Emergency Response Plan

Draft: March 2016

IREHS-0004 (7) Emergency Response Plan
IREHS-0004 (7) Emergency Response Plan

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VISTAKON Emergency Response Plan

1 Introduction

The manual outlines the emergency plan to be followed in the event of an on-site emergency. The procedures and resources outlined herein have been developed to protect people, property and the environment. The plan has also been developed to meet the applicable requirements of the Safety Health & Welfare at Work Act 2005 and the Environmental Protection Agency Act 1992.

The Emergency Plan gives guidance on the actions to be taken before and during an emergency. It is used before an emergency for training and preparation and during an emergency as an aid in mitigating the incident.

The information in the Emergency Plan supports the information contained in the Business Continuity Plan (BCP). The BCP details the actions to be taken after the initial emergency response by the site Crisis Management Team (Senior Management Team) in dealing with aftermath of the incident. As the incident winds down, the BCP takes effect. The BCP covers post emergency care of any injured personnel and communication with next of kin, regulatory, corporate and media reporting requirements and business recovery programmes.

The Company appreciates the support and participation of staff in any emergency situation. The Company will accept full responsibility for all actions taken and instructions given by staff in good faith, during an emergency response situation.
2 Control of Emergency Response Plan

2.1 Administration of the Emergency Response Plan

2.1.1 The Emergency Response Plan is a controlled document through the Vistakon Ireland Document Control System.

2.1.2 The reviewing of the Emergency Response Plan is the responsibility of the EHSS Manager and the EHS Team.

2.1.3 The Emergency Response Plan is available to all employees on COMPLIANCE WIRE and on the Intranet Safety & Environmental Tab.

2.1.4 A separate list of employee names, addresses and contact numbers is retained by the EHS Manager, EHS Specialist, the Human Resources Manager and the General Manager. This list is updated on a quarterly basis.

2.1.5 The Emergency Response Plan is retained in a folder in the Reception/Security Office.

2.2 Revision of the Emergency Plan

2.2.1 This plan will be reviewed and/or revised:
   a) whenever regulations or processes change;
   b) if the plan fails in an emergency;
   c) if any information in the plan changes;
   d) if recommended at the EHS Management Review Meeting;
   e) if there were major changes to the emergency response equipment;
   f) changes to the internal and external response resources;
   g) a significant new Hazardous chemical is brought on Site (Form Control No. ICF-321 is completed);
   h) a new process is brought on site;
   i) issues arising from Management of Change (MOC) or issues arising from BCP Table Top Exercises.

2.2.2 All changes to the Emergency Response Plan will be tracked by Visie Qumas Document Submission Administrators using VCF-2405 which is retained in soft copy. This form logs the reasons for the changes and the reason why they are being made.
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3 Types of Incident, Severity and Level of Response

3.1 Types of Incident

When a call is received upon ringing 1234 (Security), the caller will be asked a standard set of questions regarding the incident. On receiving this information the receiver, will initiate an appropriate emergency response to the incident reported.

The types of incident covered by this emergency plan are as follows:

a. Serious injury or medical emergency (Section 5.1)
b. Fire or explosion (Section 5.3)
c. Chemical spill (Section 5.4)
d. Gas leak (Section 5.5)
e. Bomb threat (Section 5.6)

An emergency response involving contact with a biological agent is not included in the emergency response plan as no class 3 or 4 biological agents are held on-site. The response to a biological threat from an external source is provided in Appendix 2.

3.2 Incident Severity and Levels

Incidents can be further classified into three levels of severity, each of which has an associated response, these are described below:

Level 1 - Minor Incident

A Level 1 incident can typically be dealt with by the person identifying the problem. The supervisor should be informed and the incident formally logged; this will permit assessment of the incident particularly with regard to the possibility of re-occurrence and the potential for a more serious event. Level 1 incidents normally do not involve plant evacuations or Emergency Response Team (ERT) mobilisation

Examples: minor localised fire, minor injury

Level 2 - Serious Incident

Immediate action should be taken, where possible, by the person identifying the incident, who calls 1234 (Security) to summon ERT assistance. The supervisor should also be immediately informed and should assess the situation. Thereafter, the ERT will contact the necessary emergency services (if not already summoned), and the Crisis Management Team Leader (General Manager). The latter will assess the situation either through discussion or by inspection. Level 2 incidents normally involve Emergency Response Team (ERT) mobilisation and may involve plant evacuation.

Examples: serious injury, containable fire, containable chemical spill/gas release, confined space rescue

Level 3 - Severe Incident

Immediate action should be taken, where possible, by the person identifying the incident, who calls 1234 (Security) to summon ERT assistance. The supervisor should also be immediately informed and should assess the situation. Thereafter, the ERT will contact the necessary emergency services (if not already summoned), and the Crisis Management Team Leader (General Manager). The latter will assess the situation either through discussion or by inspection. Level 3 incidents will involve Emergency Response Team (ERT) mobilisation and may involve plant evacuation.

Examples: person’s trapped, serious fire, large flammable liquid spillage threat to the safety of personnel, serious environmental damage.
4 The Emergency Organisation

The roles and responsibilities of the individuals and groups during an emergency are described below.

4.1 Operating Personnel

Identifier

The person identifying the incident will take immediate action where safely possible (remove persons from any imminent danger, emergency first aid etc., stop spillage/shut down supply), call 1234 to mobilise the ERT including first aiders and will advise his supervisor either directly or through a third party.

Supervisor (depending on incident location)

On being advised of an incident, the supervisor will assess the situation either from the description or by site inspection. In the case of a level 2 or 3 incident, he will ensure appropriate ERT mobilisation and advise his line manager.

4.2 Emergency Response Team (ERT)

The ERT will aim to contain an emergency and make any rescue efforts (if safe to do so) until the arrival of the external emergency services such as fire brigade and ambulance. The ERT is made up of volunteer members from each shift (A, B, C & D) additional ERT trained personnel are available in Facilities and EHS to supplement the shift ERT on days if required. The ERT on each shift is composed of:

- Incident Controller
- Deputy Incident Controller
- First Aiders (x2)
- Fire Checkers (x4)
- Pump Checkers
- Roll Call Marshall Co-ordinator
- BA Responders (x2)
- Spill Responders (x2)

Upon direction from the Incident Controller, ERT members will search affected areas to make fire and/or chemical spill/gas leak assessments, identify any other hazards and search for casualties. ERT members are trained in basic fire fighting and chemical spills at the early stage of development. If a fire has already taken hold by the time the ERT arrive, ERT will evacuate the area and leave advanced fire fighting to the external emergency services and the sites automated fire sprinkler system.

The ERT duties in the event of the specific emergency situation such as fire chemical spill, gas leak, serious injury, bomb threat are outlined in Section 5 below.

The active ERT is posted on the Emergency Response Board at main reception swipe-in area.

At start of each shift the ERT personnel collect pagers and radios from security as follows:

- Incident Controller – radio & pager
- Deputy Incident Controller - radio & pager
- Fire Checker Phase 1/2/3 – will collect radio at Security
- Fire Checker Phase 4/5 (including production floor, mezzanine/interstitial, waste plastics and office area) – will collect radio at Security

All members of the ERT place their names on the Emergency Response Board at main reception swipe-in area, replacing those names of the departing ERT members from the earlier shift.

At the end of the shift ERT members remove their names from the ERT board and return pagers and radios to Security.
On activation of the Fire Alarm (panel will go into alarm in reception), the emergency pager will activate and inform the responder that there is an issue at the control panel. Security must contact the Emergency Response Team, by the Pager system. Radio can also be used to contact for Incident controller only.

On being informed by Security that the Fire Alarm has been activated and/or on hearing the fire alarm, the Emergency Response Team should go to Reception to interrogate the Fire Alarm Panel and to receive further instructions from the Incident Controller. The Phase 4/5 Fire checkers will proceed immediately to the Phase 5 fire panel and await instruction from Incident controller by radio.

The ERT duties in the event of the specific emergency situation such as fire chemical spill, gas leak, serious injury, bomb threat are outlined in Section 5 below.

The **Incident Controller** leads the ERT, he will assess the severity of the incident. On being advised of an incident, he shall proceed immediately to Security, assess the situation and manage the emergency response. A checklist for the Incident Controller is given in Section 5 below. In the event of a level 2 or 3 incident, he will immediately call the necessary emergency services, the Crisis Management Team Leader (General Manager) and will take whatever action is appropriate with the resources available to him. The function of the incident controller is to control evacuation and response (if any). The controller will be assisted by the Crisis Management Team in the event of a serious or major incident occurring on-site. The Incident controller will ensure EHS Manager is contacted for any hospitalisation or incident with environmental impact so that regulatory agencies are contacted if required.

