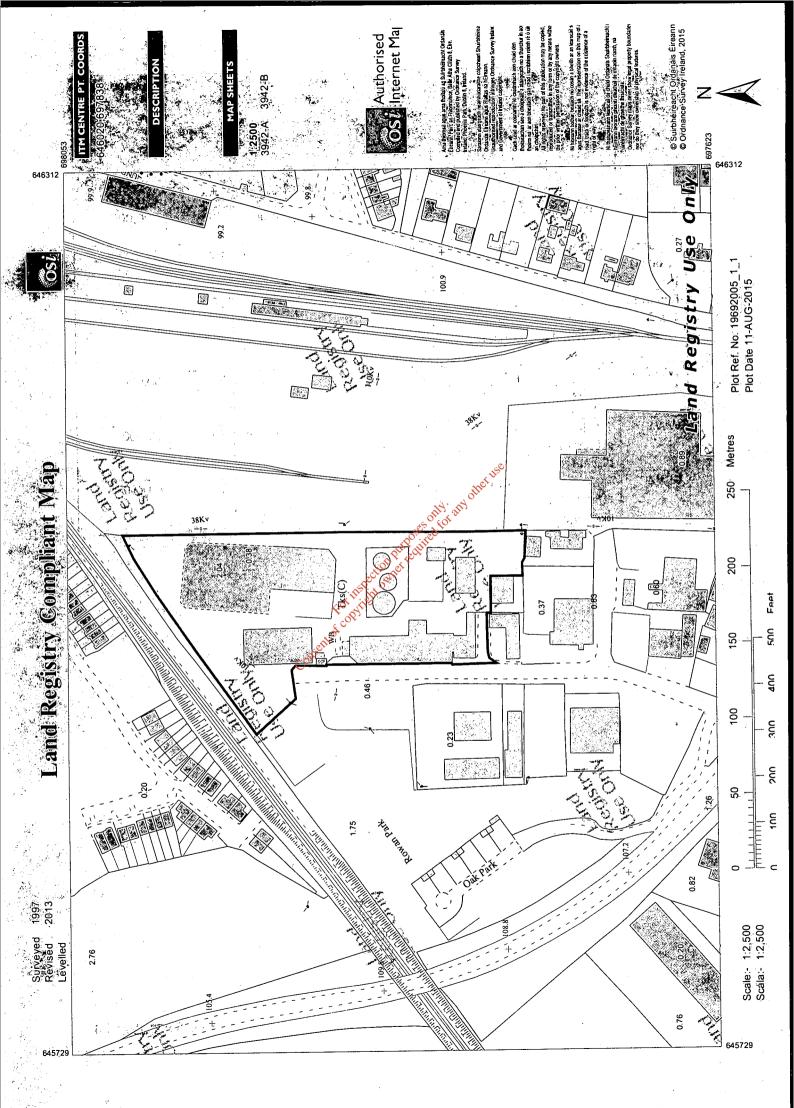
Table 2.1: Storage and Treatment tanks

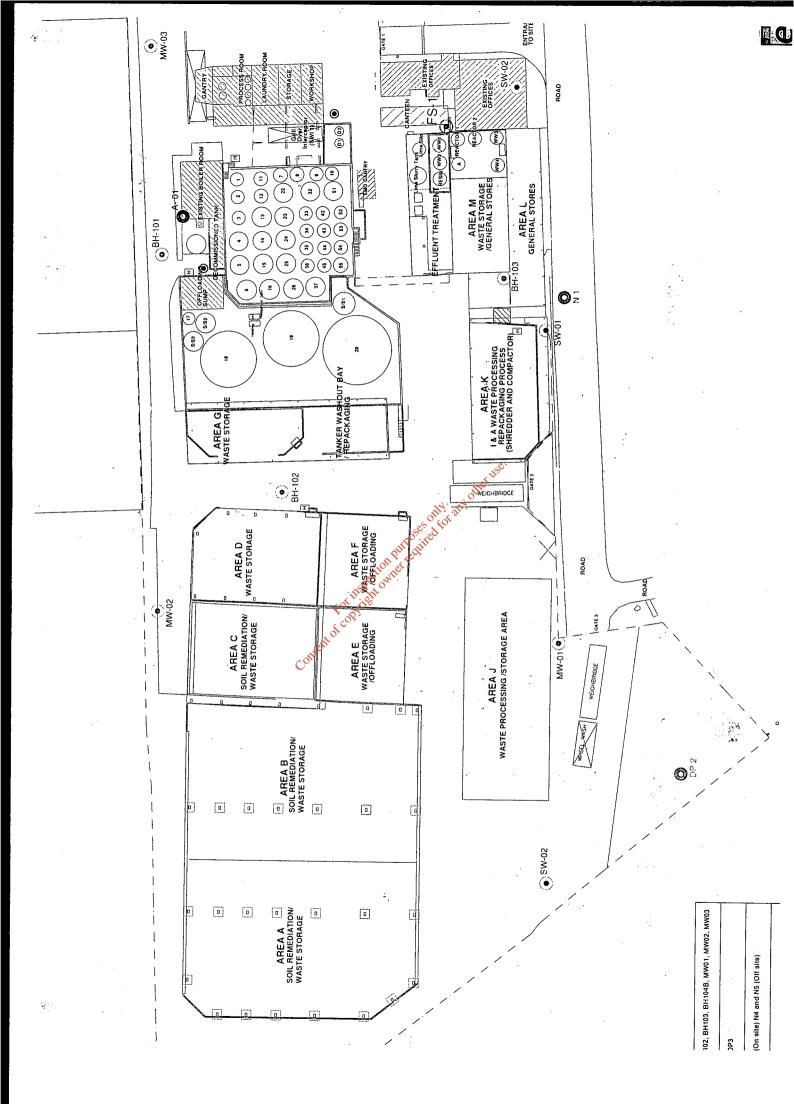
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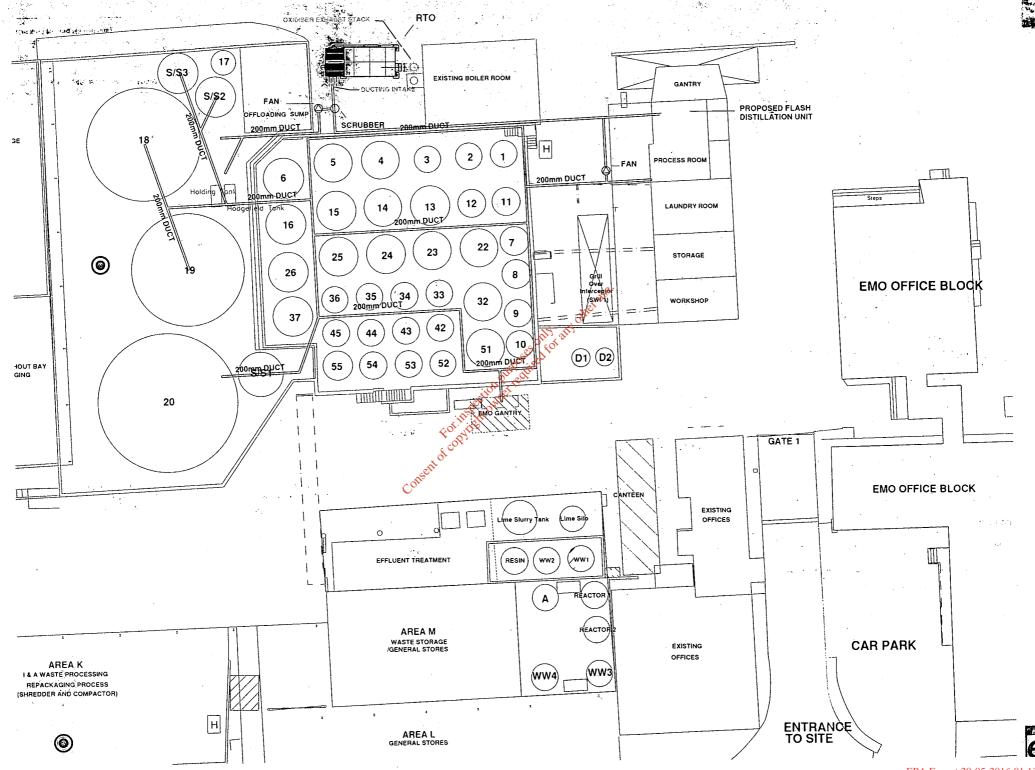
	Storage and Tre	atment tanks	he and the		Mary Sales		
Tank No.	Current Contents (subject to change)	Current Use Process, Storage, Blend/ Finish)	Tank can be heated (Yes/No)	Operating (Current)	, Temperatu Min	res °C	Capacit (litres)
1	Finished product	Storage	No	60	Ambient	Ambient	54,000
2	Finished product	Storage	No	.60	Ambient	Ambient	54,000
3	Finished product	Storage	Yes	60	Ambient	30	54,000
4	Finished product	Storage	No '	60	Ambient	Ambient	To be replace
5	Finished product	Storage	No	60	Ambient	Ambient	108,00
6	Finished product,	Storage	No	60	Ambient	Ambient	140,00
7	Waste Oil	Precipitation Process	Yes	80 other tr	40	60	60,000
8	Waste Oil	Precipitation Process	Yes ses	80	40	60	60,000
9	Waste Water	Storage	Yes not to	60	Ambient	Ambient	60,000
10	Waste Oil	Storage 40	Yes	60	Ambient	Ambient	60,000
11	Waste Oil	Storage of Contraction	Yes	Ambien .	Ambient	N/A	54,000
12	Waste Oil	Storage	Yes	Ambien	Ambient	N/A 45	100,00
13	Waste Oil	Pre filtering heating	Yes	55	40	45	100,00
14	Waste Oil	Pre filtering heating	Yes	55	40		
15	Waste Oil	Pre filtering heating	Yes	55	40	45	100,00
16	Waste Water	Storage	Yes	55	40	45	140,00
17	Waste oil	Storage	No	Ambien	Ambient	Ambient	54,000
18	Waste Oil	Preliminary water separation	Yes	80	30	65	900,00
19	Waste Oil	1 22 23 34 34 34	Yes	80	30 -	65	900,00
20	Waste Oil	Storage	Yes	50	Ambient	25	2,000,

