

INSPECTORS REPORT ON A LICENCE APPLICATION

To:	DIRECTORS	
From:	PERNILLE HERMANSEN	- LICENSING UNIT
Date:	14 OCTOBER 2004	
RE:	Application for a Waste Licence from Rilta Limited t/a Sita Environmental, Licence Register 192-1	

Application Details

Type of facility:	Hazardous Waste Facility
Class(es) of Activity (P = principal activity):	3 rd Schedule: Classes 4, 7, 11, 12 and 13 4 th Schedule: Classes 2, 3, 4, 6, 8 (P) and 13
Quantity of waste managed per annum:	62,500 tonnes
Classes of Waste:	Hazardous Waste, Commercial Waste, Construction and Demolition Waste, Industrial Waste and Industrial Sludges.
Location of facility:	Block 402, Greenogue Business Park, Rathcoole, Co. Dublin
Licence application received:	9/9/03
Third Party submissions:	One
EIS Required:	Yes
Article 14 Notices sent:	5/12/03
Article 14 compliance date:	11/02/04
Article 16 Notices sent:	26/04/04 (Art16(1)01PH) 8/06/04 (Art16(1)02PH)
Article 16 Compliance date:	05/08/04
Site Inspection:	9/10/03 Site Notice Inspection by Inspector Helen Maher. Site notice compliant

1. Facility

Rilta Limited t/a Sita Environmental has applied for a waste licence for a new development at a greenfield site at Greenogue Business Park, Rathcoole, Co. Dublin. The proposed facility comprises of three units: a drum recovery centre (DRC), a

hydrocarbon waste treatment centre (HWTC) and a hazardous waste transfer station (HWTS). The applicant is presently operating two facilities in the Dublin region: Upper Sheriff Street (WL 35-1) and Lower Oriel Street (WL 83-1). It is planned that both facilities will be relocated to the Greenogue site and their existing licences surrendered.

A planning permission for the facility was granted by South Dublin County Council (SDCC) on 12/12/02. The applicant as well as Newcastle Lyons and District Residents Association appealed the planning permission to An Bord Pleanála. Subsequently An Bord Pleanála granted permission for the proposed development on 18/07/03.

The facility (approximately 1.28 hectares) is contained within the boundaries of the Greenogue Industrial Estate so it is assumed that the facility will be surrounded by industrial/commercial facilities. Currently John Paul Construction Ltd is located at the north of site. The land outside the boundaries of the Greenogue Industrial Estate is agricultural in nature with small pockets of industrial land. The River Griffeen (Liffey catchment) runs along the northern boundary of the facility. The Casement Aerodrome, a state military airport, is located approximately 2.1 km northeast of the site. There are 8 residential dwellings within 500 m of the facility with the nearest dwelling about 250 m west of the proposed facility.

Classes 4, 7, 11, 12 and 13 of the Third Schedule and Classes 2, 3, 4, 6, 8 and 13 of the Fourth Schedule were applied for. Class 8 of the Fourth Schedule is the principal activity. Class 4 of the Third Schedule has been refused, as the described activity is more appropriate under Classes 7 and 13 of the Third Schedule which are licensed activities that the RD allows for.

No submissions regarding facility hours have been received. The planning permission does restrict the operational hours. This control is not duplicated herein.

Facility Development

The installation of infrastructure at the facility is controlled by Condition 3 of the recommended decision.

The three operations mentioned above will be housed in three distinct fully enclosed banded buildings. The RD requires that an impermeable concrete surface shall be installed in all areas of the facility (Condition 3.5). Other main infrastructure proposed by the applicant and required by the recommended decision includes security fencing and installation of waste quarantine areas, banded fuel storage, two weighbridges, a vehicle wash area, as well as installation of wastewater and surface water run-off drainage network including silt traps and oil interceptors.

2. Operational Description

The applicant proposes to accept up to 62,500 tonnes of waste per annum. The RD allows the facility to accept up to 62,500 tonnes per annum consisting of Hazardous Waste (57,500 tpa), Industrial Waste (3000 tpa), Industrial Sludges (1000 tpa), Construction and Demolition Waste (500 tpa), and Commercial Waste (500 tpa) detailed in Schedule A. The annual tonnages of the various waste types can be changed with the agreement of the Agency as long as the total annual tonnage remains the same.

The DRC will entail drum and industrial packaging reconditioning and recycling facility. It is proposed that the range of nominally empty industrial packaging to be

reconditioned or recycled will include steel drums, plastic drums and intermediate bulk containers (IBCs). The process will entail cleaning and washing of drums/IBCs and repainting of steel drums or crushing/shredding of drums/IBCs. To control the waste intake at the DRC, Condition 5.2 requires the applicant to submit a proposal for agreement detailing waste acceptance criteria.