### 4.3 External Services

**Ambulance Services**
The Ambulance Service will be called when required by the Incident Controller.

**Fire Services**
The Fire Service will be called by the Incident Controller if required.

**Medical Services**
The Occupational Health Physician is Dr. David Madden is available for consultation where required. The Vistakon Occupational Health Nurse is Daragh Devane is available on-site 3 days per week for consultation and advice. Outside of office hours, personnel can call the local GP on call service.

**Health and Safety Authority**
The H.S.A. Inspector will be contacted where required by the EHS Manager. The former will be responsible for submitting the incident report to the H.S.A. Inspector in accordance with the Regulations.

**Environmental Protection Agency**
The Environmental Protection Agency E.P.A. Inspector will be contacted where required by the EHS Manager. The former will be responsible for submitting the incident report to the EPA Inspector in accordance with the IPPC Licence requirements.

**Garda Siochana**
Garda Siochana officers will be called in the event of a bomb threat or security matter and be responsible for mobilising the necessary Garda services.

**Incident Control Centre**
The Incident Control Centre in the event of an emergency will be the Security office, where due to the nature of the emergency this location is not available, the alternative location will be the repeater fire panel on the back corridor (Phase 2).
4.4 Additional Internal Resources

Crisis Management Team Leader

This is the General Manager (or designate), will monitor the situation, lend assistance where required and call out the Crisis Management Team and activate the BCP if required. The General Manager has overall responsibility for all activities in the event of an emergency and ensuring adequate resources are in place to deal with an emergency.

In the absence of the General Manager, the Operations/Engineering Manager will act as Deputy. The Crisis Management Team Leader will assist the Incident Controller with his duties and advise the Incident Controller to cease response activities should the risk to staff be determined to be too great.

Crisis Management Team

The Senior Management Team members are known as the Crisis Management Team, the team is supported by a various internal specialists such as EHSS and facilities. In the event of a serious or major incident occurring onsite, they are mobilized by the Crisis Management Team Leader and their actions and responsibilities are outlined in the BCP. Their responsibilities include liaison with next of kin, media and regulatory agencies as outlined in the BCP.

EHSS Director/Site Lead

The EHSS Director/Site Lead will provide assistance and technical support to Incident Controller where required. The EHSS Director/Site Lead will review emergency procedures annually and co-ordinate Table Top Exercise/Simulations/Evacuations and ERT training and ensuring that all evacuations, simulations and desktop exercises are recorded. The EHSS Director/Site Lead will be responsible for reporting to EPA and HSA as required.

EHSS Specialist

The EHSS Specialist is responsible for updating the Emergency Response Plan and the Business Continuity Plan (BCP). The EHSS Specialist is responsible for requesting an updated employee emergency contact list from HR on a quarterly basis and creating an Emergency Response Folder for the Local Emergency Services and key contracting personnel working on site. The EHSS Specialist ensures that hard copies of all SDS for all Chemicals are retained at Reception.

4.5 Emergency Response Equipment

4.5.1 Fire Alarm System

Vistakon Ireland has several different fire related systems in place. The Combined Fire Strategy is provided in Appendix 1.

In brief, the automatic Fire Detection System will go into an alarm where a detection device is activated. The alarming zone should immediately be evacuated in a safe manner. If all zones go into alarm, then the entire building should be evacuated.

A number of devices may cause alarm activation:

- If the temperature of one of the Fire Sprinkler System’s quartzoid bulb rises above its set point (some exceptions depending on local environment), then the bulb will burst, allowing Fire Fighting Water to spray the local area. The Fire Sprinkler Pumps will be activated due to the system pressure drop, maximising the Sprinkler effectiveness.

- On operation of a break glass unit in any of the areas, the sounders will operate continuously in all areas of the building – including the External Buildings.
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- On operation of a single smoke detector in any one of the nine principal zones listed below, the sounders within that zone only will operate in a pulsed mode (2 seconds ON and 8 seconds OFF). If the sounders have not been silenced within ten (10) minutes after the initial alarm has been raised, then the sounders will operate in a continuous mode (i.e. double knock) resulting in evacuation of that zone only. All other principal zones will now go to pulsed tone alarm condition. ERT TEAM CAN INITIATE A FULL EVACUATION AT ANY TIME (Break Glass or fire panel activation).

- Where a second smoke detector in any one of the nine principal zones listed below goes off, the sounders within that zone will operate in a continuous mode (i.e. double knock) resulting in evacuation of that zone only. All other principal zones will now go to pulsed tone alarm condition.

- Some individual rooms within a principal zone have only got one smoke detector installed. If this detector should be activated then it shall be treated as a double knock and render that particular principal zone in continuous alarm.

Upon hearing the Emergency Response Pager bleep and/or the Fire Alarm, the Emergency Response Team will take command of the situation.

It is their job to co-ordinate activities, including evacuation of the building, initial investigation of the Fire alarm, monitoring of the Fire Sprinkler System, and hand over to the Fire Brigade when they reach site.

The Facility is divided into the following TEN main fire compartments (principal zones):

1. Administration (Phase 1)
2. Production Area Lines 13 – 18 and associated mezzanines and support /services cores (Phase 1).
3. Production Area Lines 19 – 23 and 30 – 37 along with the associated mezzanines and support /services cores (Phase 2).
4. Production Area Lines 24 - 29 along with the associated mezzanines and support /services cores (Phase 3)
5. Production Area Lines 40 - 50 along with the associated mezzanines and support /services cores (Phase 4 & Phase 5)
6. Waste plastics (Phase 1 & 2) and IPA tank farm electrical room
7. Distribution warehouse, facilities, calibration, microbiology lab & chemistry lab.
8. Utilities Building, Water Room 2, Future Manufacturing along with the associated mezzanines and support /services cores (Phase 3) and Utilities and Water Room 1 (Phase 1)
9. Waste plastics and compressor room (Phase 3 & 4)
10. Phase 5 Waste Plastics
11. Phase 5 Office Area Front Block
## 4.5.2 ERT Equipment

