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# Objection to Proposed Decision W0192-03 Rilta Environmental Ltd.

Dear Inspector,

Enva Ireland Ltd would like to make the following objections to the Proposed Decision Reg. W0192-03 in relation to the review of Waste License Reg. W0192-02. Enva are commercially active in the hazardors waste market, currently operating 4 EPA licensed hazardous waste facilities. The objection is made largely in the context of ensuring there is a level playing field for operators within the hazardous waste treatment and waste oil recovery sectors.

The grounds of the objection can be divided into three sections, namely:

- A) Acceptance of Hazardous Waste for On Site Treatment
- B) Emissions Control
- C) Production of Fuel from Waste oil

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# A) ACCEPTANCE OF HAZARDOUS WASTE FOR ON SITE TREATMENT

Objection: There is insufficient clarity contained within the proposed license controlling the nature or types of hazardous wastes authorized to be treated at the facility (as distinct from being transferred on to other facilities). The Inspectors Report notes that there is 'a significant change in the list of materials and EWC codes that are to be accepted/treated on-site' It remains very unclear what specific wastes (EWC Codes) are proposed to be treated at the facility as distinct from what wastes are for onward shipment.

The following observations provide context to this objection:

1. The list of wastes in Attachment H1 of the application includes a significant number of additional waste streams (by EWC codes) than was permitted under the previous license (this was noted in the Inspectors report). A significant number of these additional waste streams included in the new application (Attachment H1) are apparently for on site treatment (Treatment D9). See table 1 below where these additional waste streams are split into 3 categories:

Table 1 – New Waste Streams as per the current application (Attachment H1):

- Co. For		
Hazardous Wastes	Wastes (New)	Non Hazardous wastes (New)
Hazardous Wastes Wastes Not permitted currently but listed in 2008		
listed in 2008		
<b>X</b> AER		
© 01 05 05	08 03 08	19 07 03
05 01 05	08 03 12	19 12 12
06 01 01	10 01 23	01 04 09
06 01 02	10 02 11	10 04 13
06 01 06	11 01 05	10 01 23
06 01 99	11 01 08	10 01 99
06 02 04	11 01 09	16 10 02
06 02 99	11 01 11	19 02 99
07 01 99	11 01 13	19 09 02
08 01 12	11 03 01	19 09 04
	14 06 03	
	16 05 06	
	16 05 08	
	16 06 06	
	16 07 99	
	16 10 01	
	17 05 05	
	19 02 11	

The waste streams summarised in the above table, do not appear to be approved currently by the Agency for treatment on site, and are all included in the current application – Attachment H1- for on-site treatment - D9.



Furthermore the new waste streams as listed in column 1 of the above table, do not appear to be approved currently but are listed in the licensee's 2008 AER apparently having been treated on site.

It should be noted that in the application for the current license (W0192-02) submitted in 2007 the applicant had not apparently indicated that any non-hazardous wastes were to be treated (see table 2.1 of the EIS). It should also be noted that attachment D of the previous application (W192-02) had only provided for the treatment of hydrocarbon related wastes.

- 2. A large number of the wastes listed for treatment in the Hydrocarbon Treatment Plant (ie in Appendix A of the Applicants response dated 5/8/09) are not listed in Attachment H1, which apparently details all the wastes proposed for acceptance at the facility (ie both on-site treatment and export).
- 3. While waste drilling muds (01 05 05) are listed in Attachment H1 of the application, apparently for on site treatment, this waste stream is not listed in the wastes proposed for treatment in the hydrocarbon treatment plant and no details of any alternative other process is provided.
- 4. A number of the waste streams listed in Attachment H1 of the application apparently for on site treatment appear to be mis-described or less than fully described, including:

