

This report has been cleared for Submission
to the Board by the Programme Manager
Frank Clinton
Signed: *Frank Clinton* Date: *21/10/10*



**LICENSING &
RESOURCE USE**

INSPECTORS REPORT ON A LICENCE APPLICATION

TO:	DIRECTORS
FROM:	Marie O'Connor - Licensing Unit
DATE:	23 December 2009
RE:	Application for a review of Waste Licence from Rilta Environmental Ltd, Licence Register W0192-03

Type of facility:	Integrated Waste Management Facility
Classes of Activity (P = principal activity):	3 rd Schedule: Classes 7,11,12,& 13 4 th Schedule: Classes 2,3,4,6, 8,&13 (P)
Category of Activity under IPPC Directive (2008/1/EC):	5.1
Quantity of waste accepted per annum:	111,000 tonnes
Classes of Waste:	Hazardous (including waste oil), Commercial, Construction & Demolition & Industrial wastes and industrial sludges
Location of facility:	Block 402, Grant's Drive, Greenogue Business Park, Rathcoole, Co. Dublin
Licence application received:	30 January 2009
Third Party submissions:	None
EIS Required:	No
Article 14 Notices sent:	17 July 2009
Article 14 compliance issued	17 November 2009
Additional information received	23 rd October 2009, 2 nd and 21 st December 2009
Site Inspection/site notice check:	20 th October 2009

Background

The Rilta Environmental Ltd. facility at this location was initially licensed in December 2004 and was operating at and above a throughput of 65,000 tonnes per annum when it applied for a review of its licence in June 2007. The review was sought to accommodate an increase in throughput of mainly hazardous wastes (to a total of 111,000 tonnes/annum) and increases in emissions to air and sewer. Planning permission and an environmental impact statement (EIS) was required and the EIS was submitted with the licence review application. Within the EIS and the licence review application the licensee indicated that although waste oils (~2,000tonnes/annum) would be accepted and processed within the facility (Hydrocarbon Waste Treatment Centre) they would be sent off-site for disposal. The review was granted in May 2008 and included among the Waste Management Act 1996-2007 Fourth Schedule classes of waste recovery activities licensed – Class 8 Oil re-refining and other re-uses of oil.

In December 2008, the OEE became aware that processed waste oils from the Rilta facility were sold as a product for use as a fuel. The licensee was instructed by OEF, in a letter dated 12th December 2008, not to transfer any waste oils (treated or otherwise) from their site unless with the approval of the Agency and to recall waste oils that they had sold to other sites (in the quarry/asphalt sector).

The licensee, in January 2009, applied for a review of their licence to allow them to process waste oils to a standard where it would be considered suitable for re-use as a fuel. It was clarified in additional information that the use of the processed waste oil would be in asphalt plant where the process involves hot mixing.

On 06th October 2009 the Agency successfully prosecuted Rilta Environmental Ltd who admitted breaching a condition of its licence by processing aqueous, hydrocarbon and sludge waste at the Hydrocarbon Waste Treatment Centre in a manner other than provided for in the Licence, without the prior agreement of the Environmental Protection Agency.

Facility

The facility is located on the Greenogue Industrial Estate approximately 1.5km from Rathcoole, Co. Dublin and close to the Baldonnel aerodrome. The site covers 1.1hectares and is bounded to the north by the Griffeen River, to the south by Grants Drive and on either side by industrial units. Construction on the facility began in 2003 and operation commenced in December 2004 under the terms of Waste Licence Reg No. W0192-01. The facility was limited to the acceptance of 65,000tonnes/annum of waste which was increased to 110,000tonnes/annum by the review granted in May 2008 to accommodate an increase in the quantity of contaminated soils accepted at the site.

The hazardous and non-hazardous wastes accepted at the facility include contaminated soil, acid and alkali wastes, laboratory chemicals, wastes containing oil, interceptor sludges and C&D wastes.

The application outlined that there are up to 65 people employed at the facility which operates 07:30 to 18:00 Monday to Friday and 07:30 to 14:00 on Saturdays and occasionally outside these hours with the agreement of the Agency.

Operational Description

Waste is weighed on arrival at the site and details logged at the weighbridge office before being transferred to either (a) Drum Recovery Centre, (b) Hazardous Waste Transfer Station or (c) Hydrocarbon Waste Treatment Centre. Since no change is proposed at areas (a) or (b) this report will only elaborate on the operations in the Waste Treatment Centre.