At the HWTC the principal process will be treatment/recovery of hydrocarbon waste sludge from such sources as the bilge tanks of ships, petrol stations and oil spills delivered to the site primarily by tanker but also in oil drums and IBCs. The first stage in the treatment process involves sedimentation into oil, wastewater and sludge fractions in three settlement tanks (total volume 600 m³). After sedimentation the oil fraction is further treated by heating and filtration prior to transfer off-site for recovery at authorised facilities such as Atlas Environmental Ireland Ltd (WL 184-1). The wastewater fraction removed from the settlement tanks is pumped to one of six flocculation tanks where flocculating agents are added and solids precipitated before discharge to sewer. All the solids/sludge in the flocculation tanks will be returned to the settlement tanks where it can be co-processed with the sludge fraction from the settlement tanks. The sludge fraction is removed from the settlement tanks by sludge scrapers situated at the bottom of each settlement tank and is pumped to the sludge processing unit which entails filter plate presses used to dewater the sludge prior to transfer off-site for disposal. Condition 5.9 requires that the treatment/recovery of hydrocarbon contaminated waste at the HWTC be carried out as proposed by the applicant.

The proposed HWTS will allow for transfer of hazardous waste for recovery/disposal to agreed facilities. Only pre-notified and pre-classified hazardous waste shall be accepted at the HWTS subject to availability of a designated storage area and sufficient quarantine space (Condition 5.2). The applicant has submitted details in relation to possibly processing photo waste at the HWTS in the near future. The emissions from the photo waste processing are not considered to be of environmental significance. The RD requires the details of this processing plant shall be agreed by the Agency by way of SEW (Schedule B and Conditions 3.12 and 5.8).

3. Use of Resources

The facility has included details on water and energy consumption as follows: electricity 800,000 kWh and water 3120 m³.

4. Emissions

4.1 Air

The applicant proposes three emission points at the DRC from the following processes: drum washing (A1), spray painting (A2) and drying (A3).

The control of the drum intake (Condition 5.2.4) ensures that emission limit values for emission point A1 are complied with (Schedule C). The emission limit value for TA Luft Organics Class I is in accordance with the 2002, TA Luft Standards.

The applicant has not detailed the proposed quantity of solvent to be used at the DRC. The RD sets the emission limit values for Total Organic Carbon (as C) at three scenarios: solvent usage below 5 tpa, solvent usage between 5-15 tpa and solvent usage above 15 tpa. For solvent usage between 5-15 tpa and above 15 tpa, the painting and drying processes carried out at the DRC falls under the scope of the

Council Directive 1999/13/EC¹ and the Solvents Regulations SI 543/2002². The emission limit values for Total Organic Carbon (TOC) at air emission points A2 and A3 have been set in accordance with the above mentioned legislation (Schedule C). The fugitive emissions values (Condition 6.3.4) have been set in accordance with the solvent regulations. Furthermore the RD requires that the applicant prepare and submit a solvent management plan (SMP) in accordance with the solvent regulations (Condition 6.3).

Solvent usage below 5 tpa is not covered by the solvent regulations. Where solvent usage is less than 5 tpa emissions from emission point A2 and A3 are controlled in terms of mass flow to ensure protection of the environment (Schedule C). The air emission model submitted by the applicant shows that the levels modelled at this mass flow are significantly less than 1/40th of the relevant 8-hour OEL.

In the Article 16 reply received on 10/5/04, the applicant stated no blending/mixing of wastes would be carried out initially at the HWTS, therefore the fourth proposed emission point was not required. The RD stipulates that no mixing/blending can take place in the decant room in the HWTS prior to approval by the Agency (Condition 5.7 and Schedule B). The SEW proposal for the decant room shall include details on air emissions including an air emissions model, process control equipment, abatement equipment, stack characteristics, etc. (Condition 3.12). The emission point at the decant room is not considered to be of any major environmental significance. If future plans for the development are substantially different than proposed then Condition 11.1 would prevent progress of these changes in advance of the Agency decision whether to review the licence or not.

The RD requires that air emission be monitored at the three proposed emission points A1, A2 and A3. The applicant shall submit a programme for monitoring of fugitive emissions (Condition 6.3). Schedule D sets out the requirement for monitoring.

4.2 Emissions to Sewer

A Section 52 consent has been obtained from SDCC. All wastewater discharged to the foul sewer will be discharged to the main foul sewer serving the business park which discharges to the Ringsend Waste Water Treatment Plant. Condition 6.7 sets the requirements for emission to sewer with additional consent conditions requested by SDCC.