Description in Attachment H 1	Comment
06 01 02 Hydrogen Fluouride Waste	This EWC code relates to Hydrochloric
Turk and the state of the state	Neid
06 05 05 Alkali Waste	No code 06 05 05 exists
07 01 99 WEEE Waste	07 01 chapter relates to organic
to thigh	chemicals
08 01 12 Contaminated Water	This EWC code relates to paint/varnish
nt of	waste
11 01 01 Detergent washings	No code 11 01 01 exists
11 03 01 Zinc Sludge	This code relates to wastes containing
	cyanide
14 06 03 Aqueous Washings	This code relates to 'other solvents and
	solvent mixes'
16 05 06 Glycol Washings	This code refers to laboratory chemicals
	including mixes of laboratory chemicals
16 05 08 Coolant	This code refers to discarded organic
	chemicals
16 06 06 Neutralized Waste	This code refers to separately collected
	electrolyte from batteries and
	accumulators
16 10 07 Oily water	No code 16 10 07 exists
19 02 11 Sludge	Other waste containing dangerous
	substances from physico/chemical
	treatment of waste



- 5. It is noted that other licensed facilities (eg W0184-1) seeking to add EWC codes to their list of permitted waste streams have the following information sought by the Agency in consideration of acceptability:
  - Dangerous substances contained within the wastes
  - Acceptance criteria for these wastes
  - Associated risks/hazards with these wastes
  - Required abatement/handling equipment and current on site availability
  - · Location on site where wastes are to be processed or stored

The Proposed Decision will grant the applicant a very substantial increase in the number of waste streams/EWC codes acceptable at the facility with no assessment apparent of these factors. This provides the applicant with an unfair advantage over other operators including Enva who are subject to much more rigorous assessment of additional waste streams. Such information has been requested from the Agency from Enva even when the additional waste streams are not for on site treatment but only being accepted for storage pending transfer to another authorised facility.

- 6. While it is noted that the Inspectors Report (p8) indicated an intention 'to require the applicant to review their waste acceptance procedures in line with the wastes outlined in Table H.1 from this Waste License Review application. It is not apparent how this is effected within the Proposed Decision.
- 7. The proposed Decision does not provide a direct requirement to ensure the 'vast array of wastes' (indicated in Applicant's email on 23/10/09) are stored so as to minimise the risk from incompatible substances. While condition 3.15.1 refers to bunds being designed in accordance with the Agency's guidelines it does not include for the operation of a segregation system for incompatible substances. While condition 8.5 requires appropriate segregation it does not specify the segregation of incompatible substances in line with international guidelines such as the German Federation of Chemical Industry's (VCI) concept for mixed storage of chemicals provides guidance in this area for chemical storage in mobile containers, or the UK Health and Safety Executive guidance HS(G)71 'Chemical warehousing: the storage of packaged dangerous substances'.

#### Conclusion & Recommendation to Section A

In the interests of clarity and transparency it is suggested that Schedule A.2 be amended to clearly show and differentiate which waste streams/EWC codes are approved for treatment at the facility.

Additional EWC codes should not be permitted without an appropriate assessment of the waste streams consistent with the approach being taken across the sector.

The license should allow for the enforcement of an appropriate storage/segregation plan for the facility appropriate to the range of wastes being accepted.



#### **B) EMISSIONS CONTROL**

**Objection:** The Proposed Decision does not make adequate provision for the control of emissions associated with the activities licensed at the facility. In particular the Proposed Decision will permit significantly lesser controls over emissions than is currently required on other licensed facilities carrying out similar activities. In the application the applicant makes reference to the 'vast array of waste streams coming in for treatment' and thus the controls required need to be robust and comprehensive. The following observations provide context to the objection.

#### **Emissions to Sewer**

The monitoring parameters for sewer discharge should obviously relate to the nature of the wastes being treated. In the Proposed Decision the sewer discharge parameters appear to be largely concerned with effluent from oil/hydrocarbon treatment with limited regard for other chemical parameters appropriate for chemical treatment.

