



OFF LICEN GUIDANCE

INSPECTORS REPORT ON A LICENCE REVIEW APPLICATION

To:	DIRECTORS	
From:	Niamh O' Donoghue	- LICENSING UNIT
Date:	28 February 2006	
RE:	Application for an Waste Licence Review from AVR-Safeway Ltd, Licence Register 50-2	

Application Details

Type of facility:	Hazardous Materials Recovery Facility
Classes of Activity (P = principal activity):	3 rd Schedule: Classes 7, 11, 12, 13 4 th Schedule: Class 1, 2, 3, 4, 8, 11, 12, 13(P)
Quantity of waste managed per annum:	72,000tpa
Classes of Waste:	C&D, Industrial non-hazardous sludge's, Industrial non-hazardous solids, hazardous – waste oils, oil filters, asbestos, paint & ink, batteries, fluorescent light tubes, contaminated soils, waste solvents and chemicals
Location of facility:	Corrin, Fermoy, Co. Cork
Licence application received:	11 th July 2005
Third Party submissions:	One
EIS Required:	No
Article 14-Notices sent:	10 th October 2005,
Article 14 compliance date:	7 th November 2005
Site Notice Check	23 rd November 2005
Site Visit	1 st February 2005

Facility

AVR Safeway Ltd. has operated a hazardous waste recovery facility at its present location in Fermoy since the issue of its existing licence in September 2000. Previously the site operated as a transport facility for nine years. The site comprises approximately 1.4ha adjoining the N8 in an area dominated by intensive agriculture. The nearest dwelling belongs to the applicant and is c. 70m from the site boundary. Between 200 and 500m of the site boundary there are a further 27 residences. The hours of waste acceptance and operation are presently 0800 to 1900 Monday to Saturday inclusive. AVR wish to extend this to 24 hours a day seven days a week. The RD limits waste acceptance at the facility to daytime hours allowing 24-hour operation of the waste handling facility.

Current activities relate to the collection, acceptance, and temporary storage, blending and bulking up of waste for export to recovery or disposal facilities. The licensee requested a review of its existing licence in November 2004 primarily to increase the quantity and scope of waste it can accept and blend on site. The company also wished to update the licence to reflect agreements already in place with the Agency. The facility at present is licensed to accept 32,000 tonnes per annum (tpa) of hazardous waste and 1,000tpa of

non-hazardous. In the present review an increase to a total of 72,000tpa (61,000 hazardous and 11,000 non hazardous) is sought.

As stated the original licence was issued in September 2000, since then there has been a significant change in the licence format. The present RD reflects these changes and has resulted in a more generalised condition format especially in the area of waste acceptance and processing conditions. Each condition of the existing licence has been evaluated and it is considered that the present conditions in the RD adequately cover all the requirements of the existing licence making it more effective and enforceable.

Operational Description

Infrastructure

The facility consists of an administration/laboratory area, a 600m² waste storage warehouse and thirteen bunds ranging in size from a 10m³ diesel tank bund to bunds for the storage of 20ft containers. The lighting system, forklift, pumps and tools used within the warehouse are intrinsically safe and the entire warehouse is completely bunded. Ancillary facilities include fire fighting trucks, water retention tanks, waste storage boxes, and a weighbridge. The entire hazardous waste transfer area is bunded.

Additional infrastructure proposed will consist of a waste blending facility, an extension to the warehouse and additional storage boxes. The bunded waste blending facility will comprise of 6 tanks (30m³-120m³). Various liquid waste streams (mainly solvents) will be blended to make a waste stream suitable for co-incineration in power stations and/or cement kilns in Europe. The extension to the warehouse will comprise a hazardous waste store, a new changing room and canteen for staff.

The RD requires that prior to acceptance of waste at the new waste blending facility, an independent third party carry out a risk management validation inspection of the new facility (Condition 9.3). The validation report and recommendations, including a timescale for their implementation, must be submitted to the Agency for agreement.

Facility Operation

Waste material is currently handled on site via one of two pathways. Pathway 1(P1) is storage in specified bunded yard areas. Pathway 2 (P2) is subdivided into the following transfer building operations:

- a) Mixing and blending of small drums of hazardous waste
- b) Mixing and blending of large drums of hazardous material
- c) Baling of waste industrial clothing
- d) Repackaging of small containers of hazardous waste into UN approved containers
- e) Drum crushing and shredding
- f) Aluminium Oxide bulking: This is not referenced in the existing licence but the process is presently operated with the approval of the Agency. This material, a by-product of the pharmaceutical industry is bulked up and sent for use as an alumina source in the cement industry in Belgium.
- g) Dichloromethane Separation: This is not referenced in the existing licence but the process is presently operated with the approval of the Agency. The facility separates the waste material into its DCM and water portions. The DCM portion is sent to Holland for recovery while the water portion is sent for incineration.
- h) Sludge bulking: This is not referenced in the existing licence but the process is presently operated with the approval of the Agency. Industrial wastewater treatment plant sludge is bulked up for transport to power plants for use in co-incineration in Germany.

