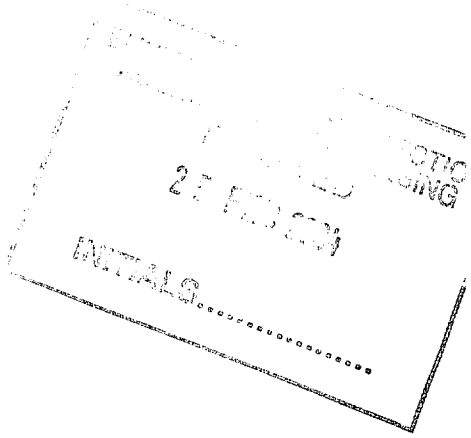
Section E

Waste Acceptance and Handling



Section E – Waste Acceptance and Handling

Section E.1 - Existing Waste Types and Quantities

Information submitted as part of the Application Form (Tables E.1.1 to E.1.3) and Attachments (E.1.1. to E.1.4) of the original Waste Licence Application 55-1.

Section E.2 - Proposed Waste Types and Quantities

STI wish to accept a number of waste types into the newly acquired building at 420 Beech Road, to be contained within the proposed transfer station.

These incorporate the following, according to their relevant EWC code:

- 18 01 02 Body parts and organs including blood bags and blood preserves (except 18 01 03) Recognisable anatomical material is sent for incineration.
- 18 01 03 Wastes whose collection and disposal is subject to special requirements in order to prevent infection;
- 18 01 06 Chemicals consisting of or containing dangerous substances (minute quantities used in healthcare only)
- 18 01 08 Cytotoxic and cytostatic medicines;
- 18 01 09 Medicines other than those mentioned in 18 01 08;
- 18 02 02 Wastes whose collection and disposal is subject to special requirements in order to prevent infection.
- 18 02 05 chemicals consisting of or containing dangerous substances
- 18 02 07 Cytotoxic and cytostatic medicines
- 18 02 08 Medicines other than those mentioned in 18 02 07

Storage of this waste will be for the shortest practicable time and STI envisage that no waste will remain in the transfer station for any longer than two weeks. Anatomical waste, properly stored at the -18°C in the freezer section of the Transfer Station, will also be transferred within this timeframe.

Quantities of all waste, identified by type, collected by STI in 2003 have been included in Appendix 6. Quantities of healthcare waste processing at the STI facility since contract commencement are also included in this section.

In addition, STI now seek to also treat processed blood products using our STI Model 2000 system. This waste is currently treated at our Antrim Plant and has caused no adverse effects to humans or the environment.

Therefore wastes which are treatable by the STI system can be categorised according to their relevant EWC codes as follows:

- 18 01 01 Sharps (except 18 01 03)
- 18 01 02 Body parts and organs including blood bags and blood preserves (except 18 01 03) and excluding recognisable anatomical waste.
- 18 01 03 wastes whose collection and disposal is subject to special requirements in order to prevent infection.
- 18 01 04 wastes whose collection and disposal is not subject to special requirements in order to prevent infection (healthcare waste)
- 18 01 07 Chemicals other than those mentioned in 18 01 06 (minute quantities used in healthcare)
- 18 02 01 Sharps except (18 02 02)
- 18 02 02 wastes whose collection and disposal is subject to special requirements in order to prevent infection
- 18 02 03 wastes whose collection and disposal is not subject to special requirements in order to prevent infection.
- 18 02 06 Chemicals other than those mentioned in 18 02 05

E.3 – Waste Acceptance Procedures

Waste acceptance procedures have been greatly enhanced since the previous Waste Licence Application 55-1 with the introduction of the electronic tracking system referred to in Section E.2.2. This is now successfully incorporated into waste acceptance and handling procedures. The same

system will be utilised in the 420 Beech Road plant for the both elements of the operation.

Procedures are currently being drawn up for the operation of the transfer station and will be submitted to the Agency for approval prior to any operation commencing.

E.4 – Waste Handling

Current waste handling procedures are maintained for waste treatable by the STI Model 2000 system. Any new substances identified by generators must be backed up with MSDS sheets prior to acceptance. For the handling of excluded waste which must be incinerated, please refer to Attachment D.2 (a) of the Waste Licence Application 55-1.

All waste will be tracked from generator to disposal/dispatch point using the electronic tracking system.

Generators are provided with Certificates of Destruction for all waste types collected by STI.

Section E.5 – Raw Materials and Energy

The only change of any significance is the removal of the use of sodium hypochlorite. (see Section E.6)

The list of additional raw material to be utilised as part of the transfer station operation have been listed as part of Section D.2 of this review application.

Section E.6 – Plant

Sodium hypochlorite is no longer utilised at the plant (except for machine/surface sterilisation), as the system has been conclusively proven to be able to operate on steam alone. No IBC's of Sodium Hypochlorite or and mixing tanks for dilution of same with water will be held in either building.

The compactors stated for installation in Attachment E.5 of the Waste Licence Application 55-1 were not installed as they were found not to be the most practicable form of handling.

The Chem-Clav unit is now referred to as the STI Model 2000 Unit. A unit identical to the unit in operation 430 Beech Road will be installed in the new plant in order to provide 100% contingency. However in order to accommodate the occasion when both units are running concurrently, STI is seeking an increase from one tonne to a maximum 2.5 tonnes per hour throughput per hour.

Process Efficacy

STI have requested a review of the process efficacy protocol in light of technical data which dictates the irrelevance of this testing, in addition to the grossly excessive costs involved.

A report to this effect has been drafted on behalf of STI by Dr. Malcolm Holliday a leading microbiological expert in the UK. This report concurs that daily challenge testing of the system in addition to regular grab sampling is more than satisfactory verification of the process.

This report is included in Appendix 9.