While not clear from the information provided as part of the application it is understood that the applicant wishes to operate an acid/alkali treatment or 'neutralisation' plant. When treating acids there needs to be consideration to all anions that may occur from this treatment, i.e. sulphate, chloride, phosphate, fluoride, nitrate. Neutralisation will not necessarily remove these anions from the discharge and the neutralisation products may remain soluble and hence may be discharged to sewer.

While it is acknowledged that the Sanitary Authority have the primary role in determining the parameters and limits the Agency also have powers in this regard. The applicant refers to confusion with some of their customers by the historic use of the term 'hydrocarbon treatment centre' (Applicant email of 23 Oct 2009) this may also have mislead or confused the Sanitary Authority. It may be that the Sanitary Authority has not been made fully aware of the vast array of waste streams coming in for treatment' and have not fully considered the inclusion of parameters such as those placed on other licensed facilities treating chemical wastes of the same characteristics, such parameters might include:

Parameter	Comment
Toxicity	No monitoring or restrictions yet the facility is treating substantial volumes of waste with significant toxicity potential
Ammonia	Monitored monthly with no restriction on the concentration or mass emission yet the facility is permitted to treat oil contaminated with ammonia, landfill leachate and many other aqueous waste streams which commonly have significant ammonia present
Organohalogens	No monitoring or restrictions, yet chlorinated wastes and solvents are listed apparently for treatment on site
Volatile Organic Compounds	Only BTEX controlled (common petroleum related parameters), yet solvents are listed apparently for on site treatment; (eg. 14 06 03)



Phenols	No restrictions yet the facility is proposing to treat discarded organic chemicals and solvents;
Metals	Many metals are not controlled (eg Ag, Al, Co, Hg,
	Cd,) which are commonly present in hazardous
	waste streams
Nitrates	No monitoring or restrictions
Sulphides	No monitoring or restrictions
Phosphorous	No monitoring or restrictions
Chloride	No monitoring or restrictions

### Monitoring Frequency

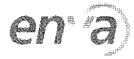
The monitoring frequencies applied for sewer discharges are far less frequent than those imposed on other licensed physical and chemical treatment facilities: The nature of the hazardous waste treatment market in Ireland generally necessitates treating different hazardous wastes with different characteristics from one day to the next. Therefore the characteristics of the discharges vary very significantly from one day to another, (it is not a consistent process with a consistent discharge). To ensure compliance with the emissions limits it is therefore necessary for any operator to analyse proposed discharges on a daily basis. The following observations can be noted in respect of differences in the monitoring frequencies from other licensed hazardous waste treatment facilities:

- Monitoring for COD is required monthly rather than <u>daily</u> monitoring imposed on other facilities;
- Monitoring of pH and temperature is monthly, yet <u>continuous</u> monitoring of pH and temperature is commonly imposed on other facilities:
- Monthly monitoring requirements for ammonia yet a frequency of 3 times a week is applied to other facilities;
- No monitoring requirement for phosphorous/phosphate yet daily monitoring imposed on other facilities.

## **Emissions to Atmosphere**

Similarly the treatment of such a 'vast array of waste streams coming in for treatment' requires appropriate infrastructure to control any significant emissions to atmosphere which may arise during the treatment processes. Other licensed facilities in Ireland treating wastes of the same characteristics have properly enclosed pressure rated, reaction vessels linked to an air abatement system (eg air emissions scrubber) which is the normal approach to provide such a safeguard. Attention is drawn to the Best Available Techniques Reference Document (BREF), for Waste Treatments Industries produced by the European Commission. In particular, Chapter 5.2 where BAT no. 72 (d) indicates BAT to include 'enclosing all treatment/reaction vessels and ensuring that they are vented to the air via an appropriate scrubbing and abatement system'.