Condition 3.13 of the RD requires that a wastewater drainage system be installed prior to commencement of waste acceptance at the facility. The RD allows for the installation of the wastewater drainage network as proposed by the applicant. The wastewater shall pass through a silt trap and a Class II full retention interceptor. The drainage network from the DRC and the HWTS shall be fitted with a manual shut-off valve prior to discharge to the sewer with the valves kept in the closed position as proposed by the applicant (Condition 3.13). The wastewater from these two operations shall only be discharged to sewer with the consent of the Agency and the Sanitary Authority as requested by the SDCC (Condition 6.7).

Wastewater treatment at the HWTC of the wastewater fraction removed from the settlement tanks (described in Section 2 above) is required under Condition 5.11 of the RD. Furthermore Condition 5.11 of the RD requires that wastewater not suitable for

¹ Council Directive of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations.

²Emissions of Volatile Organic Compounds from Organic Solvents Regulations, 2002.

discharge to the sewer shall be tankered off-site for treatment at authorised facilities agreed by the Agency.

The recommended decision requires wastewater (excluding sanitary wastewater) to be monitored. In addition to the parameters requested by SDCC, an Effluent Metals screen shall be carried out quarterly with the metals to be screened for subject to the agreement of the Agency. Monitoring requirements are set under Schedule D. Emission limit values are set under Schedule C.

4.3 Emissions to Surface Waters

The applicant proposes to discharge the surface water run-off from the facility to the River Griffeen. The applicant has obtained information from the Eastern Regional Fisheries Board indicating that the Griffeen River is classed as Salmonid as it contains populations of brown trout (*Salmo Trutta*).

The applicant has carried out biological monitoring both upstream and downstream of the facility on the River Griffeen. The results show a rating of Q2-3 at both locations indicating the river to be moderately polluted.

The applicant proposes to discharge surface water run-off from roof buildings and hardstanding areas to the surface water run-off drainage system. The RD allows for this except the surface water run-off from the vehicle wash area and the weighbridge area shall be discharged to the wastewater drainage system (Condition 3.13). The applicant proposes that all surface water run-off will pass through an attenuation tank and an oil interceptor prior to discharge to the river. The attenuation tank will have a capacity of 450 m³ to ensure that the flow to the River Griffeen will not exceed 6 l/s per hectare (in accordance with SDCC planning permission). The RD requires that the applicant shall install and maintain silt traps and a Class I full retention oil interceptor fitted with a manual shut-off valve (Condition 3.13).

Surface water monitoring requirements are established under Schedule D. The RD requires that surface water monitoring is carried out at the discharge point from the facility and at the two proposed locations (SW1 and SW2) on the river Griffeen (Schedule D). The RD requires that a biological assessment of the river is carried out six months after the licence is granted and thereafter as may be required (Condition 8.10 and Schedule D). Emission limit values are set under Schedule C. Condition 6.4 of the RD sets a trigger level for the parameter suspended solids at the final discharge point from the facility.

4.4 Emissions to ground/groundwater:

Condition 6.5 specifies that there shall be no direct emission to groundwater. Furthermore all areas of the facility are required to be on impervious concrete surfaces (Condition 3.5). All hazardous waste storage areas as well as tank and drum storage areas shall be bunded (Condition 3.10). Condition 3.10 also requires that daily visual inspections shall be carried out to detect any spillages in bunded areas as well as visual weekly inspections of all bunds and hardstanding areas to check for structural soundness and cracking/damage.

The applicant has submitted rotary logs for three boreholes drilled which show rock head (Calp Limestone) is 2.9 – 3.3 m below the surface and groundwater levels resting at 0.2m below rock head. Furthermore the applicant states that the facility overlies a locally important aquifer with a vulnerability rating of extreme (L1/E). The

applicant states that the closest recorded well to the site is a shallow dug well located ca. 1 km to the south of the site in a different groundwater catchment.

The applicant states that the site will be bunded and paved areas covered with impermeable hardstanding, with all rainfall being diverted to the storm water management system. According to the applicant this effectively means that all recharge or potential contamination of groundwater will be eliminated. However, the waste licence application and the EIS do not contain any assessment of the impact on groundwater in relation to the use of underground settlement tanks at the HWTC.