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<th>CAPABILITIES FUNCTIONS</th>
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<th>INSPECTION FREQUENCY</th>
<th>INSPECTION MAINTENANCE DESCRIPTION</th>
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<td>Smoke Purge Generator</td>
<td>Utilities</td>
<td>To Extract Smoke from Prod. And Interstitial To power Water Room 1 in an emergency</td>
<td>Facilities</td>
<td>Monthly &amp; Quarterly</td>
<td>ICF-461 Operations function check and visual inspection</td>
</tr>
<tr>
<td>SCBA</td>
<td>Mail Room</td>
<td>2 No. Breathing apparatus</td>
<td>Facilities</td>
<td>Weekly/ Monthly &amp; Annually</td>
<td>SCBA Inspection Procedure</td>
</tr>
<tr>
<td>Fire Pumps</td>
<td>Fire System Pump House</td>
<td>To supply Sprinkler Water to the Plant</td>
<td>Facilities</td>
<td>Weekly</td>
<td>Operations function check and visual inspection</td>
</tr>
<tr>
<td>Fire Alarm</td>
<td>Reception and several Plant Rooms</td>
<td>To audibly alert all personnel of the presences of a fire or Smoke</td>
<td>Facilities / Irish Superior</td>
<td>Weekly</td>
<td>Operations function check</td>
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<tr>
<td>Sprinkler System</td>
<td>Plant wide</td>
<td>To suppress a fire with Sprinkler Water</td>
<td>Facilities</td>
<td>Weekly &amp; Monthly</td>
<td>Part Operational function check and visual inspection</td>
</tr>
<tr>
<td>Spill Kits</td>
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<td>To contain potential local leaks.</td>
<td>Chemistry (BERCAR)</td>
<td>Monthly</td>
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</tr>
<tr>
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<td>To ensure clear open communication in event of emergency</td>
<td>Operations / Facilities / Security</td>
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<td>Spares in Spare Parts</td>
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<tr>
<td>Emergency Response Bleepers</td>
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<td>To ensure clear open communication in event of emergency</td>
<td>Operations / Facilities / Security</td>
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<td>Spares in Spare Parts</td>
</tr>
<tr>
<td>Eye Wash Stations</td>
<td>Plant wide</td>
<td>To provide clean water for rinsing eyes in the event of chemical spillage</td>
<td>Production / Facilities/ Labs/Warehouse /Tool room</td>
<td>Weekly</td>
<td>Operational function check</td>
</tr>
<tr>
<td>Fire Extinguishers</td>
<td>Plant wide</td>
<td>To provide local, portable extinguishers for the suppression of a small fire</td>
<td>Facilities / Antifyre</td>
<td>Annual</td>
<td>Visual inspection and partial change out (20%)</td>
</tr>
<tr>
<td>Fire Hydrants</td>
<td>External Plant wide</td>
<td>Connections for Fire Brigade</td>
<td>Facilities</td>
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</tr>
<tr>
<td>Pump House Valves</td>
<td>Fire System Pump House</td>
<td>Isolation of Fire Pumps</td>
<td>Facilities</td>
<td>Annually</td>
<td>Valves exercised and returned to a locked open position</td>
</tr>
<tr>
<td>Emergency Showers</td>
<td>Production &amp; Warehouse Facilities &amp; Boiler Room</td>
<td>Emergency Shower</td>
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<td>Weekly</td>
<td>Run Shower</td>
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<tr>
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<td>To prevent Cardiac Arrest</td>
<td>Security</td>
<td>Weekly</td>
<td>Review per Weekly Inspection Form</td>
</tr>
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<td>Oxygen Tanks</td>
<td>Strategic Areas x 4</td>
<td>To supply Oxygen during CPR</td>
<td>Security</td>
<td>Weekly</td>
<td>Review per Weekly Inspection Form</td>
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<tr>
<td>First Aid kits &amp; Plaster Dispensers</td>
<td>Strategic Areas</td>
<td>To Supply Dressing/Burn Material</td>
<td>Security</td>
<td>Weekly</td>
<td>Review per Weekly Inspection Form</td>
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<tr>
<td>AAAAF Foam Dispenser/Cannon</td>
<td>Foam Shed</td>
<td>To supply a foam blanket to extinguish IPA fires</td>
<td>Facilities</td>
<td>Monthly</td>
<td>Visual inspection of equipment and foam level check</td>
</tr>
<tr>
<td>ERT Equipment for Incident Management</td>
<td>Ref List created by EHS</td>
<td>ERT Equipment for Incident Management</td>
<td>Security</td>
<td>Weekly</td>
<td>Review per Weekly Inspection Form</td>
</tr>
<tr>
<td>Gas Detectors</td>
<td>Security</td>
<td>Gas detection N2 leak or IPA leak</td>
<td>Security</td>
<td>Weekly</td>
<td>Review per Weekly Inspection Form</td>
</tr>
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### 4.6 Training
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Employees and Contractors
All employees and contractors receive training in emergency response and evacuation at induction and on an annual basis thereafter in tool box talks and presentations on COMPLIANCE WIRE.

Visitors
Visitors are the responsibility of employees or contractors whom they visit, they must be informed of evacuation procedures on arrival and accompanied at all times if they have not completed safety induction. Each visitor will receive a visitor information leaflet at Security on arrival.

Emergency Response Team
The ERT receives training as follows:
  - Emergency Response procedures – All ERT
  - Basic Fire Response procedures – All ERT except First Aiders
  - First Aid & AED Operation – All First Aiders
  - Incident Control – Incident Controllers
  - Chemical Spill - All ERT except First Aiders
  - Use of BA – BA Responders
  - Gas leak (CCP, Heat pum, N2, Nat Gas)

Security
Security personnel receive training in call response and dealing with external threats.

Crisis Management Team
Training is undertaken as part of BCP programme:
  - annual refresher
  - annual table top exercise
  - 3 yearly external corporate rated tabletop exercise

ERT and safety induction training records are maintained by the EHS Specialist.

4.7 Drills and Simulations
Fire drills are undertaken annually in accordance with the current revision of IN-IDP-0013. Simulation exercises are undertaken by EHS with an emergency response team and actions are tracked accordingly.

4.8 Communications
All communications in the news media and general public will be handled by the Crisis Management Team Leader (General Manager).

The BCP outlines responsibilities and procedures for communication to media, regulatory, corporate and other relevant bodies.

All media & external contacts seeking information on the incident should be noted and referred immediately to the Crisis Management Team Leader. In no circumstances should there be any confirmation or denial that an event has occurred to any external source by ERT members.

4.9 Incident Review & Reporting
Following each site evacuation the Incident Controller, EHS & Other Departments involved will meet to review the incident, prepare report and identify any areas for improvement.

Other incidents will be reviewed on a case by case basis and a full review called when deemed appropriate by EHS.

5 Incident Response
A hazard analysis and risk assessment has been undertaken and a number of potential incidents have been
IREHS-0004 (7) Emergency Response Plan

identified, the procedures to be followed in the event of such incidents are outlined below:

1. Personal Injury/Medical Emergency (Section 5.1)
2. General Site Evacuation (Section 5.2)
3. Fire or explosion (Section 5.3)
4. Chemical spill (Section 5.4)
5. Gas leak (Section 5.5)
6. Bomb threat (Section 5.6)
7. CCP Incident (5.7)

An emergency response involving contact with a biological agent is not included in the emergency response plan as no class 3 or 4 biological agents are held on-site. The response to a biological threat from an external source is provided in Appendix 2.

5.1 Personal Injury/Medical Emergency

Instruction in the event of a personal injury for all employees, contractors, first aid personnel, supervisors and security are outlined below. The company has developed procedures and resources to enable a rapid response in the event of a personal injury or medical emergency at work as outlined in Figure 1 below. This includes the provision of specialised occupational health support and rehabilitation if required to enable a successful outcome for any injured employee.

5.1.1 Instructions for all employees and contractors

- If incident involves personal injury - remove the hazard if safe to do so.
- Call for help - First aider can be contacted via Security at 1234.
- Whilst awaiting the arrival of First Aider:
  - Do not remove casualty, unless in immediate danger;
  - Remain with the casualty and give reassurance;
  - Make the casualty as comfortable as possible.
- Inform area supervisor of the incident as soon as possible.

5.1.2 Instruction for First Aid Personnel

- On instruction from Security or Incident Controller, proceed to scene of injured personnel, taking emergency medical bag and automated external defibrillator (AED) if required.
- Evaluate the situation and only enter an area if it is safe to do so.
- If situation is life threatening (CPR in Progress) or potentially life threatening, advise Incident Controller /Security to call ambulance.
- Perform appropriate first aid measures.
- Obtain any necessary support from Incident Controller or Area Supervisor (if incident has not required mobilisation of full ERT).

5.1.3 Instruction for Supervisors

- Upon hearing of an injury/illness to a person in your area, ensure First Aid assistance has been obtained.
- Liaise with First Aider and find out what further medical intervention is required.
- If no further medical intervention is required employee returns to work.
- If no urgent medical attention is required and injury/illness is work related arrange for a consultation with Dr. Madden (contact via EHS 2134/2228 during office hours).
- If more immediate medical attention is required at night/week-ends use the local GP service doctor on-call.
- If urgent medical assistance is required arrange for ambulance or alternative transport to the hospital:

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- As the responsible supervisor, you will accompany the injured part to the hospital;
  - Arrange with HR for contact of next of kin;
- Stay with injured part until released or other support such as next of kin arrives.

- Contact your Department Manager and General Manager if employee must go to A&E (Hospital).

5.1.4 Instructions for Security
The Security Officer receiving the emergency call:

1. Ask caller to **Remain Calm**.
2. Ask caller to **State Who They Are**.
3. Activate the Emergency Fire Alarm Button if evacuation required.
4. Complete All Questions In **Emergency Call Record** *(Print Neatly - Someone else may have to read it)*.
5. When satisfied you have all relevant information ask caller to **HANG UP**.
6. Contact the Emergency Response Team on bleepers, radios & tannoy system, direct first aiders to scene if required.
7. Convey all information to the Incident Controller and First Aiders.

5.2 General Site Evacuation

5.2.1 Instructions to all Employees on Hearing Alarm:

- All Vistakon employees, contractors and visitors should make safe any equipment you are using if safe to do so and immediately leave the building by the nearest emergency exit.

- All Vistakon employees and contractors are responsible for any visitors they have on-site and must ensure their safety in an evacuation.