While such infrastructure is largely precautionary, as the treatment processes are not expected to evolve significant air emissions, unintended air emissions can occur if reactions are carried out too quickly or if minor contaminants are present. As such appropriate infrastructure needs to be in place to safeguard against such eventualities. The abatement system should be designed to cope with a range of potential emissions that may arise from treating the types of waste being treated. There are no such safe



guards required under the Proposed Decision other than relatively basic passive abatement measures that appear to relate to odour control (close doors, venting & dispersion).

The atmospheric emissions from the physico-chemical treatment of wastes are apparently not combined into a central emissions point which would facilitate their monitoring. While condition 6.9 addresses general fugitive emissions this is cannot be considered sufficient for controlling atmospheric emissions from physico-chemical treatment of a broad range of hazardous wastes and whose nature and character may change on a daily basis.

#### Conclusion/Recommendation to Section B: Emissions Control

The control of both sewer and atmospheric emissions is substantially lesser than is necessary to ensure proper control of these emissions from a hazardous waste treatment facility. The level of monitoring proposed is very significantly less than is applied to other licensed facilities treating similar waste streams and thus provides a substantial cost saving in the operation of the facility over other licensed facilities. This ultimately provides an unfair competitive advantage to the facility at the expense of the environment. The conditions controlling emissions should be reviewed to ensure the necessary measures are required to ensure robust control of both sewer and air emissions.



#### C PROPOSED PRODUCTION OF FUEL FROM WASTE OILS

#### Section C (i) Reach

Condition 11.5 of the Proposed Determination requires the applicant to notify the Health & Safety Authority of the characteristics and quantities of the processed fuel oil. This is assumed to be related to ensuring the requirements of the Regulation (EC) No 1907/2006 as amended (Reach). Under Reach materials that are not fully recovered (ie remain wastes) are not included within Reach's scope. However once a waste is fully recovered and ceases to be a waste, Reach requirements apply in principle in the same way as to any other material, with a number of exceptions granted conditionally. The most recent version of 'Guidance on waste and recovered substances' produced by the European Chemicals Agency (ECHA), is directly relevant to the applicants proposed activities and drawn upon within this objection. http://guidance.echa.europa.eu/docs/guidance\_document/Draft\_WaR\_Substances\_v2\_%201.pdf

The applicant has indicated in correspondence dated 5<sup>th</sup> August 2009 that the requirements of Reach do not apply, however this is considered in conflict with the presumed intention to market a fuel derived from waste oil as a fully recovered product as distinct from a waste. The following observations can be made in this regard:

- 1. The applicant asserts that 'if the one is classified as 'reprocessed waste oil for reuse as a fuel' it will not be within the scope of Reach or CLP/CPL' however this is only correct if the 'reprocessed waste oil for reuse' remains a waste. If this is the case then it must continue to be treated as such and cannot be used as a fuel in applications that are not licensed under the Waste Incineration Directive (WID).
- 2. In completing the Reach classification tool the applicant answered 'no' to Question 2 'Are you a manufacturer or importer of the substance on it's own or in (a) preparation(s)?' however all forms of recovery are regarded as manufacturing process within Reach as stated in the guidance available.

Reach does provide certain conditional exemptions in respect of Reach requirements specifically Article 2(7)(d) of Reach:

1. The first condition requires the substance to be the same as the substance already registered. As such it is necessary to identify the original substance to which sameness is applicable. This is not simply a generic name of the substance but would need the relevant CAS/EINEC number of the registered substance. The proposed specification of the processed fuel oil and the specification of the original substances (ie unused virgin oils) are not identical and therefore sameness cannot be simply assumed. The main source of information on substances within Reach are Substance Information Exchange Fora (SIEFs) formed under the registration and preregistration processes. SIEFs seek to agree the sameness of substance identity and such information is necessary for recovery operators seeking to avail of the exemption under Article 2(7)(d) of Reach.



2. The second condition provides that the information required by articles 31 or 32 relating to the substance that has been registered in accordance with Title II is available to the establishment undertaking the recovery. If a recovery operator is unable to access the relevant information on the same substance already registered he/she cannot rely on the exemption under Article 2(7)(d) and has to register the substance.