Two new pathways are proposed, P3 relates to procedures for the acceptance of waste, mainly solvents, for the new waste blending operations. P4 is a new series of pathways for which approval will be sought on an individual basis. AVR have to date had a number of operations initially operated as pilot projects, which resulted in quantities of waste being diverted from disposal to recovery following successful demonstration of the project to the EPA. AVR wish to formalise this arrangement and the RD includes Condition 1.5 allowing limited research and development.

The RD requires that all wastes arriving on site will be assigned to a waste-processing stream (P1-P4) and processed in accordance with approved procedures. Additionally, it requires that prior to the increase in the volume of wastes accepted at the facility the licensee shall provide a report on the duty and standby

capacity of all waste handling and processing equipment and waste may only be accepted at the facility where a suitable storage area is available. Mixing and blending of wastes can only occur following completion of compatibility and confirmatory tests.

Use of Resources

Waste generated on site mainly consists of packaging and, cleaning and maintenance materials. Records have been kept of energy and resource use by AVR since 2001. Diesel is used for the on site crane and for company vehicles (5m³ in 2004). The proposed facility will result in a decreased usage of the crane and a corresponding drop in diesel usage. Electricity is used for site lighting, pumps, heating and cooling. The proposed waste blending facility will increase electricity demand. Water is used for vehicle, tank and drum washing and domestic use (400m³ in 2004). Proposed developments on site will not significantly affect water usage. Since 2002 there have been a steady drop in energy consumptions per tonne of waste processed. The RD requires energy and resource efficiency to be addressed as part of the objectives and targets of its EMS.

Emissions

Emissions to Air

The existing licence lists two point source emissions at the facility. AGS-1 in Bund H is a water scrubber installed on the vent from the acid storage tanks and drum washer extraction system. The existing licence required monthly monitoring of HCl, this was changed to quarterly with Agency approval, and to date no monitoring results have been above the limit of detection of 1ppm. WSCF-1 is a water scrubber followed by a carbon filter located in Bund D to collect the vented gases from the separation and bulking activities located there. The existing licence required monthly monitoring of HCl and volatiles. This was changed to quarterly with Agency approval. Monitoring to date for HCl has been below the limit of detection. VOC levels have all been significantly less than the licensed limit of 10g/hr. The RD reflects existing agreements with the Agency.

The proposed waste bulking and blending facility will result in an additional emission point (WSCF-2). An abatement system similar to WSCF-1 will be located in the new tank farm collecting vented gases. Emissions will be very small (36m³/day); and will consist of VOC's only, monitoring frequency is set as per licence point WSCF-1.

- Fugitive emissions arising.

Fugitive emissions arise from both inorganic and organic material handling on site. Fugitive VOC emissions are monitored daily for 3-8 hours using a mobile photo-ionisation detector. There have been no issues to date at the facility. Quarterly assays for asbestos are carried out at three locations; results indicated the fibre concentrations at the facility are the same as other rural areas in Ireland. The RD proposes to decrease asbestos monitoring to bi-annual.

Emissions to Sewer

There are no on site emissions to sewer from the facility. Sewage treatment is by septic tank and soakways. External tanker washing and internal rinse water arising is presently sent to Fermoy WWTP. A S52 was issued to the Sanitary Authority in relation to the tanker discharge to the Fermoy wastewater treatment plant. It has subsequently been decided by the Agency that tankering of effluent from the site is more appropriately regulated by waste collection permit regulations and is thus outside the scope of Section 52 of the Waste Management Acts 1996 to 2005. Cork County Council have been informed accordingly.

Storm Water Monitoring

The surface water drainage from the site flows in the direction of the Shanowenadrimina stream. This enters the main channel of the River Bride 5km from the site. Rainwater runoff is the only emission to surface water from the site. The facility is divided into four catchments each of which discharges to its own Class I oil interceptor, which has a bypass facility to the firewater retention pond. The outflow from the combined surface water discharge is continuously monitored for pH, conductivity and TOC. If the trigger levels agreed by the Agency are exceeded a valve is automatically shut-off. Surface water is then collected in a retention tank for disposal by appropriate means. The RD does not propose to alter this system. Firewater retention at the facility is in accordance with the Agency's Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities.

Surface Water monitoring

The existing licence requires quarterly monitoring of Shanowenadrimina stream water quality, an annual biological assessment and annual sediment quality monitoring. Monitoring to date indicates the facility has not impacted on either the water or sediment quality. The RD does not propose to alter these requirements.

Ground/Groundwater:

The facility is located on sedimentary rocks of the Upper Devonian period, which are overlain by thin gravels overlain by muddy sand. It is situated on a locally important aquifer, generally moderately productive in local zones. The existing licence requires the monitoring of three onsite and seven off site wells and a local holy well. The nearest receptor is the O' Flynn farm borehole 150m from the site. All surfaces within the site are concrete construction providing an impermeable surface.