<table>
<thead>
<tr>
<th>Emergency Response Record</th>
<th>Ask caller to stay calm – Take Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Caller’s Name</td>
<td></td>
</tr>
<tr>
<td>2. Type of Emergency</td>
<td></td>
</tr>
<tr>
<td>3. Location of Emergency</td>
<td></td>
</tr>
<tr>
<td>4. Time of Accident/Incident</td>
<td></td>
</tr>
<tr>
<td>5. Number of persons involved:</td>
<td></td>
</tr>
<tr>
<td>6. Nature of Injury(s): <strong>tick the relevant box</strong></td>
<td>Nature of Incident</td>
</tr>
<tr>
<td>Sprain/Strain</td>
<td>Fire</td>
</tr>
<tr>
<td>Laceration/puncture wound</td>
<td>Chemical Spill</td>
</tr>
<tr>
<td></td>
<td>Identify/Volume</td>
</tr>
<tr>
<td>Burn</td>
<td>Gas leak</td>
</tr>
<tr>
<td></td>
<td>Identify gas</td>
</tr>
<tr>
<td>Dislocation</td>
<td>Explosion</td>
</tr>
<tr>
<td>Amputation</td>
<td>Suspicious package</td>
</tr>
<tr>
<td>Spinal Injury</td>
<td>Other</td>
</tr>
<tr>
<td>Poisoning/Toxic effect</td>
<td></td>
</tr>
<tr>
<td>7. Log time and date of call:</td>
<td>Time/date:</td>
</tr>
<tr>
<td>8. Operator taking call:</td>
<td></td>
</tr>
</tbody>
</table>
IREHS-0004 (7) Emergency Response Plan

- Personnel should proceed (a) directly, (b) in an orderly way and (c) safely to nearest exit. Do not run.
- Do not stop or return to the building to collect any personnel possessions.
- Proceed to the nearest muster point and swipe your ID Badge, this will record that you have safely left the building:

<table>
<thead>
<tr>
<th>Muster Point Number</th>
<th>Location of Muster Points around the Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Directly in Front of the Reception</td>
</tr>
<tr>
<td>1</td>
<td>Canteen Side Entrance / Construction Site</td>
</tr>
<tr>
<td>1</td>
<td>Contractors Compound at the rear of the building</td>
</tr>
<tr>
<td>1</td>
<td>Outside Front door Phase 5 Reception</td>
</tr>
</tbody>
</table>

- Proceed to your designated Assembly Point (clearly marked areas in the car park) and wait there until the all-clear is given by the Controller via the Roll Call Co-ordinator.

<table>
<thead>
<tr>
<th>ASSEMBLY POINTS/LOCATION (VISITORS/CONTRACTORS)</th>
<th>GROUPS &amp; Location of Assembly Points.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly Point</td>
<td>Daily Visitors</td>
</tr>
<tr>
<td></td>
<td>Nesting Long Term Contractors &amp; Daily Contractors</td>
</tr>
<tr>
<td></td>
<td>(Please Note: This does not apply to directly supervised agency personnel – see Note 1)</td>
</tr>
<tr>
<td></td>
<td>BOTH ASSEMBLY POINTS ARE LOCATED ON THE LEFT HAND SIDE OF THE CAR PARK NEXT TO THE ROAD.</td>
</tr>
<tr>
<td>Assembly Point 1</td>
<td>Ground &amp; 1st Floor Administration/HR/Finance/IT/Purchasing/Quality &amp; Various Managers</td>
</tr>
<tr>
<td></td>
<td>(Please Note: This applies to permanent and directly supervised Agency Personnel- see Note .2)</td>
</tr>
<tr>
<td></td>
<td>LOCATED ON THE RIGHT HAND SIDE OF CAR PARK</td>
</tr>
<tr>
<td>Assembly Point 2</td>
<td>Phase 1 &amp; Phase 5 Offices Operations/Quality/HR/Operations Support Office/Engineering Support</td>
</tr>
<tr>
<td></td>
<td>(Please Note: This applies to permanent and directly supervised Agency Personnel- see Note .2)</td>
</tr>
<tr>
<td></td>
<td>LOCATED ON THE RIGHT HAND SIDE OF CAR PARK</td>
</tr>
<tr>
<td>Assembly Point 3</td>
<td>Phase II Office Engineering/Training/EHS/QC &amp; Batch Release Personnel &amp; PM Group.</td>
</tr>
<tr>
<td></td>
<td>(Please Note: This applies to permanent and directly supervised Agency Personnel- see Note .2)</td>
</tr>
<tr>
<td></td>
<td>LOCATED ON THE RIGHT HAND SIDE OF CAR PARK</td>
</tr>
<tr>
<td>Assembly Point 4</td>
<td>Microbiology/Chemistry/Facilities/ Warehouse/Spare Parts/Tool room/Calibration</td>
</tr>
<tr>
<td></td>
<td>(Please Note: This applies to permanent and directly supervised Agency Personnel- see Note .2)</td>
</tr>
<tr>
<td></td>
<td>LOCATED ON THE RIGHT HAND SIDE OF CAR PARK</td>
</tr>
<tr>
<td>Assembly Point 5</td>
<td>All Manufacturing Phases, Process Technicians and Operations Support Employees &amp; 90 Pack Warehouse Personnel/Rig Personnel &amp; Repacking Team all Areas.</td>
</tr>
</tbody>
</table>
Please Note: This applies to permanent and directly supervised Agency Personnel- see Note 2).

LOCATED ON THE LEFT HAND SIDE OF CAR PARK (MIDDLE)

Alternate Assembly Point

Note: This assembly point will be used by all Employees & Contractors if the front of the building is under threat.

LOCATED ON THE RIGHT HAND SIDE OF CAR PARK BY WAREHOUSE BARRIER.

Note 1: Definitions: Nesting Long Term Contractors:
SODEXCO/AES/ATC/BAY/MIM/STL & ENVA.

Note 2: Definitions: Directly Supervised Personnel:
KVMS/CPL/PM/DPS/Flextronics & SL Controls

- All employees & non J&J employees should know their designated area from EH&S Induction Training.

- Employees must obey all Evacuation Roll Call Marshal Co-ordinator/Deputy instructions.

Provide Roll Call Marshals/Deputies with any relevant information you may have about the fire or persons missing person’s whereabouts.

The target time for the full evacuation of the building to be completed is within five minutes. This means that you should be in a safe location within five minutes and then proceed immediately to the nearest muster point and then on to the Assembly Point.

Returning to the Building

- The Controller is responsible for giving the instructions to the Roll Call Co-Ordinator in the Car park for re-entering the building controller person. UNDER NO CIRCUMSTANCES shall any personnel re-enter the building until the Controller has given the “All Clear” to do so.

- The Roll Call Co-ordinator communicates by Loud Haler “It is Safe for all employees to return to the building”.

- When the "All Clear" has been given by the Controller, return directly and in an orderly way to the building swiping your ID Badge at the turnstile again.

5.2.2 Instructions to all Emergency Response Team on Hearing Alarm:

Proceed immediately to the Security Office and await further instruction from the Incident Controller.

5.3 Fire

5.3.1 General Instruction to all Employees and Contractors on Discovery of a Fire:

- Fight fire (with extinguisher) if appropriate ensuring that the exit isn’t blocked. Only minor fires, (office dust bin size or smaller) should be tackled in this manner, and only by personnel trained in the use of extinguishers.

- If the fire is not easily controllable, sound Alarm by breaking nearest Break Glass Unit.
IREHS-0004 (7) Emergency Response Plan

- Proceed to the nearest Muster Point and swipe your ID Badge which will record that you have safely left the building and then go to designated assembly point. Follow general evacuation instructions as in 5.2.1 above.

- No employee should put themselves or other employees at risk.

5.3.2 General Instruction to all Employees and Contractors on Hearing Fire Alarm:

- Proceed as outlined in Section 5.2.1 above.

5.3.3 General Instruction to all Employees and Contractors if you are trapped in Fire/Smoke:

What to do if you are trapped during a fire:

- Place wet cloth around and under doors to prevent smoke from entering;
- Close as many doors as possible between you and the fire;
- Be prepared to signal someone outside, but do not break glass until absolutely necessary because smoke may be drawn into the room.

What to do if you are caught in smoke:

- Drop to the floor and crawl toward an exit;
- Stay as low as possible;
- Take shallow breaths through your nose and use a shirt or towel as a filter.

5.3.4 Instructions for Security

5.3.4.1 Receiving an Emergency call: proceed as per section 5.1.4

5.3.4.2 Fire Alarm Activation:

- When the alarm is activated pin point the location of fire on the Fire Panel for the Emergency Response Team and advise by pagers, radios (Incident Controller) and tannoy system (automated button under desk).

- Remain at the switchboard until the Incident Controller takes over your post.