Tank No:	Current Contents	Current Use	Tank can be heated	Operating (Current)	g Temperatu	res ^o C	Capacity (litres)
	(subject to change)	Process, Storage, Blend/ Finish)	(Yes/No)				
				Max	Min	Avg	
22	Finished product	Storage	-Yes	.60	"Amblent	Ambieni	100,000
23	Finished product	Blend/Finish	No	60	Ambient	Ambient	100,000
- 24-	Waste Óil	Storage	Yes	80	40	60	100,000
25	Finished product	Dewatering Process	Yes	80	Ambient	60 ,,	100,000
26	Waste Oil	Storage	Yes	60	Ambient	Ambien	t 140,000
32,	Finished product	Storage	Yes	80	Ambient	60	100,000
33	Finished product	Storage	No	: Ambien t	Ambient	Ambien	t 54,000
34 71	Finished product	Storage	No	Ambien t	Ambient	Ambien	t 54,000
35 · · ·	Finished product	Storage ,	No	Ambiene	Ambient	Ambien	t 54,000
-36 100	Waste Oil	Storage	No	Ambien	Ambient	Ambien	t 50,000
37* (X)	Waste Oil	Storage/ Transfer	Yes* Other red	80	Ambient	Ambien	t 140,000
.42	Gas-Oil/ Kerosene	Storage	PATO	Ambien t	Ambient	Ambien	t 54,000
43 ^N J.	Gas Oil/ Kerosene	Storage Ment of Storage	No	Ambien t	Ambient	Ambien	t 54,000
44	Gas Oil/ Kerosene	Storage	No	Ambien t	Ambient	Ambien	t 54,000
45	Gaŝ Oil/ Kerosene	Storage	No	Ambien t	Ambient	Ambien	t 54,000
51	Finished product	Blend/Finish	No	60	Ambient	Ambien	t 100,000
52	Gas Óil	Storage	No	Ambien	Ambient	Ambien	t 54,000
53	Empty & Out	of commission (1	to be replace		\ 		`````````
54	Gas Oil/ Kerosene	Storage	No	Ambien t	Ambien t	Ambien t	54,000
55	Gas Oil/ Kerosene	Storage	No	Ambien	Ambien t	Ambien t	*54,000
SS 1	Finished product	Blend/Finish	No	60	Ambien t	30	190,000
SS 2 4	Waste Oil	Blend/Finish	Yes	60 -	Ambien	40	190,000