In the review application AVR proposed not to monitor any off site boreholes in the future. The three on site wells triangulate the site. Groundwater protection is provided for by the on site bunds for waste storage. The entire site is paved with impervious concrete and is surrounded by a 150mm high impervious curb. The results of EPA's sampling at the facility shows levels of nickel and occasionally zinc from onsite wells to be slightly elevated in a number of samples, though the 'up-stream' well reports similar fluctuations. It is therefore not clear if the source is on-site. The on site well arrangement is sufficiently representative and should provide sufficient indication of any site-sourced groundwater contamination. Monitoring for zinc has been increased to quarterly and the requirement to monitor nickel added at a quarterly frequency; and TOC determination increased to monthly so-as to assist early detection of organics contamination. Off-site well monitoring is required should on site monitoring indicate the facility is having an adverse effect on the quantity and/or quality of the groundwater.

Ecology

The ecology of the area is monitored annually via a flora and fauna survey in accordance with the existing licence. No effects on the local ecology as a result of the facility have been detected and changes seen can be more readily attributed to ongoing construction work of the Fermoy by-pass, 200m from the facility, or agricultural activities in surrounding lands. The ongoing value of this monitoring requirement to assess the impact of the facility is limited for the reasons given. The RD removes this requirement.

Meteorological Monitoring

In accordance with the existing licence a weather station has been in operation on site since 2001. Wind speed and direction, temperature, precipitation, evaporation and relative humidity are recorded daily. AVR have requested the removal of relative humidity and evaporation from the licence, as the equipment for these tests requires specially trained personnel to maintain and calibrate. Additionally, in order to be of value it would require the purchase of conversion software. It is considered that monitoring of the remaining parameters is sufficient in determining any impact the facility may be having and the RD reflects this change.

Noise:

Background noise levels are elevated at the boundary due to the proximity of the N7. The main sources of noise at the facility are on site traffic and the operation of plant and machinery (e.g. drum shredder). The existing licence required monitoring at boundary and noise sensitive locations annually. Monitoring to date has not highlighted any issues with noise from the site. Limits in the reviewed licence have been set at the nearest noise sensitive locations in accordance with Agency Guidance Note on Noise. An annual noise survey is required to demonstrate compliance. Annual night time noise surveys were discontinued after 2002 following agreement with the Agency, however as the facility now intends to operate 24 hours a day the RD requires a nighttime survey to be conducted within a month of night operations commencing, and annually thereafter.

Nuisance:

Due to the nature of the activities on site, litter, dust, vermin, birds and pests would not be expected to cause nuisance and have not to date.

Wastes Generated:

Approximately 66 tonnes of hazardous waste is generated monthly at the facility (800tonnes/annum); this is mainly from the internal washing of tankers and drums and is sent off site for incineration. The remainder consists of waste carbon, contaminated gloves and wipes, bund spills, waste blending tank cleaning, and

shredded plastic drums. These are mainly sent for incineration or landfill at approved facilities. Non-hazardous waste types arising consist largely of external tanker washing and internal tank rinse water, which are sent to Fermoy WWTP.

Decommissioning and Aftercare

AVR have a decommissioning plan in place, the RD requires this be updated to account for changes onsite.

Cultural Heritage, Habitats & Protected Species

The site has operated as an industrial site for fourteen years. The AVR Safeway facility has been in operation on this site since 2000. There are no protected areas within 10km of the site. There will be no significant environmental emissions from the facility, which could give rise to adverse effects in designated sites. The Fermoy by-pass is currently under construction 200m northeast of the facility.

Compliance Record

Two incidents have been recorded from 2001 to date. Both were as a result of off-site accidents to which the company responded. The company received two complaints over the same period, one relating to an odour, which was later, attributed to slurry spreading. The other was a concern regarding landscaping of the facility, which was resolved. There have been five complaints recorded in relation to the facility by the EPA all from the same source: four telephone and one written complaint. Two of these complaints were passed from Cork County Council and relate to regional groundwater contamination issues. One complaint was in relation to odour. The facility has not been notified in relation to any of these complaints.

Fit & Proper Person Assessment

The applicants experience, technical abilities, financial and legal standing would qualify them as Fit & Proper Persons.

Submissions

There was one submission made in relation to this application.

1 Submission from Mr Frank O' Donoghue, Senior Fisheries Environmental Officer

Mr O' Donoghue makes the point that the applicant proposes to discharge to the expanded Fermoy sewer network with no reference to the time scale for such works. Also the proposal would constitute a BOD loading of 90kg/day, which is a 1500 person equivalent. He states that the Council needs to be cognisant of its commitment to treat such a load and it must be taken into consideration in relation to its future planning and development strategies/plans for Fermoy.

Comment: - The matter of acceptance of discharges via tanker to the Fermoy wastewater treatment plant and its capacity to treat same is primarily a matter for the sanitary authority.. The effluent can only be sent to an appropriate facility.

14. Charges


Charges for 2005 were set at €20,976.9. The RD recommends a charge of €20,788.

15. Recommendation

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

Signed



 Niamh O' Donoghue
Licensing Unit

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 to 2005.