- Ensure Muster Point Print List 1 prints off within 5 minutes. This lists records details of everyone who is swiped into the building at the time of the evacuation.

- Ensure to prompt Muster Points List 2, this lists records everyone who has not swiped out using the muster points, in other words it is the missing persons list.

- This list must be given to the Roll Call Marshall Co-ordinator.

- If requested by Incident Controller you must go to main entrance to stop all persons / vehicles entering site and log all vehicles leaving site.

5.3.4.3 Sprinkler Water flow Alarm

- The sprinkler water flow alarm indicates a water flow through the sprinkler pipe work. The Security should always monitor this and raised the alarm (as in Section 5.3.4.2) if it is active.

- In the event of a Fire, the Controller should initiate a plant evacuation, and confirm that this
alarm is active once the Fire Pump has started, at this point the emergency services should be contacted.

- The only exceptions to this course of action will arise when the Fire Pump is being tested or checked by the Facilities Department. In such an event the appropriate staff member will advise the Receptionist/Security when commencing a test and when that test condition has been completed.

5.3.5 Instructions for Emergency Response Team (ERT):

In the event of a fire alarm the ERT proceeds immediately to the Security Office to receive further instruction from the Incident Controller. The assigned responsibilities of the ERT Incident Controller (Section 5.3.5.1), Roll Call Marshalls (Section 5.3.5.2), Fire Checkers (Section 5.3.5.3), Pump House Checkers (Section 5.3.5.4), First Aiders (Section 5.3.5.5) are outlined below.

If fire has already taken hold when ERT arrive on scene leave it to the automatic fire sprinkler system and the external fire brigade, ERT members must always use buddy system when investigating a fire. First priority is area search and rescue and ensuring personnel have been evacuated from the affected area. ERT must decontaminate equipment after use and ensure used BA bottles are returned for filling. Any injuries sustained must be reported to Incident Controller promptly.

5.3.5.1 Instructions for the Controller

- When alarm is activated go directly to Reception, obtain any available information on emergency from security and fire panel and communicate by two-way Radio with Roll Call Marshall Coordinator/Fire Checkers/Pump House Checker.

- In the event of a sprinkler flow alarm being confirmed as a fire, initiate a full plant evacuation and contact emergency services.

- Commence emergency response routine using Incident Controller Board & Checklist as an aid.

- Assign Deputy Incident Controller to commence log of events as per Incident Controller Emergency Log.

- Or assign the Deputy Incident Controller Bridge Function – wording to be determined by AI based on recent training with Doyle consultancy.

- Advise the relevant Fire Checkers to proceed to the location of the Fire as indicated on the fire alarm panel – in the event of a fire alarm in Phase 4 or 5 (including production floor, mezzanine/interstitial, waste plastics and office area) make radio contact with Phase 4/5 fire checkers and direct to location as per fire panel indication. Follow-up with Phase 1/2/3 fire checkers as back-up. Keep in radio contact with Fire checkers for regular updates.

- On the advice of the Fire Checkers, call the Emergency Services (Fire, ambulance or guards as required) @ 112 (This is Vistakon at the National Technology Park Plassey, we have an emergency ......... and require assistance from....) and/or initiate full plant evacuation if required.

- If gas cylinder/gas leak /flammable liquid/vapour involved, evacuate to 200m, advise fire checkers to leave the area

- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.

- Assign First Aiders if required

- Send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site.
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- Communicate with Roll Call Marshalls Co-Ordinator for missing Persons in the event of a fire, search if safe to do so. If not await arrival of fire brigade and provide information on any missing persons.

- Take regular Roll Call of Fire Checkers – assign Deputy to check at 3 minute intervals, if not in communication.

- Call Crisis Management Team Leader (General Manager) and request mobilisation of Crisis Management Team if required

- Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to fire and inform him of any missing persons and any fire details - reports any missing persons and last know whereabouts and advise if there is any hazardous material in the area and provide copy of MSDS and maps of the area.

- The controller with support from the EHS Team is responsible for the overall incident report and investigation.
# Incident Controller Checklist

## 1. Attendance in Incident Control Room

<table>
<thead>
<tr>
<th>Person</th>
<th>Present</th>
<th>Assigned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Checker Phase 1/2/3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Checker Phase 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aider 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aider 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill Responder 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill Responder 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA Responder 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA Responder 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Checker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sprinkler checker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll Call Marshall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 2. Notification

- **Fire Brigade**
- **Ambulance**
- **General Manager**
  - Incident, be on standby/report to site
- **Deputy – Facilities Director**
  - Incident, be on standby/report to site

## 4. Assignment of Responsibilities

<table>
<thead>
<tr>
<th>Issue</th>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deputy</td>
<td>Log events. Log sheet blanks attached</td>
<td></td>
</tr>
<tr>
<td>Swipe System</td>
<td>Check evacuation, report missing persons to Incident Room</td>
<td></td>
</tr>
<tr>
<td>Fire Checker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump checker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photographic record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radios</td>
<td>Bring to Incident Room</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Guard site entrance, no persons to enter, log all leaving</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas cylinder/flammable vapour evacuate to 200m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll call fire checkers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Sequence of Events</td>
<td>Further Action Required</td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
5.3.5.2 Instructions for Roll Call Marshall Co-ordinator

- When alarm is activated collect the Swipe Muster List and Visitor and One Day Pass Book from Security.
- Ensure you have your two-way Radio for Communication and loud haler.
- Enforce a disciplined evacuation.
- Report to the Controller either that:
  - o all personnel are present and correct;
  - o some people are missing and, if possible where last seen.
- When the “All Clear” has been given by the Controller, inform personnel to swipe their ID Badge at the swipe system and return directly and in an orderly way to their work station.
- Ensure access to the factory is kept clear for emergency services.

5.3.5.3 Instructions for Fire Checkers

- When the initial alarm is activated, ensure that you collect your two way radio and gas detector for clear communication.
- Follow instructions from the Controller / who will direct you towards the location of fire alarm.
- Proceed cautiously to the alarm zone. A search of the area should be carried out, if safe to do so, to determine whether:
  - The alarm is a **false alarm** and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.
  - The cause of the alarm is **minor** (a smoldering bin or minor fire) and can be easily dealt with within a short time frame by using a fire extinguisher, water hose, etc. again this information needs to be conveyed by radio to the Incident Controller so resources as required can be developed to assist.
  - The alarm is **serious or major** and will require the assistance of the external emergency services, this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.
  - Only minor fires (low risk), shall be tackled with a fire extinguisher. If safe to do so, attempt to control or extinguish fire with appropriate extinguisher, using a back up support person to act as an observer and to provide emergency assistance if required. **DO NOT ENTER THICK SMOKE OR CROSS-THROUGH BURNING AREA TO GET TO FIRE FIGHTING POSITION.**
  - If the fire is not easily controllable and full evacuation alarm has not yet activated, break the nearest Break Glass Unit to sound the Full Evacuation Alarm.
  - Communicate your location by two way Radio to be accounted for by the Controller and evacuate immediately.
  - Proceed to sprinkler valve locations and ensure that the valves are open.
  - Remain at the sprinkler valve location until the "All Clear" has been given by the Controller.
5.3.5.4 Instructions for Pump House Checker

- When the initial alarm is activated, ensure that you have your two way Radio for clear communication.
- Follow the Controllers instructions and proceed to the Emergency Fire Pump House.
- Check that fire pumps are operating correctly.
- Communicate your location by two way Radio to be accounted for by the Controller confirm status of the pump.
- Remain at the Pump house until the “All Clear” has been given by the Controller on two-way Walkie-Talkie.

5.3.5.5 Instructions for First Aiders

Follow instructions as outlined in section 5.1 above.

5.4 Chemical Spill

The procedures below outline the steps to be taken in the event of a small or large chemical spill on-site. Spills are defined as follows:

- **Small spill:** The spill volume is less than 3 litres or 1m in diameter. It does not require employee protective measures above normal PPE required for handling the specific chemical involved or special training to effect clean up. Personnel in the area know the hazards and are comfortable cleaning up.

- **Large spill:** The spill volume is greater than 3 litres or 1m in diameter. This spill requires evacuation of the immediate area. The ERT clean up the spill. If the spill is greater than 1000L, the incident controller will use the storm water emergency shut off valve to prevent a large chemical spill going to the river, the incident controller may also use external resources to clean up the spill.

- **Storm water emergency shut off valve:** The main storm water emergency shut off valve is located on the final site outlet drain SW-01 (Ref EPA, IPPC license drain location map) This valve can be activated by push button or manually at drain location SW-01 or remotely at storm water emergency shut off orange break glass unit outside Temporary PG yard entrance.

