SECTION J

ACCIDENT PREVENTION & EMERGENCY RESPONSE

Section J.1

Atlas Environmental Ireland will draw up a comprehensive Emergency Response Plan (ERP) coupled with detailed Emergency Response Procedures (ERPs) specifically for the operation of this facility.

Prior to developing either the emergency response plan or any emergency response procedures, Atlas will conduct a risk assessment on the primary activities proposed to be conducted. The purpose of this risk assessment is to clearly identify potential risks and where they may occur, the likelihood of occurrence, the significance of the occurrence and contingency arrangements required.

Due to the nature of the proposed facility obvious contingency arrangements will be developed for:

- Accidental Spills
- Accidental releases to air and other environmental media
- Fire
- Waste handling equipment malfunctions
- Arrival of inappropriate wastes.

Spillage of large volumes of liquids (greater than 100 litres) will be treated as an emergency. All operations will cease until the spillage has been dealt with properly. Spill control kits will be stationed at strategic locations throughout the site. These will contain granules and containment booms for soaking up any spills that may occur. Booms will be used to contain the spill and prevent it spreading.

Spills occurring in the hazardous chemical storage area will be retained in the containment bund. The tanker parking bund has the capacity to retain the contents of one tanker plus 10%. In the event that a spillage exceeds this volume an overflow valve is provided to the hazardous chemical store bund. Any hazardous waste contained in these bunds as a result of a spill, will be pumped to a retention tank and removed off-site for appropriate treatment or disposal. Containment is provided at the loading bay area by a containment bund. The covered dispatch area will have a separate bund. The tank farm (containing 3 no. bulk tanks and a diesel storage tank) is separated from the rest of the building by a bund wall (approximately 1.5 m in height).

All Hazardous material will be contained in packaging/drums of international standard that are designed to be extremely durable and robust and will be handled for relatively short periods of time. This will help reduce the likelihood of a spill should there be any accidental falls.

All packaged waste will be stored in seven bunded storage bays in total within the Waste Transfer Station. These will be marked clearly with signage as CK 1 to CK7. CK 1 will be a dedicated quarantine area for non-conforming waste material. Each bay will be 4.5 m wide and 9.5 m long. All seven bays will be in parallel to each other and will be divided from each other by a separation wall. The entrance to each bay will be ramped. The ramp height will be approximately 300 mm in height. Each bay will have a corner sump which will allow excess solvent/effluent to drain and be conveyed to a central holding/retention tank. All tank and drum storage areas will bunds are designed for a volume not less than the greater of the following:

- 110% of the capacity of the largest tank or drum within the bunded area; or
- 25% of the total volume of the substance, which could be stored within the bunded area.

All drainage from bunded areas will be pumped to a retention tank and periodically taken off site for treatment/disposal. Where possible spilled liquids will be returned to the original destination tank.

Contamination of air may occur where a spillage of volatile hazardous chemicals takes place. In this case the appropriate containment material, such as foam will be used to prevent VOCs being emitted. Site staff will contain the spill wearing appropriate personal protective equipment (PPE) and dispose of the material in the appropriate manner.

As all operations will be carried out under enclosed conditions on concrete bunded hardstanding and the majority of the waste arriving on site will be in sealed containers it is unlikely that contamination of soil or groundwater will occur.

Fire at the facility will be treated as an emergency. Regular hazardous inspections and risk assessments will be carried out at the facility. Findings of these inspections and assessments will be regarded when updating procedures.

Fire points will contain the following types of fire suppressants/retardants:

- AFFF Extinguisher
- Powder Extinguisher
- CO_2 Extinguisher
- Water Extinguisher

Due to the nature of the materials to be stored on this site, water will not be the preferred fire suppressant. Other more effective suppressants are required, such as the Aqueous Film Forming Foam (AFFF), Powder and Carbon Dioxide. The quantities of these suppressants are generally much less than the water equivalent.

All site employees will receive an introduction to fire safety in their relevant work area. This will include:

- knowledge of the location of all fire extinguishers
- knowledge of the location of all fire alarms
- the relevant extinguishers to use on various types of fire

All site services operatives and some office-based staff will receive training in practical fire fighting.

Site-specific emergency response procedures (ERPs) will be prepared based on all environmental, health and safety risks identified as part of the operation and maintenance of the facility.

Staff will also have training in the Emergency Response Procedures and be familiar with evacuation routes and assembly points. The Emergency Response Plan (ERP) will incorporate a programme of regular exercises/drills including:

- Testing of bunds
- Fire drills
- Simulated accidental spillages

Emergency response arrangements will include procedures for dealing with malfunction of waste handling equipment and disruption of services e.g. power.