However if a recovery operator has not pre-registered the substance, yet the substance does achieve sameness, then the exemption <u>only</u> allows the recovered substance to be manufactured or placed on the market <u>after the full registration</u> of the substance by the recovery operator or another actor (manufacturer/importer etc). Only pre-registration of the substance would allow for a recovery operator to continue placing the recovered substance on the market prior to full registration of the substance.

It is worth noting that the Reach obligations related to the life-cycle and supply chain of a substance and end with the waste stage. This has the consequence that the uses of a recovered substance do not have to be covered in the exposure scenario of the "original" substance. Thus for example, base oil registration is unlikely to include application of the substance as a fuel and thus places additional requirements on a recovery operator producing fuel from lubricating oils to meet the requirements of Reach.

If the applicant has not made the necessary registration or pre registration the applicant would therefore appear not to be in a position to place their processed fuel oil on the market until they or another actor in the supply chain have completed the necessary registration. Furthermore if the applicants have not availed of the pre registration process then they cannot avail of the transitional arrangements available before full registration.

See <a href="http://echa.europa.eu/reachit/pre-registration-it\_en.asp">http://echa.europa.eu/reachit/pre-registration-it\_en.asp</a>

## Conclusion/Recommendation to Section C (i): Reach

To provide a robust transition from waste legislation to substance legislation the license should include a requirement for the applicant to demonstrate their compliance with Regulation (EC) No 1907/2006 before placing processed fuel on the market as a non-waste substance.



# Section C (ii) Waste Oil Recovery Process (including conclusions and recommendations).

Condition 6.1.4(ii)/Schedule C8 seek to establish/specify procedures for the analysis of oils and in particular for the final product. The analysis of relevant parameters within waste oil derived fuels at the levels proposed is currently only developing in the UK and the results of this process will prove beneficial to producers in Ireland. It is suggested that the process of approving test methods by the Agency should involve all licensed recoverers of fully recovered fuel oils derived from waste oils in Ireland resulting in a common and consistent approach.

In addition the proposed limits and testing regime for the non-environmental related parameters water, carbon residue and total sediment are considered unnecessary or inappropriate. Water content of up to 3% in the fuel will no significant impact on the performance of the fuel in asphalt plants and should be permitted avoiding unnecessary processing. Similarly the carbon residue and sediment parameters are non-environmental parameters (generally correlating with the ash content) and are more relevant to the use of the fuel in other applications (eg a water tube boiler) than in an asphalt plant where they do not affect performance or environmental impact. It is suggested that Schedule C8 be amended to increase the water content limit to 3% and remove the requirement to test for sediment and carbon residue.

Condition 6.2 and Schedule C.7 pt the Proposed Determination require the testing of inputs to the waste oil treatments yetem for PCB. In addition PCB levels are tested for as part of the final certification process as per schedule C.8. The test for PCB is difficult and very time consuming, taking approximately 2 hours per sample (cleanup & run on GC-ECD). The requirement to test every load arriving is considered very onerous and impractical. It is suggested that only oils originating from electrical equipment (eg Transformers) of otherwise suspected of containing PCB should be tested prior to processing. Testing for PCB as part of final certification should remain as specified.

Schedule A.3 seeks to prevent the use of chlorinated hydrocarbons being used as inputs to the production process. However in Enva's experience most, if not all, waste lubricating oils as well as most waste fuels have a chlorine content. Thus such a restriction will only cause confusion in it's application, whereby any chlorine content may restrict or confuse it's acceptability for processing. The proposed determination includes a chlorine limit on the processed fuel oil product in Schedule C.8 which is considered sufficient to control this parameter.



I trust that the Agency will take due regard for the objections detailed herein. If any further information or clarification is required please do not hesitate to contact the undersigned.

Please find enclosed the required fee of €200 in respect of this objection

Yours sincerely

Declan Ryan Managing Director

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