- **Flammable liquid:** A liquid that has a closed cup flash point less than 55°C. Examples of flammable liquids on this site are Iso-Propanol Alcohol (IPA), propan-1-ol, Galyfilicon and inks. Such materials are highly flammable and can form explosive mixtures with air. Flammable liquid vapours are heavier than air and may settle in low spots, or move a significant distance from the liquid itself. Emergency personnel should stay out of low areas and ventilate closed spaces before entering. Vapours may travel to a source of ignition and flash back.
  - **Acid spill:** are corrosive liquid spills with a pH <3 such as hydrochloric acid and nitric acid. Typical anti-corrosion/fouling inhibitors used in facilities, water room and CCP.
  - **Base spill:** are corrosive liquid spills with a pH>10 such as sodium hydroxide and ammonia solution. Typical anti-corrosion/fouling inhibitors used in facilities, water room and CCP.

5.4.1 General Instruction to all Employees on Discovery of a Chemical Spill

- Where the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid treatment as outlined in section 5 above.
IREHS-0004 (7) Emergency Response Plan

- Only appropriately trained personnel within the area should carry out a chemical spill clean-up.
- If trained in chemical spill refer to Section 5.4.2 below, otherwise call security at 1234 and request ERT assistance, advise all personnel to evacuate the area and follow procedure as in section 3.2 below.
- If the Spill is not easily controllable, sound Alarm by breaking nearest Break Glass Unit
- Proceed to the nearest Muster Point and swipe your ID Badge which will record that you have safely left the building and then go to designated assembly point.
- No employee should put themselves or other employees at risk.

5.4.2 General Instruction to all Employees trained in Chemical Spill

5.4.2.1 Small spill

If the spill is small (less than 3 litres or 1m in diameter):

- Where the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid treatment as outlined in section 5 above.
- If the spill is from an overhead source, call security at 1234 and request ERT assistance, advise all personnel to evacuate the area and follow procedure as in section 5.4.2.2 below.
- Identify the spilled material
- Attempt to stop the source of the spill WITHOUT endangering yourself in the process e.g. turn off supply, close valve, shut down pump, get container upright, place receptacle under leak.
- Warn personnel in the adjacent area and inform your supervisor
- Obtain and review Material Safety Data Sheet (MSDS) for Chemical. If in doubt contact EHS for advice.
- If there are any concerns about the nature or size of the spill, Dial 1234 - Security to notify a member of the ERT Team for assistance.
- Open the spill kit. The location and response levels of spill kits are outlined in Appendix 4.
- Don the PPE contained in the area spill kit gloves, safety glasses/goggles and safety shoes
- Surround the spill with mini boom and pads. Add absorbent pads to the spill, working from the spill's outer edges toward the center.
- Clean up the used spill material, place all used spill material in drum and treat as hazardous waste.
- No employee should put themselves or other employees at risk.

5.4.2.2 Large spill

If the spill is large (more than 3 litres or 1m in diameter):

- Where the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid treatment as outlined in section 5 above.
- Call security at 1234 and request ERT assistance, advise all personnel to evacuate the area and follow procedure as below.
- Identify the spilled material
- Attempt to stop the source of the spill WITHOUT endangering yourself in the process e.g. turn off supply (if IPA spill involved hit emergency tank farm shut off valve in 3GT), close valve, shut down pump, get container upright, place receptacle under leak.
- Warn personnel in the adjacent area and inform your supervisor

5.4.3 Instructions for Security on Chemical Spill

5.4.3.1 Receiving an Emergency call – proceed as per section 3.1.1.

5.4.3.2 Fire Alarm Activation due to chemical spill

Proceed as per section 5.3.5.2 above.
5.4.4 Instructions for Emergency Response Team (ERT):

In the event of a chemical spill emergency the ERT proceeds immediately to the Security Office to receive further instruction from the Incident Controller. The assigned responsibilities of the ERT Incident Controller (Section 5.4.4.1), Roll Call Marshalls (Section 5.4.4.2), Spill Responders (Section 5.4.4.3), and First Aiders (Section 5.4.4.4) are outlined below.

ERT members must always use buddy system when investigating a spill. First priority is area search and rescue and ensuring personnel have been evacuated from the affected area. ERT must decontaminate equipment after use and ensure used BA bottles are returned for filling. Any injuries sustained must be reported to supervisor promptly.

In the event of a spill in the new Wastewater Treatment Plant call the Facilities Team to clean-up such a spill. There is a trained facilities and EHS team to deal with these spills. The area is completely enclosed and banded, any spill in bund is contained and will be managed by Facilities. The risk has been assessed relative to chemical unloading and such activities will only take place during office hours when facilities and EHS personnel are available on-site.

5.4.4.1 Instructions for the Controller

- When alarm is activated go directly to Reception, obtain any available information on spill from security and fire panel and communicate by two-way Radio with Roll Call Marshall Co-ordinator/Spill Responders. Evaluate the information available (employee observations, MSDS information, ERT observations and any monitoring data) to enable a satisfactory hazard evaluation.
- Refer to the Material Safety Data Sheet (MSDS) for the spilled material. All Chemicals stored on-site are listed in the Current Chemical Inventory (CCI). Copies of MSDS for all Chemicals are available on the Intranet (Environmental/Safety Tab/Safety/MSDSPRO). Hard copies of MSDSs are available for each Chemical at security area.
  - Monomer spills should be treated with caution. Under the right conditions monomer provides a potential source of exothermic reaction, for example: light, extreme temperature, or contact with metals and mixing with incompatible materials such as acids or bases.
  - If considered necessary the Spill Team should contact EH&S personnel for advice or call in external resources if the spill is considered too large. **EXTERNAL SPILL RESOURCES:** ENVA are the outside resource contact for cleaning up via vacuum tanker potentially large scale hazardous materials including IPA, diesel oil, lubricant oil, Monomer and Tween.
  - In the event of a spill in the new Wastewater Treatment Plant call the Facilities Team to clean-up such a spill.

- Commence emergency response routine using **Incident Controller Checklist** as an aid.

- Assign deputy incident controller to commence log of events as per **Incident Controller Emergency Log**.

- Advise the Spill Responders to Don PPE (chemical suit/BA/goggles/chemical boots/gloves) and carrying Gas Alert Detector proceed to the location of the spill as indicated on the fire alarm panel or by telephone reporter

- On the advice of the Spill Responders, call the Emergency Services (Fire, ambulance or guards as required) @ **112** (*This is Vistakon at the National Technology Park Plassey, we have an emergency*...
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... require assistance from...).

- If flammable liquid/vapour involved and Gas Alert reading indicate LEL>10%, advise Spill Responders and any other ERT to evacuate the area. Call Fire Brigade. If the vapour/gas levels exceed 10% of the LEL, reduce the hazard by:
  - passive ventilation, allow natural ventilation to reduce vapour levels
  - active ventilation using explosive proof fans
  - cover the spilled material with vapour barrier sorbent products

Contact EHS for further advice on LEL stabilisation. Eliminate all sources of ignition.

- If major IPA spill in tank farm bund, direct trained spill responders to apply foam to limit vapour potential.
- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.
- Assign First Aiders if required and safe to do so.
- If a major spill incident send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site.
- Communicate with Roll Call Marshalls Co-ordinator for missing Persons in the event of a spill. If search is required assign 2 BA trained members to dispatch and search if safe to do so. If not await arrival of fire brigade and provide information on any missing persons.
- Take Roll Call of ERT Team – assign Deputy to check at 5 minute intervals.
- Call Crisis Management Team Leader (General Manager) and request him to mobilise Crisis Management Team if required

Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to spill and inform him of any missing persons and any spill details - reports any missing persons and last know whereabouts and advise if there is any hazardous material in the area and provide copy of MSDS and maps of the area. The Fire Services will require details on the Chemical name, approximate spill quantity, availability, location and quantities of neutralising agents if available. If summoned, the Fire services should be met on arrival, provided with a copy of the relevant MSDS and directed to the spill location

The controller with support from the EHS Team is responsible for the overall incident report and investigation into the incident accordance with the requirements of the current revision of INIDP-0014 including completion of ICF-517.