Should any plant on-site breakdown or malfunction the Site Manager or the site supervisor will be informed.

In the event that the pallet weigher breaks down or malfunctions, the relevant customers will be informed of the facilities inability to accept waste, and to divert their waste elsewhere if necessary.

As all records are initially recorded in writing, should there be a fault with the electronic recording system it will be possible to continue operations and update the electronic database once operational.

Should one or more of these units breakdown or malfunction, waste on-site will be stored until the equipment is functional. Incoming wastes will be accepted and stored at the discretion of the Site Manger. This will depend on storage capacity remaining on-site.

In the event that storage capacity is approaching 100%, or at the discretion of the Site Manager or site supervisor, customers will be informed of the situation and asked to retain their waste on-site if possible or make alternative arrangements.

Two forklifts will be employed on site to move wastes to storage areas. Should either or both of these malfunction, alternative arrangements will be made as follows:

- one/two forklifts will be hired for the required period of time
- one/two forklifts will be purchased
- Operations will moderated and the appropriate action taken such as informing customers.

Normal operation hours for this facility will be 07:00 am to 9:00 pm Monday to Saturday. However, occasionally the facility will need to work outside these hours (e.g. Sundays and Bank Holidays). This will be to facilitate ship docking times and emergency call-outs by customers. Staff will always be present on site to accept and store waste regardless of the time. A rostering system will dictate which members of staff will be required to be on-site during these abnormal working hours. A senior staff member will also be on site to deal with any emergency situations at all times when the plant is operational. When the site is closed it will be fully secured and all waste will be properly stored. Contact numbers of site staff responsible for the management of the site will be given to the Cork County Fire Officer should an emergency situation arise.

Raw material such as pallets, plastic IBC drums, plastic bags, shrink wrap, industrial cleaners and fire suppressants will be stored in a dedicated location within the main waste transfer building. Office supplies such as paper, cardboard, toner and printer cartridges will be stored in the office.

This facility will not process/treat any waste on site and therefore no new hazardous waste will be produced in the site's operations. Solid waste generated at the site will largely be restricted to office waste paper, cardboard and canteen waste. It is estimated that the quantity of this type of waste will not exceed 1.8 tonnes per annum. Approximately 85% of paper and cardboard waste will be recycled.

All drummed/packaged waste will be stored in one of the seven bunded storage bays in within the Waste Transfer Station. These will be marked clearly with signage as CK 1 to CK7. CK 1 will be a dedicated quarantine area for non-conforming waste material on the basis of their hazard class and based on the ADR classes and rules of segregation. SOP No. 75 is in place to deal with 'incoming packaged waste'.

Site operators will segregate incoming waste into one of the following storage categories and store the waste in the appropriate bunded storage bay:

Table J.1 Storage arrangement for different waste classifications

Storage Area	Class of Wastes
Bund CK1	Quarantined wastes
Bund CK 2	Class 8 (corrosives – acidic) Batteries
	Non-regulated e.g. cooking oil,
Bund CK 3	Class 8 (Corrosive – Alkaline) -Photographic,
	Non-regulated e.g. Fluorescent Tubes,
Bund CK 4	Non regulated – Antifreeze, waste lubricating oils (non-flammable), Brake fluid, Windscreen Washer fluid;
	Class 2 (gases/aerosols)
Bund CK5	Class 7 - Healthcare Wastes –Refrigerated facilities will be provided for at this bay
Bund CK 6	Class 4.1 Solid Oily Waste
	Non regulated - Used Oil filters,
Bund CK 7	Class 3 Flammable liquids e.g. Mixed fuels, paint thinners etc
	Class 4.1 Solid Oily Waste
	Non Regulated – Used oil filters

Note: *Non -regulated relates to ADR/IMDG code for transportation where segregation rules are derived from.*

Inspection approved bulk oil is pumped to a tank with sufficient capacity as deemed by the operations personnel. Alternatively the unloading may take place into IBCs particularly if the material is being quarantined or is not suitable for recovery.

The location of all the aforementioned activities are shown in Drawing No 2004-238-01-001 Rev A titled 'Internal Layout of Gleneden Site at Raffeen Industrial Estate' which is in Section D.2 Attachment D.2.1 but this may be subjected to some changes. It may be necessary to reconfigure within the warehouse the location of some designated areas. No relocation of any of these in-house activities will be carried out without first receiving written approval from the Agency. In the event that the Agency is minded to grant the increased scope sought in this licence review, the exact nature of these proposals - including the relevant drawings, equipment specifications etc - would be submitted to the Agency in advance for its agreement. Hence if the Agency was so minded, they could fall within the category of 'Specified Engineering Works' in the licence.