The applicant is currently processing aqueous, hydrocarbon and sludge wastes in the Waste Treatment Centre. Waste oils that are processed at the facility are required to be sent off-site for further recovery or disposal.

The Waste Oil Treatment process, as outlined by the applicant, involves decanting high levels of water from the oil, filtering using vibrating screen filters and mesh filter baskets to remove suspended solids, chemical treatment with dewatering agents, de-emulsifiers and de-ashing agents and heat treatment.

The applicant provided lists of EWC codes for waste oils and mixtures which will be accepted and a draft Waste Oil Acceptance Procedure to determine the method of treatment or disposal to be undertaken.

The applicant proposes to achieve the standard as set out in the Table 1 of this memo. They also propose significant testing of each batch for PCB's and heavy metals per load. They provided test results for samples taken from waste oils that had undergone the process. Results of analysis carried out on the emissions from a steam generator when operating on processed waste oil was also submitted. The report contained details of CO₂, CO, NO_x, SO₂ and O₂ and other parameters such as metals, dioxins etc relevant to the burning of waste and the Incineration of Waste Directive (2000/76/EC) (WID).

The licensee stated in the application that they were not proposing any change to the throughput or quality of the waste accepted at the facility, the operation of, or emissions from, the facility and has not requested any change to the conditions or schedules of the existing licence.

However, in the review application, they have submitted a revised *Attachment H.1 Materials Handling* which includes a significant change in the list of materials and EWC codes that are to be accepted/treated on-site. There is little description as to how the wastes were to be processed or the impact that this would have on the emissions, particularly on emissions to sewer.

Assessment

The review deals with the request that waste oils when subjected to treatment in the Waste Treatment Centre be no longer classed as a waste if it meets a certain specification which will allow it to be sold to customers that wish to use it as a fuel without the requirements of waste legislation imposed on them.

Background legislation

Waste mineral, lubricating and fuel oils are mainly classified under the European Waste Catalogue (EWC) code 13 and are generally considered as hazardous waste. The Waste Oils Directive (WOD) (75/439/EEC) set out in detail the requirements for the collection and disposal of waste oils and specified emission limit values that should be applied where waste oil was combusted in plants of greater than 3MW thermal input. It also defined the process of 'regeneration' whereby waste oils were refined to produce base oils and thus were no longer a waste.

The Incineration of Waste Directive (WID) (2000/76/EC) repealed the sections in the Waste Oils Directive (WOD) (75/439/EEC) dealing with the use of waste oil as a fuel and required that existing facilities combusting waste oils would be compliant with the requirements of the WID from 28 December 2005.

The Waste Directive (2008/98/EC) repeals the entire WOD from 12/12/2010 and outlines the requirements in relation to the collection, treatment and transport of waste oils. It also provides for a mechanism whereby Member States can determine an end-of-waste status for waste materials.

Facilities involved in the processing of waste oils contend that there should be a standard set which would allow the waste oils to be processed so as to be considered a fuel and thus not waste. In the UK, the Environment Agency/DEFRA determined that the burning of recovered waste oil would be covered by the WID and produced guidance for facilities in the sector (e.g. AQ 7(05) and IPPC SG9- April 2005) however the waste oil processing facilities took a legal challenge and on foot of a ruling by the UK Court of Appeal the EA/DEFRA (in 2007) set up a Task and Finish Group who issued Interim guidance (AQ 17(07)) on a specification for processed waste oils to be considered as fuels and thus not subject to WID requirements. The Environment and Heritage Service Northern Ireland and SEPA have issued similar guidance.

The Waste Directive (2008/98/EC) in Article 6 allows for end-of-waste status and sets out the conditions that should be applied to setting the criteria:

- (a) the substance or object is commonly used for specific purposes*
- (b) a market or demand exists for such a substance or object*
- (c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation applicable to products; and*
- (d) the use of the substance or object will not lead to overall adverse environmental or human health impacts.*

In addition, the criteria must include limit values for pollutants where necessary and must take into account any possible adverse environmental effects of the substance or object.

If no criteria are set by the EC the Member State can make this decision on the basis of case law but they must notify the Commission of the decision in accordance with Directive 98/34/EC if required.