In the Article 16 reply received 10/5/04 the applicant states that three concrete underground settlement tanks with a total volume around 600 m³ have already been installed at the proposed facility. The tanks installed at the facility are poured concrete chambers; they are not pre-cast tanks imported as an engineered contract, and they do not meet any ISO/BS relevant for the storage of petroleum contaminated liquid waste. According to the applicant the tanks are to be considered BAT as the construction and design is based on the tanks at the existing facility (WL 35-1), which has caused no problems. However the Agency has noted key problems with the integrity and the testing sequence of these tanks (see attached audit report).

The applicant has also submitted a proposal for installation of shallow monitoring wells around the underground settlement tanks in the backfilled space between the tank walls and the sides of the excavation for detection of leaks from the tanks. The concrete underground tanks are not BAT for such a geological scenario as described above, and it would be difficult/impossible to carry out integrity testing at regular 3 years intervals. Furthermore the proposed shallow monitoring wells around the tanks for detection of leaks are not adequate. The RD requires that secondary containment shall be installed to the existing underground settlement tanks with a leak detection system prior to commencement of waste acceptance at the HWTC (Condition 3.11). Prior to the installation of the secondary containment system with leak detection, the applicant shall submit an SEW proposal (Schedule B and Condition 3.2). A construction quality assurance validation including a certificate confirming that the tanks are in compliance with BS EN 12285-1:2003 or equivalent shall be completed following installation (Condition 3.11).

The applicant has submitted groundwater monitoring results from three boreholes installed at the facility. The regional groundwater flow in the area is to the north towards the River Griffeen. The monitoring results from borehole BH1 (at the southern side of the facility) shows slight contamination (DRO: 0.272 mg/l, Mineral Oil: 0.177 mg/l, interpreted as biodegraded diesel, Total Phenol: 0.02 mg/l). The source of the organic pollution is uncertain. Furthermore the groundwater monitoring showed elevated levels of sodium, potassium, chloride, nitrate, nitrite, total suspended solid, chemical oxygen demand and electrical conductivity to the north of the site at BH2 and BH3. The applicant states that the monitoring indicates a low level of contamination but that there is no obvious source for the contamination.

The RD requires that groundwater be monitored at the three proposed boreholes BH1, BH2 and BH3. Condition 8 and Schedule D sets out the groundwater monitoring requirement.

4.5 Wastes Generated:

The applicant estimates that a total of 269 tpa of wastes will be generated at the DRC consisting of effluent washings, shredded plastics, waste oil, paints/sludges and interceptor waste. In addition the applicant estimates that a total of 11,655 tpa of

wastes will be generated at the HWTC consisting of mainly trade effluent as well as waste stabilised/solidified with flocculating agents, recovered oils from process, mixed municipal waste and empty metal drums. The trade effluent will be discharged to the foul sewer from the facility after treatment on-site. The other waste generated on site will be transferred for disposal or recovery with facilities agreed by the Agency (Condition 5.10).

4.6 Noise:

The applicant carried out a noise survey at the facility in April 2002. The results of the daytime noise survey show elevated noise levels at the three boundary monitoring locations (L_{eq} : 59.3 dB(A), 60.2 dB(A) and 59.5 dB(A)). The applicant states that the primary noise source at all three boundary locations was from construction activities in the surrounding area. The applicant also carried out a 24 hour continuous noise survey at a noise sensitive location (NSL) approximately 360 m south east of the site, recording daytime levels varying from L_{eq} 47.6 dB(A) to 72.0 dB(A) with a mean value of 55.03 dB(A) (the mean value being the arithmetic average of the recorded levels). The recorded night time levels varied from 43.1 to 59.3 L_{eq} dB(A) and the mean night time level was 49.9 L_{eq} dB(A). The applicant states that the noise sources at the NSL were from road traffic, activities at casement aerodrome and noise from the adjacent Greenogue Industrial Estate.

Furthermore the applicant has carried out an assessment of the impacts of noise from the facility. The prediction shows a maximum noise levels of 47.0 dB(A) and 51.5 dB(A) at two boundary locations. At the NSL mentioned above the maximum noise level is predicted to be less than 25 dB(A). The applicant states that the noise emission from the integrated waste management facility will have negligible noise impact at all residences and there will be no tonal or impulsive components in the emission.

Condition 6.6 requires that there shall be no tonal or impulsive components in the noise emission from the facility at the noise sensitive locations. The noise emission limit values from the facility to be measured at any noise sensitive location are set in Schedule C as follows: 55 dB(A) (day) and 45 dB(A) (night). Schedule D set the requirements for noise monitoring.

4.7 Nuisance:

Potential nuisances at the facility are controlled by Condition 7 of the RD.