Tank No.		1	alt. a. co				3.0
Pank No.	Current Contents (subject to change)	Current Use Process, Storage, Blend/ Finish)	Tank can be heated (Yes/No)	Operation (Current	ng Temper.) Min	atures °C	Capacity (litres)
SS 3	Waste Oil	Blend/Finish**	Yes	60	Ambien	40 ^f	190,000
<u> </u>		, ,			t	140	190,000
Decante	Waste Water	Storage	No	80	Ambien	60	10,000
r Tanks (2)					t		
Reactors	Treatment/	Storage/	No	70	40	50	10,000
1 & 2	Interim	Lime	,		70	30	10,000
	storage of	addition.					
1404/2.0	effluent						
WW 3 &	Interim storage of	Storage	No	70	40	50	50,000
	effluent					t 	
. WW1	Treated	Storage	No	55	Ambien	30	60,000
	effluent for	_			t	30	00,000
	discharge			769	p•		
WW2	Treated	Storage	No	55 ther	Ambien	30	60,000
	effluent for discharge			55 other use	t		
	uischarge		es o	£01.			ļ.







Question 3: By reference to the licensed activities at the installation, as listed in the Section 76A (II) amendment dated 30/12/2013, provide a brief description of the class 11 activities carried out under each of the listed activities. State whether any of the listed activities are no longer relevant.

Response

Enva wish to retain all existing classes of activities currently licensed (as listed in Table 3.1 overleaf).

It is no longer proposed to operate a sludge drying plant for non-hazardous wastes (e.g. sewage sludge) as currently permitted under the Licence and therefore it has been omitted.

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Table 3.1 - C	Class 11 activities under IED.			
Activity Class	Class Description	Licensed Activities		
11.1	The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required. (Is an industrial emissions directive activity, in so far as the process development or operation specified in 11.1 is carried on in an			
	installation connected or associated with another activity that is and industrial emission directive activity)	This class is included to facilitate activities associated with the activities listed below and to allow for non IED activities covered under separate legislation to be carried out on an IED facility.		
11.2	Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:	HAZARDOUS WASTE ACTIVITIES		
(a)	biological treatment;	Biological treatment of waste (e.g. contaminated soil & stone)		
(b)	physico-chemical treatment;	Treatment of contaminated soil & stone including screening, sorting, washing and chemical treatment; Treatment of hydrocarbon contaminated liquids and other aqueous effluents (including precipitation, oxidation, neutralisation & solids removal); Shredding of hazardous waste (packaging/containers and other solids with residues, oil filters etc.); Washing of hazardous wastes to remove residues prior to recovery/disposal; Conditioning of hazardous wastes for onward recovery/disposal;		
(c)	blending or mixing prior to submission to any of the other activities listed in paragraph 11.2 or 11.3;	liquid wastes are bulked in tanks prior to further processing; solid wastes are bulked for bulk export and subsequent disposal/recovery;		