The UK has a system in place which, through consultation and notification to the commission, has set Quality Protocols for end-of waste for substances such as aggregates, tyres and biodiesel.

Following the Court rulings in the UK on waste oil the EA and Waste and Resource Action Programme (WRAP) in consultation with DEFRA prepared a Quality Protocol outlining the criteria for the production and use of processed fuel oils from waste lubricating oils. On 07th August 2009 the Quality Protocol was submitted to the process under Directive 98/34/EC and MS and the EC were notified of the proposal. The draft UK Quality Protocol gives specifications for two types of processed fuel oil but places no limitation on the outlets for the sale of the fuel oil product. However, it does limit the use of the 'Residual oil equivalent' (standard equivalent to heavy fuel oil) to plant where it is used as a substitute for Heavy Fuel Oil. The deadline for comments was 30 November 2009 and comments have been made by the EC and Austria but are not available on-line as yet.

Irish legislation

There is no legal or administrative system in place in Ireland for determining the criteria to apply to the inputs, process and product so as to determine if waste has undergone sufficient processing to have reached an end-of-waste status.

In Ireland, a licensed facility (Licence Reg. No.W0184-01) processes waste oil in a similar manner to that proposed by the applicant and sells it as a product called 11LS in accordance with the specification set out in their licence. This licence was issued in 16 January 2004 prior to the implementation of WID and the licensee was notified of the requirements of WID. The Agency is currently assessing if the licence requires a review. With the agreement of OEE they have restricted their sales to the asphalt sector.

Standards applicable to processed fuel oil

The applicant proposes to achieve the standard as set out in the Table below.

Table 1

Property	Applicant proposal	UK Note 2	Interim	UK QP^{Note 1}
Flash Point (min)	66°C	66°C		66°C
Sulphur content (max)	1.0 %m/m	1.0 %m/m		1.0 %m/m
Water content (max)	1.0 %V/V	1.0 %V/V		1.0 %V/V
Ash content (max)	0.50 %m/m	0.15 %m/m		0.20 %m/m
Carbon residue	20 %m/m	20 %m/m		20 %m/m
Total sediment	0.15 %m/m	0.15 %m/m		0.15 %m/m
Strong acid number	0	0		0
Total halogens	1000 ppm as Cl			150 ppm as Cl
PCB's	10ppm			5ppm
Lead	150ppm			25ppm
Nickel	20ppm			5ppm
Copper	60ppm			40ppm

Chromium	20ppm		5ppm
Vanadium	60ppm		5ppm
Cadmium	10ppm		5ppm

Note 1: limits for other parameters particularly metals are included at 5ppm.

Note 2: Quality Protocol (QP) Residual oil equivalent specification. Limits as specified for Class G oils in British Standard BS2869:2006 for '*Fuel oils for Agricultural, domestic and industrial engines and boilers - Specification*'

Table 1 above provides a comparison with that proposed by the applicant and the draft UK Quality Protocol. The applicant's proposal is less stringent to that in the draft UK Quality Protocol and more stringent to that in the UK interim standard for recovered fuel oil and the Product 11LS standard in Waste Licence Reg. W0184-01. The technology for producing processed fuel oil to the specification in the UK Quality Protocol may not in place in sites in Ireland and until the protocol and the relevant test methods have been finalised it would not be feasible to require compliance with its requirements. The applicant submitted an additional request on 21 December 2009 to amend the ash limit that they request to 0.5%/m/m and provided some details and references as to why this was suitable if the processed oil was used in asphalt applications.

The applicant proposes that the processed oil would be utilised in the asphalt/roadstone sector as a substitute for Heavy Fuel oil in 'hot mix' asphalt/roadstone coating plants. The main type of process uses a drum to dry aggregates with hot gases prior to mixing with hot bitumen. The waste gases are extracted through a bag house with the dust recirculated to the aggregate. A significant portion of the wastes in the combustion gases are bound in the product and not emitted to atmosphere.

No monitoring of the emissions from asphalt plant using this specification of processed waste oil was submitted however, monitoring of emissions from a test rig (boiler/steam generator) indicates that the many of the requirements of WID can be met when the processed waste oil is utilised. The levels of particulates, heavy metals and HCl exceeded the air emission limit values in Annex V of WID. In addition, the results of analysis of the processed waste oil used in this test was not in the report and the typical analysis given in Attachment D2 is assumed.

