



This report has been cleared by the Programme Manager for submission to the Board/OCLR Director

Signed: Vracep Bernap Dated: 06/03/2008

*Approved. P. Lard*  
15/3/08

**MEMO RE: TECHNICAL AMENDMENT**

<b>TO:</b>	Directors
<b>FROM:</b>	Marie O'Connor - LICENSING UNIT
<b>DATE:</b>	06 <sup>th</sup> March 2008
<b>RE:</b>	Shannon Environmental Services Limited, Reg W0041-01 - Technical Amendment C

Application Details	
Location of activity:	Smithstown Industrial Estate, Shannon, Co. Clare
License issued:	05 May 2000
Technical Amendments Issued	11 <sup>th</sup> October 2005 and 21 December 2006
Request for TA received	31 January 2008
Additional information received	13 <sup>th</sup> and 18th February and 04 March 2008

**Company**

The licensee, Shannon Environmental Services, have a waste licence (Reg W0041-01) to carry out the chemical and physical processing of wastes for disposal and recovery. In December 2006 a TA was approved on their licence to allow for the treatment of ammonium bifluoride waste on a trial basis to determine if it was feasible. The trial was successful and the company have now applied to amend their licence to cater for the new process. In addition they have requested that other areas of the licence are amended to better reflect the changes that have occurred in their processes and site since May 2000.

The OEE Inspector, Brendan Foley, provided comments in relation to the site and in particular has requested that conditions related to storage of materials and types of waste to be processed are amended.

**Consideration of the TA Request**

The consideration below is set out in sections to deal with conditions and schedules of the licence as set out in the request:

**(a) Ammonium bi-fluoride process**

The new waste to be processed is a waste etching solution and consists of approximately 92% water, 8% ammonium bifluoride and trace levels of nitrates and phosphates. Lime is to be added to form a fluoride precipitate which is removed by filtration. The ammonia liquor is to be directed to a stripping column and the gaseous ammonia is captured by the acid based scrubbers. The trial carried out under Technical Amendment B demonstrated the level of

emissions from the process and it is proposed to direct these emissions to the existing point X2. To ensure that the new parameter is controlled and monitored the proposed TA sets ELV's and monitoring requirements for ammonia. Monitoring for Total Organic Carbon (TOC) is now considered BAT and more appropriate for this type of process and this is also included as an ELV replacing the TA Luft requirements but providing equivalent environmental protection.

An assessment of the impact of the emission of ammonia was provided in the data submitted for Technical Amendment B and since it is to be ducted to a different emission point with a higher flowrate a higher level of dispersion would result. No significant environmental impact is predicted at the maximum flowrate however the licensee is required to assess the stack height at the operational flowrate so as to ensure that any odour impact is addressed. The initial flowrate increase is to allow for the ammonium bifluoride process emissions to be ducted through X2 and an additional increase is allowed in further years to cater for on-going works to eliminate odour related issues by ducting fugitive and minor emission points to X2 for abatement.

Schedule G.1 has been significantly amended to allow for the ducting of this process to X2 and at the same time to provide additional environmental protection by bringing the emission limits into line with current BAT and the levels proposed by the licensee. The mass emission from X2 has been capped in column 3 of Table G.1 and these numbers are in line with the mass flow thresholds in the existing licence but are more stringent as they are limits rather than thresholds above which a limit applies.

Table F.2.2 related to monitoring of emissions has also been modified to provide for additional monitoring to include ammonia, TOC and flowrate. This is considered necessary as the flowrate is proposed to increase from 800m<sup>3</sup>/hour to 6,000m<sup>3</sup>/hour.

Aqueous emissions will be treated on-site and discharged to sewer and the filtercake will be sent for disposal in accordance with the requirements of the licence.

#### **(b) Schedule G.2 - Emissions to sewer**

The licensee has requested an amendment to the emission limit values (ELV's) and daily maximum flow which significantly increases the mass emission of all parameters being discharged to sewer. A letter of consent from the Water Services Authority (WSA) accompanied the request. The Tradaree (Shannon Town) wastewater treatment plant has recently been taken over from Shannon Development by Clare Co. Co. and a licence application is on-hand with the Agency for the discharge from the plant (D0045-01). An upgrade of the Shannon Town WWTP that was envisaged in the previous consent has not yet happened and the reduction in ELV's specified in the licence from September 2000 have not been applied.

It is proposed to amend Schedule G.2 in line with the consent of the WSA. However it is noted that the Shannon Town WWTP has not been upgraded and therefore a mass limit has been added to some parameters in line with the previous ELV's. This means that although the increase in ELV's and daily flowrate has been allowed the daily quantity discharged of these parameters is capped to that which arises from the increase in flow.

#### **(c) Schedule H Waste Types and Quantities and Condition 5.1**

The existing licence refers to Tables E.1.2 and E.1.3 which were in the original licence application however these tables relate to 'old' EWC numbers which were revised in 2002. The licensee has requested that the list of wastes that can be accepted for treatment is updated in line with a letter submitted to the OEE in 2004 with an additional 6 waste types -

Appendix 1 below. Having reviewed the new list it is generally compatible with the lists agreed with OEE and it is proposed to incorporate this updated list into the licence. No amendment to the quantities of hazardous or non-hazardous wastes is proposed.

**(d) Condition 5.6**

The licensee requests that the wording of this condition is amended as it leads to a conflict with the UN/IMDG (International Maritime Dangerous Goods) code in relation to the labelling of waste containers. The proposed TA amends the condition to reflect recent licences.

**(f) Condition 5.18**

The licensee has requested that this condition relating to the use of waste carriers is amended to reflect the condition as written in recent licences. The TA takes this into account.

**(g) Condition 7.13**

This condition required that an effluent sample was split into three parts and retained for the relevant competent authorities. As advised to the Agency (letter of 06/11/07) the composite sampler now takes a 10 litre sample which is adequate for the needs of the relevant authorities. The condition is therefore amended to reflect recent wording in other licences.

**(h) Conditions 3.5 (b), C.2.8.1 & C.7.12 and Schedule F1.1**

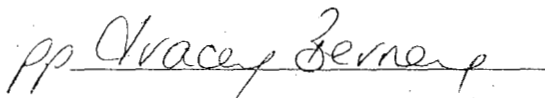
In relation to the first two conditions, Condition 3.5 allows for the amendment of issues related to the submission of reports including the number of copies and the time for submission. The licensee was notified by letter from the Agency in 2004 in relation to the number of copies of reports required. The licensee should contact the OEE Inspector to formally agree the report submission dates in line with the verbally agreed proposal.

The licensee has requested that part of Condition 7.12 which relates to the locking of a hut containing samples is deleted from the licence in line with a verbal agreement from 15<sup>th</sup> November 2007 and Schedule F1.1 relates to locations for noise monitoring. Condition 9.3 allows for issues related to the location scope and method of monitoring to be amended with the agreement of the Agency and it is not considered necessary to add any further condition to enable it. The licensee should discuss this with the OEE Inspector and obtain written agreement regarding the proposal.

**Overall Recommendation**

It is recommended that the Agency grant Technical Amendment C to the applicant as outlined in the draft TA attached and for the reasons outlined in this report.

Signed



Marie O'Connor

OCLR