- Incident Controller will contact EHS Manager. EHS Manager is responsible for contacting Regulatory Agencies such as EPA and HSA.
## Incident Controller Checklist

### 1. Attendance in Incident Control Room

<table>
<thead>
<tr>
<th>Person</th>
<th>Present</th>
<th>Assigned to</th>
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<tbody>
<tr>
<td>Fire Checker Phase 1/2/3</td>
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<tr>
<td>Fire Checker Phase 4/5</td>
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<tr>
<td>First Aider 1</td>
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<td>First Aider 2</td>
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<tr>
<td>Spill Responder 1</td>
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<td>Spill Responder 2</td>
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<td>BA Responder 1</td>
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<tr>
<td>BA Responder 1</td>
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<tr>
<td>Pump Checker</td>
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<td>Sprinkler checker</td>
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<tr>
<td>Roll Call Marshall</td>
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<tr>
<td>Security</td>
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</tr>
</tbody>
</table>

### 2. Notification

- Fire Brigade
- Ambulance
- General Manager*
- Deputy – Facilities Director
  - Incident, be on standby/report to site

### 4. Assignment of Responsibilities

<table>
<thead>
<tr>
<th>Issue</th>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deputy</td>
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</tr>
<tr>
<td>Swipe System</td>
<td></td>
<td>Check evacuation, report missing persons to Incident Room</td>
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<tr>
<td>Fire Checker</td>
<td></td>
<td></td>
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<tr>
<td>BA</td>
<td></td>
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<tr>
<td>Spill</td>
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<tr>
<td>Pump checker</td>
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<tr>
<td>Photographic record</td>
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<tr>
<td>Radios</td>
<td></td>
<td>Bring to Incident Room</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td>Guard site entrance, no persons to enter, log all leaving</td>
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<tr>
<td>Telephone</td>
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<tr>
<td>Gas cylinder/flammable</td>
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<tr>
<td>vapour evacuate to 200m</td>
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<tr>
<td>Roll call fire checkers</td>
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## Incident Controller Emergency Response Log

<table>
<thead>
<tr>
<th>Date:</th>
<th>Time</th>
<th>Sequence of Events</th>
<th>Further Action Required</th>
<th>By whom</th>
<th>By when</th>
<th>Complete</th>
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5.4.4.2 Instructions for Roll Call Marshall Co-ordinator

- When alarm is activated collect the Swipe Muster List and Visitor and One Day Pass Book from Reception/Security.
- Ensure you have your two-way Radio for Communication and loud haler.
- Enforce a disciplined evacuation.
- Report to the Controller either that:
  - all personnel are present and correct;
  - some people are missing and, if possible where last seen.
- When the “All Clear” has been given by the Controller, inform personnel to swipe their ID Badge at the swipe system and return directly and in an orderly way to their work station.
- Ensure access to the factory is kept clear for emergency services.

5.4.4.3 Instructions for First Aiders

- On instruction from Security or Incident Controller, proceed to scene of injured personnel, taking emergency medical bag and automated external defibrillator (AED) if required.
- Evaluate the situation and only enter an area if it is safe to do so.
- If situation is life threatening (CPR In Progress) or potentially life threatening, advise Incident Controller/Security to call ambulance.
- Perform appropriate first aid measures. If the accident involves chemical contamination, take immediate action:
  - Move the victim from the immediate area of fire, explosion, or spill (if this can be done without further injury to the victim or you).
  - Locate nearest emergency eyewash or safety shower. Remove any contaminated clothing from the victim under the shower and flush all areas of the body contacted by chemicals with copious amounts of water for 15 minutes.
- Obtain any necessary support from Incident Controller or Area Supervisor (if incident has not required mobilisation of full ERT).

5.4.4.4 Spill Responders

5.4.4.4.1 Large Spill Non-Flammable

If the spill is large (greater than 3 litres or 1m in diameter) and known to be isopropyl alcohol go to section 5.4.4.2 below, for other chemicals:

- Spill Responders don appropriate PPE:
  - Chemical Resistant Rubber Shoes/Boots with steel toes,
  - Chemical Resistant Rubber Gloves (nitrile etc.),
  - Chemical Resistant Full Body/Splash Suit with Hood,
  - BA Equipment
- Under instruction from the Incident Controller, proceed cautiously to the location of the spill.
- A search of the area should be carried out, if safe to do so, to determine whether:
  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.
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- The cause of the alarm is minor (a small spill <3 litres) and can be easily dealt with within a short time frame by using a standard spill kit. Again this information needs to be conveyed by radio to the Incident Controller so resources as required can be developed to assist.

- The alarm is serious or major and will require the assistance of additional spill responders and the external emergency services, this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.

- If the spill is not easily controllable and full evacuation alarm has not yet activated, break the nearest Break Glass Unit to sound the Full Evacuation Alarm. Communicate your location by two-way Radio to be accounted for by the Controller and evacuate immediately.

- Call Incident Controller, give details of the spill location and identify spilled material if possible.

- If the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid treatment, request Incident Controller for First Aid assistance as outlined in section 5.4.4.3 above.

- Attempt to stop the source of the spill WITHOUT endangering yourself in the process e.g. turn off supply, close valve, shut down pump, get container upright, place receptacle under leak.

- Identify the spilled material, where the identity of the chemical is unknown and the MSDS is unavailable ERT must check the pH, if pH < 1, it is an acid spill, if pH > 10, it is a base (alkaline spill), otherwise assume the chemical is flammable and toxic and deal as if an IPA spill.

- Contain the spillage using spill kit material such as absorbent powder, mats or socks:

- Spill is surrounded with mini boom/s.

- Any floor drain is blocked using a putty mat. Protect any possible spillage entering any drain.

- Adsorbent mats/pads are placed on the spill material until there is no visible liquid remaining, working from the spill's outer edges toward the centre.

- Cordon the area the area around a spillage Place "SPILL, KEEP OUT" sign round affected area.

- Open all doors and ventilate to remove Chemical vapours.

- Clean-up absorbent materials, place all used spill material in drum and treat as hazardous waste. These containers should be sealed, labelled very clearly and stored in a safe location while awaiting disposal. Similarly, any contaminated clothes, rags or clothing must be disposed of in a responsible manner. Notify EHS personnel of waste generated and location.

- Wash floor area with soapy water

- Decontaminate all equipment and PPE used during spill clean up using soap and water.

5.4.4.4.2 Large Spill Flammable

Flammable Liquid Spill greater than 3 Litres

Flammable liquids include isopropyl alcohol (IPA) and Galyficon, large IPA spills may involve:

- IPA/water mixture spilling out of a machine
- IPA on or around an electrical cabinet or an ignition source
- IPA spraying out of a pipe
- IPA dripping from the ceiling
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- IPA fire

- Spill Responders don appropriate PPE:
  - Chemical Resistant Rubber Shoes/Boots with steel toes,
  - Chemical Resistant Rubber Gloves (nitride etc.),
  - Chemical Resistant Full Body/Splash Suit with Hood,
  - BA Equipment

- Under instruction from the Incident Controller, proceed cautiously to the location of the spill wearing PPE and carrying Gas Alert detector and intrinsically safe radios.

- As you approach the area ensure the Gas Alert is switched on and observe the PID (ppm reading – if >200ppm don BA Equipment and the LEL (if reading >10%LEL – do not enter the area) and request further instruction from the Incident Controller.

- If LEL <10%, a search of the area should be carried out, if safe to do so, to determine whether:
  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.
  - The cause of the alarm is minor (a small spill<3litres) and can be easily dealt with within a short time frame by using a standard spill kit. again this information needs to be conveyed by radio to the Incident Controller so resources as required can be developed to assist.
  - The alarm is serious or major and will require the assistance of additional spill responders and the external emergency services, this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.
  - If the spill is not easily controllable and full evacuation alarm has not yet activated, break the nearest Break Glass Unit to sound the Full Evacuation Alarm. Communicate your location by two way Radio to be accounted for by the Controller and evacuate immediately.

- Call Incident Controller, give details of the spill location and identify spilled material if possible.

- If the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid treatment, request Incident Controller for First Aid assistance as outlined in section 5.4.4.3 above.

- Attempt to stop the source of the spill WITHOUT endangering yourself in the process, affected equipment must be shut down immediately using the emergency pull cord on the line & activate the emergency facilities IPA Tank Farm emergency shut-off valve.

- Assume a fire hazards exists in the event of any flammable spill or leak:
  - Remove all sources of ignition such as naked lights, electrical equipment, furnaces, heaters, sources of static electricity or friction sparks, motors, switched, circuit breakers.
  - Remove any equipment not intrinsically safe such as multi meter, radio
  - Designate some ERT members to assume fire fighting positions with foam extinguishers.

- Identify the extent of the spill.