In relation to the ash content although it appears that the 1995 document- HMIP Chief Inspectors Guidance Note –IPC Waste and Recovered Oil Burners of 3MW and over- does refer to a limit of 0.5%/m/m this document has been replaced and there is no other indication that such a level would be acceptable for use in combustion boilers.

It is proposed that until a decision under Directive 98/34/EC has been completed with regards to the UK Quality Protocol the RD should include waste acceptance criteria, monitoring and control of the waste oil treatment process and a specification for the processed fuel oil which allows for the waste oil to reach end-of waste status. However, given the less stringent limits on the specification it is considered prudent to limit its use to the quarry/asphalt sector plant.

The RD also proposes to limit the waste oils that may be accepted for treatment in this process to those which do not contain chlorinated oils thus minimising emissions of

HCl and the possibility for the formation of dioxins. In addition, the Schedule C.8 of the RD specifies limits for PCB's in line with the draft UK Quality Protocol.

The Agency may review Schedule C.8 and other conditions of the licence if an Irish or European technical standard or regulation becomes available.

The sections below outline the changes in the existing licence to safeguard the quality of the processed waste oil produced.

1. Waste oil processing area

The applicant is currently processing aqueous, hydrocarbon and sludge wastes in the Waste Treatment Centre. It appears from the site visit and documentation in the review application that there is insufficient segregation of materials or infrastructure to ensure that contamination of the waste oil product will not occur. The RD requires the licensee to submit proposals under Condition 3.2 of the licence for the engineering works that would be necessary to provide for segregation of materials and infrastructure to ensure that contamination of the waste oil and fuel oil product will not occur. The segregated Waste Treatment Areas should be clearly labelled to indicate the processes carried out e.g. Waste Oil Treatment, Aqueous Waste Treatment, and a drawing submitted to the Agency.

2. List of wastes to be accepted on-site for storage or treated in Hydrocarbon Waste Treatment (HWT) Area

The applicant included an extensive list of wastes which they proposed to accept and, where relevant, treat in the HWT area. As mentioned above this list in Attachment H.1 of the review application differs from that in the previous licence application (and referred to in the existing licence) but is similar to that accepted/processed on-site as stated in the AER 2008.

In line with the Appendix B of the UK draft Protocol, the information submitted by the applicant in August 2009 and where the licensee proposes to sell the processed waste oil as a fuel it is proposed to limit the wastes which should be processed in the Waste Oil Treatment System to those compatible with the end use of the processed waste oil. Wastes which could contain chlorinated substances are removed from the list in the RD in light of insufficient information regarding the emissions from the end use of the reprocessed fuel oil. In addition, it should be noted that EWC Code 16 ***Wastes not otherwise specified in the list*** and in particular EWC Code 16 07 08 which are wastes containing oil from transport tank, storage tank and barrel cleaning are not considered suitable for use in the waste oil treatment system as it is not clear where the oils may originate and the contaminants that may be present. These oils can be more correctly classified under the specific sectoral headings. The UK Quality Protocol does not include these wastes and Schedule A Table A.3 sets limitations on the waste inputs that can be processed in the Waste oil Treatment System if the processed oil is to be considered a fuel. This includes some EWC codes that are currently not included in Table H.1 of the current application and the licensee will require the agreement of the Agency to accept those wastes on-site.

3. Monitoring of processed fuel oil quality

Each batch of processed fuel produced for sale must be analysed for all parameters specified in accordance with Schedule C.8. If batches are blended they must be re-

analysed. Loads cannot be dispatched until the results of the analysis is known and conforms with the specification. A certificate of compliance must be provided with each batch dispatched.

4. Records

In reviewing this application the data from the AER and waste statistics submitted to the Agency for 2007 and 2008 in relation to the wastes accepted on-site was reviewed. From the 2008 AER it appeared that there were approximately 15 EWC codes for hazardous wastes (~6,000 tonnes) which were treated on-site but not in Schedule A.2 Waste Acceptance or agreed with the Agency. The list of brokered waste was not checked in detail. This may not be significant in terms of the overall tonnages of waste handled on-site (76,000tonnes) however it is proposed in the RD to require the format of the records kept on-site to be amended to facilitate an audit of waste acceptance at the facility and to enable the operator/licensee on a monthly basis to know what it may accept at the facility for the remainder of the year.