Dust monitoring was carried out at the facility from 19/01/02 to 02/04/02. The recorded dust levels were elevated at two locations (D1 and D3) out of the four monitored locations. The recorded dust levels were 2772 mg/m²/d with an organic content of 64% at D1 and 481 mg/m²/d with an organic content of 72% at D3. This is attributed to crushing of C & D waste adjacent to the monitoring point (D1) and the proximity to both the site road and a construction site (D3). The dust deposition limits are given in Schedule C. The monitoring requirements are detailed in Schedule D.

5. Cultural Heritage, Habitats & Protected Species

The site is not covered by any designation for conservation. There are 7 sites covered by conservation designation (6 NHA and 1 NHA/SAC) within 10 km of the proposed development. The Grand Canal (NHA) is closest to the proposed site (about 3.5 km). It is not expected that there will be any impacts arising on the sites designated for conservation from the development of the proposed facility.

6. Waste Management

The regional waste management plan for the Dublin region has been considered during the assessment of this application for a waste licence.

The existing facilities (WL 35-1 and WL 83-1) are both highlighted in the National Hazardous Waste Management Plan as being integral components of the hazardous waste management structure in Ireland. According to the applicant the proposed integrated waste management facility will improve the national capacity for hazardous waste recovery and disposal and the transfer operation will further supplement the existing national hazardous waste collection service. The development will promote the proximity principal both nationally and locally where considerable quantities of hazardous waste are produced.

7. Environmental Impact Statement

I have examined and assessed the EIS and am satisfied that it complies with the EIA and Waste Licensing Regulations.

8. Compliance with Directives/Regulations

The facility falls under the scope of the IPPC directive. In relation to the Groundwater Directive, the facility will not have any direct emission to groundwater.

9. Fit & Proper Person Assessment

Offences and Convictions

The applicant states that neither the Directors, nor any other relevant person connected with SITA Environmental Limited have been convicted of any offence under the WMA, 1996.

Technical Competence & Site Management

The applicant states that the final details of the duties, responsibilities, experience and qualification of relevant employees will be submitted to the Agency on realisation of the facility.

Financial Provision

An assessment carried out by Mr Dan Harney, Finance Officer of the financial statements submitted by the applicant concluded that that there is nothing in the statements which would lead to conclude that the applicant is not a "Fit and Proper" person within the meaning of S40(7) of the WMA, 1996 to 2003.

10. Submissions

There was one submission made in relation to this application.

11.1 Submission from Ms Aoife O'Shea, Development Applications Unit, Department of the Environment, Heritage and Local Government, Dún Scéine, Harcourt Lane, Dublin 2

Ms O'Shea makes 2 points in her submission.

- (i) *Ms O'Shea states that the Grand Canal proposed Natural Heritage Area (pNHA) is nearby and the River Griffeen, a tributary of the River Liffey passes by the site.*

Comment:

I have noted this information and it has been taken into consideration during the assessment of the waste application and the drafting of the Recommended Decision.

(ii) *Ms O'Shea recommends the following:*

1. *Adequate measure to prevent pollutants entering the river, e.g. interceptor drains incorporating filtering systems.*
2. *The maintenance/creation of a riparian corridor along the Griffeen River be a condition of the licence.*

Comment:

1. The recommended decision requires several measures be installed to prevent pollutants entering the river. The applicant is required to install bunded areas for storage of hazardous waste (Condition 3.10) and install separate drainage network systems for surface water run-off and wastewater from the facility to include installation of silt traps and oil interceptors (Condition 3.13). Only uncontaminated surface water run-off will be allowed to discharge from the facility to the River Griffeen (Condition 6.4). Furthermore the applicant is required to carry out surface water monitoring (Condition 8 and Schedule D) as well as biological monitoring of the river (Condition 8.10). Condition 9.3 requires the applicant to have adequate supply of spill kit material to deal with any spillages on site.
2. In an Article 16 reply received on 2/07/04 the applicant states that the riverside walk will be outside the property boundary of the proposed facility and therefore the walkway is not included in the proposed development. The recommended decision can not condition for anything outside the facility boundary.

11. Charges

The RD requires that the applicant shall pay an annual contribution of €18,389.00 (Condition 12.1).

12. Recommendation

I recommend that a licence be granted subject to the conditions set out in the attached RD and for the reasons as drafted.

In making the recommendation for a waste licence I have taken into account all information submitted as part of the application including the Environmental Impact Statement and the submission.

I am satisfied, on the basis of the information available, that the waste activity, or activities, licensed hereunder will comply with the requirements of Section 40(4) of the Waste Management Acts, 1996-2003.

Signed

Pernille Hermansen
Inspector
Office of Licensing & Guidance

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 1996-2003.

Appendix 1

Attached Documentation

- Audit of 12/07/02