Table 3.1 - 0	Class 11 activities under IED.	
Activity	Class Description	
Class		Licensed Activities
(d)	repackaging prior to submission to any of the other activities listed in paragraph 11.2 or 11.3;	Waste Transfer including repacking and bulking wasterfor onward shipment (e.g. Household Hazardous Wastes, Civic Amenity Site Hazardous Wastes, Industrial & Automotive hazardous wastes, Bulk wastes (contaminated soils, filtercake sludge's etc.)
(g)	regeneration of acids or bases;	Used acids (e.g. sulphuric acid from batteries) which may be re-certified for reuse;
(j)	oil re-refining or other reuses of oil;	Production of recovered fuel oil from waste oil (including heating, phase separation, centrifuging, filtering and chemical treatment)
11.4 (a) (ii)	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment; not represent the content of the content o	Physical and chemical treatment of contaminated soil (classified as non-hazardous) & stone; Treatment of aqueous effluents; Sorting, shredding of non-hazardous waste (e.g. packaging, tyres etc.)
11.6	Temporary storage of hazardous waste, (other than waste referred to in paragraph 11.5) pending any of the activities referred to in paragraph 11.2, 11.3, 11.5 or 11.7 with a total capacity exceeding 50 tonnes, other than temporary storage, pending collection, on the site where the waste is generated.	Interim storage of Hazardous waste in bulk and packaged form

Question 4: With reference to the existing Industrial Emissions licence, what licenced activities, specifically mentioned in the licence, have not commenced or have ceased and indicate whether it is your desire that they remain as licensed activities.

Response

Table 4.1 sets out the activities which have been ceased or have not commenced on site.

Ceased/Non commenced Activities
Status
It is not proposed to recommence this activity.
Enva need to retain this as a licensed activity and continue to
have the infrastructure available on site to recommence these
activities. The activities have only been suspended and be may
recommenced depending on available outlets.
Status
e.
It is not proposed to proceed with this activity.
It is not proposed to proceed with this activity although the
facility will continue to shred other wastes (hazardous & non-
hazardous
It is proposed to retain this activity as Enva are currently in
discussions with regard to the regeneration of a waste acid
Stream for subsequent reuse.
The state of the s

Question 5: In relation to new activities, not currently authorised, if any, that you wish to be authorised to commence state what additional List of Waste (LoW) codes are sought and their associated treatment processes. Include information on these new activities and LoW codes, to the extent, that they are relevant there, in your responses to the items 6,7 and 8.

Response

See below Table 5.1 detailing the proposed new classes of activities to be carried out at the site.

	Table 5:1 Proposed new classes of activities					
IED		17.00 mg/s (18.00 mg/s)				
Class	Class description	Comments	EWC codes			
11.2(f)	recycling or reclamation of inorganic materials other than metals or metal compounds;	Enva are proposing to accept certain inorganic liquids which may be recovered for use as a valuable fertiliser.	.11 01 11*			
11.4 a(ii)	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving biological treatment;	Contaminated soils accepted at the facility may be hazardous or non-hazardous, Non-hazardous soils may also be bioremediated (e.g. to reduce the contaminant levels to facilitate disposal to inertaindfill etc.)	Includes: 01 05 04, 01 05 99, 17 05 04, 17 05 06, 17 05 08, , 19 09 01, 19 09 02, 19 09 04, 19 12 09, 19 12 12, 19 13 02, 19 13 04, 19 13 06, 20 03 03; In addition see also table 6.2 for full listing			
11.4 b (ii) 11.4 (ii)	Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): biological treatment; pre-treatment of waste for incineration or co-incineration;	Contaminated soils accepted at the facility may be hazardous or non-hazardous, Non-hazardous soils may also be bioremediated (e.g. to reduce the contaminant levels to facilitate disposal to inert landfill etc.) Enva are proposing to mix certain hazardous and non-hazardous wastes to prepare the waste for incineration/co-incineration. This would include the sorting, shredding & mixing of suitable wastes for onward shipment. Non-hazardous wastes may be necessary to physically condition the waste for acceptance at the incineration/co-incineration plants to enable their feed conveyors/systems to handle the waste;	Includes: 01 05 04, 01 05 99, 17 05 04, 17 05 06, 17 05 08, , 19 09 01, 19 09 02, 19 09 04, 19 12 09, 19 12 12, 19 13 02, 19 13 04, 19 13 06, 20 03 03; In addition see also table 6.2 for full listing			

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Addition of the second