It is proposed in the RD to require the applicant to review their waste acceptance procedures in line with the wastes outlined in Table III from this Waste Licence Review application (W0192-03).

Products Legislation

The applicant provided details of correspondence with the Health and Safety Authority which outlines that if the waste oil is recovered and ceases to be a waste then REACH and CLP regulations may apply. Recovery businesses would then be considered to be manufacturers and they may have registration obligations under REACH if they are recovering substances in quantities >1tonne per year. The RD requires the licensee, prior to the sale of any processed waste oil to notify the HSA of the quantities and characteristics of the new product.

Use of Resources

Resource consumption significantly increased in 2008 and was as follows:

Gas	1,663,901KWh	(2007 - 977,260KWh)
Electricity	477,591KWh	(2007- 320,000KWh)
Water	9,122m ³	(2007 -7,100m ³)

The licensee stated that the increase was due to the commissioning of two new treatment systems in 2008 in the pH neutralisation plant.

The RD requires an audit to be carried out within a year of grant of the licence.

Emissions

The operation of the waste oil treatment system was included in the assessment of the existing licence. Rilta Environmental Ltd have stated that there will be no change to the emissions from the facility and although there was some difference between the requested emission limit values in the review application it is considered that the limits set in the existing licence are adequate for the protection of the environment and no change is proposed in the RD.

The Section 52 response from the WSA provided for the discharge to sewer and included ELV's, monitoring requirements and charges. These have been incorporated into the RD. To provide for further clarity in relation to the interpretation of the emissions to sewer it is proposed to amend Condition 4.3 in line with the emission limits set in Schedule B.5.

Wastes:

There will be no change in the wastes accepted or generated at the facility as a result of the review. In effect there should be less waste generated if the processed waste oil is considered a fuel. The facility is identified in the Dublin Waste Management Plan 2005-2010.

Best Available Techniques (BAT)

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

The applicant has indicated that it can meet the specification for processed waste oil as set out in the RL using the technologies and techniques at the facility however before they may sell the product as a fuel to the asphalt sector they are required to put in place measures to ensure no contamination of the product occurs before during or after the processing operation.

IPPC Directive 2008/1/EC

The facility is an activity under Category 5.1 of Annex 1 of Directive 2008/1/EC: *Installations for the disposal or recovery of hazardous waste as defined in the list referred to in Article 1(4) of Directive 91/689/EEC, as defined in Annex II A and II B (operations R1, R5, R6, R8 and R9) to Directive 2006/12/EC and in Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils, with a capacity exceeding 10 tonnes/day.*

Compliance Record

The licensee was prosecuted on 06 October 2009 for breach of its Waste licence Reg. No. W0192-02. The company pleaded guilty to the charges relating to the processing of aqueous, hydrocarbon and sludge waste in a manner other than was provided for in the licence.

Fit & Proper Person Assessment

Under the Waste Management Acts 1996 to 2008, in granting a licence the Agency must consider if the applicant is a Fit and Proper Person. The criteria are:

Offences and Convictions: The licensee was convicted of an offence under the Waste Management Act 1996 to 2008 on 06th October 2009. As detailed above the offence related to the processing of wastes in the manner proposed in this RD.

Technical Competence & Site Management: As detailed above there have been instances noted where the waste accepted on-site appear to differ from those allowed under the existing licence. The RD seeks to ensure this does not happen in future by requiring additional procedures and records to be maintained on-site.

Financial Provision: The licensee provided a copy of the environmental liabilities risk assessment and this is due to be updated under the RD. The OEE has reviewed this report.

The legal, technical and financial standing of the applicant qualifies them to be considered Fit and Proper Persons.

Submissions

There were no submissions made in relation to this application.

Charges

The most recent invoiced Financial charge for 2009 was €19,554. This is also the proposed charge in the RD as the enforcement requirements at the site will remain the same and OEE will review the charges for 2010 in line with there annual review.

Recommendation

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

The Agency, in consultation with the Department of Environment, Heritage and Local Government, should review the mechanism for setting end-of-waste criteria in the context of the transposition of Directive 2008/98/EC.

Signed



Marie O'Connor

Procedural Note

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