- If spill is in tank farm bund and vapor concentration is increasing >5% LEL apply foam cannon to area.

- If spill internal open all doors and area and ventilate to remove Chemical vapours.

- Continue to monitor Lower Explosion Limit (LEL) meter to determine if flammable / explosive limits exist.
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- Testing should be done at the closest point to a source of ignition. Check at the floor level and at the same elevation as the source of ignition and at waist level. Work your way back to the area of the spill. Do not touch the meter to the spilled liquid.

- If the LEL meter alarms and shows a reading greater than 10% LEL, immediately evacuate the spill area. Have the Incident Controller re-evaluate the spill and the conditions.

- The Incident Controller must refer to the Material Safety Data Sheet (MSDS) for the spilled material. All Chemicals stored on-site are listed in the Current Chemical Inventory (CCI). Copies of MSDS for all Chemicals are available on the Intranet (Environmental/Safety Tab/Safety/MSDSPRO). Hard copies of MSDSs are available for each Chemical at reception area.

- The ERT Controller should contact EHS personnel for advice or call in external resources if the spill is considered too large.

- Flammable liquid vapours are heavier than air and may settle in low spots, or move a significant distance from the liquid itself. Emergency personnel should stay out of low areas and ventilate closed spaces before entering. Vapours may travel to a source of ignition and flash back.

- ERT contain the spillage using spill kit material such as absorbent powder, mats or socks.

- Spill is surrounded with mini boom.

- Any floor drain is blocked using a putty mat.

- Adsorbent material, mats/pads are placed on the spill material until there is no visible liquid remaining, working from the spill's outer edges toward the center.

- ERT conduct continuous monitoring of the clean up area with the LEL meter while the clean up is in process.

- ERT cordon the area as soon as possible to prevent unnecessary contamination. Place "SPILL, KEEP OUT" sign round affected area.

- ERT use non-sparking shovel to pick up absorbent materials, place all used spill material in drum and treat as hazardous waste. Ground any metal containers receiving flammable liquid material. These containers should be sealed, labelled very clearly and stored in a safe location while awaiting disposal. Similarly, any contaminated clothes, rags or clothing must be disposed of in a responsible manner. Notify EHS personnel of waste generated and location.

- ERT wash floor area with soapy water.

- ERT decontaminate all equipment and PPE used during spill clean up using soap and water.

- ERT take an air sample using a LEL meter to determine flammable / explosive limits have been eliminated and if air quality falls in the acceptable range (0% of the LEL).

- ERT remove signs. The Incident Controller shall provide the all clear before personnel can return to the area.

- Incident Controller will contact EHS Manager. EHS Manager is responsible for contacting Regulatory Agencies such as EPA and HSA. EHS Manager is responsible for contacting Regulatory Agencies such as EPA and HSA.

5.5 Gas Leak

The procedures below outline the steps to be taken in the event of any Nitrogen, Ammonia or Natural Gas
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leak on-site.

An ozone leak in Phase 4/5 is not included here as any leak immediately results in shut down of the ozone generator, which is linked to sensors in the area and thereafter any ozone in the area would quickly dissipate.

Natural gas supply is immediately shut down in the event of a fire alarm in the boiler house, kitchen and laboratories.

5.5.1 Nitrogen Gas Leak

Nitrogen is an inert gas (non-explosive) and but is an Asphyxiation hazard. The Nitrogen distribution system on-site is summarised as follows:

- Nitrogen is supplied to all Phases from the Nitrogen Plant at the rear of the plant – under Air Products control.
- A safety slam shut valve for each Phase is located outside the compound – these will operate if a “Break Glass” unit is activated or an O2 monitor in the interstitial area is activated – shutting off the supply of Nitrogen.
- Safety shut valves are also interlinked with the oxygen monitoring system at each line.
- All O2 sensors are operated in pairs.

General Instruction to all Employees on Discovery of a Nitrogen Leak

- When the “low O2” alarm is sounding and the “Low O2 Evacuate Area sign” is flashing on any line, the employees should check sensors on the HMI to insure valve has closed supplying Nitrogen to the line. There is typically no risk and Calibration should be notified. O2 monitor shall be used to confirm oxygen levels

- When the “low O2” alarm is sounding and the “Low O2 Evacuate Area sign” is flashing on a number of lines it is indicative of a Nitrogen leak on the Mezzanine. This can be checked on the HMI which will show main valve closed & will indicate which sensors have gone into alarm on the mezz for each phase associated. Call security at 1234 and request ERT assistance, advise all personnel to evacuate the area and follow procedure as in section 5.2.1 above for evacuation.

- When the “low O2” alarm is sounding and the “Low O2 Evacuate Area sign” is flashing on the Mezzanine. Call security at 1234 and request ERT assistance, advise all personnel to evacuate the area and follow procedure as in section 5.2.1 above for evacuation.

- Proceed to the nearest Muster Point and swipe your ID Badge which will record that you have safely left the building and then go to designated assembly point.

- No employee should put themselves or other employees at risk.

5.5.1.1 Instructions for Security on Nitrogen Leak

5.5.1.2 Receiving an Emergency call – proceed as per section 3.1.1.

5.5.1.3 Fire Alarm Activation due to gas alarm

Proceed as per section 5.3.5.2 above.
5.5.1.4 Instructions for Emergency Response Team (ERT):

In the event of a Gas leak emergency the ERT proceeds immediately to the Security Office to receive further instruction from the Incident Controller. The assigned responsibilities of the Incident Controller (Section 5.5.3.1), Roll Call Marshalls (Section 5.5.3.2), BA Responders (Section 5.5.3.3), and First Aiders (Section 5.5.3.4) are outlined below.

ERT members must always use buddy system when investigating a gas leak. First priority is area search and rescue and ensuring personnel have been evacuated from the affected area. ERT must decontaminate equipment after use and ensure used BA bottles are returned for filling. Any injuries sustained must be reported to supervisor promptly.

5.5.1.5 Instructions for the Controller

- When alarm is activated go directly to Reception, put on ERT yellow bib, obtain any available information on gas leak from security and fire panel and communicate by two-way Radio with Roll Call Marshall Co-ordinator/BA Responders. Evaluate the information available (employee observations, gas information, ERT observations and any monitoring data) to enable a satisfactory hazard evaluation.

- Commence emergency response routine using Incident Controller Checklist as an aid.

- Assign deputy incident controller to commence log of events as per Incident Controller emergency log.

- Advise the BA Responders to Don BA and carrying Gas Alert Detector proceed to the location of the leak as indicated on the fire alarm panel or by telephone reporter

- If nitrogen involved in leak measure oxygen concentration using Gas Alert, if oxygen concentration less than 19.5% evacuate the phase. Personnel shall be stationed at each entrance to the Phase to prevent employees from entering. (These personal should have a portable oxygen monitor to ensure that the atmosphere outside the leak area is safe.)

- If the leak becomes large or un-manageable, use the emergency Nitrogen shut off. Each line has an emergency shut off valve and there is also an emergency shut-off valve located at the nitrogen plant for each phase.

- The area should be allowed to ventilate. The ventilation exhaust system will clear the area where the leak has occurred.

- On the advice of the BA Responders, call the Emergency Services (Fire, ambulance or guards as required) @ 112 (This is Vistakon at the National Technology Park Plassey, we have an emergency ......... and require assistance from....).

- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.

- Assign First Aiders if required

- If a major incident Send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site.

- Communicate with Roll Call Marshalls Co-Ordinator for missing Persons in the event of a gas leak. If search is required assign 2 BA trained members to dispatch and search if safe to do so. If not await arrival of fire brigade and provide information on any missing persons.

- Take Roll Call of ERT Team – assign Deputy to check at 5 minute intervals.
- Call Crisis Management Team Leader (General Manager) and request him to mobilise Crisis Management Team if required

- Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to gas leak and inform him of any missing persons and any other details - reports any missing persons and last know whereabouts a and maps of the area.

- The controller with support from the EHS Team is responsible for the overall incident report and investigation.

- Incident Controller will contact EHS Manager. EHS Manager is responsible for contacting Regulatory Agencies such as EPA and HSA.
## Incident Controller Checklist

### 1. Attendance in Incident Control Room

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<tr>
<td>First Aider 1</td>
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<td>Roll Call Marshall</td>
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<td>Security</td>
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### 2. Notification

- Fire Brigade
- Ambulance
- General Manager*: Incident, be on standby/report to site
- Deputy – Facilities Director: Incident, be on standby/report to site

### 4. Assignment of Responsibilities

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<thead>
<tr>
<th>Issue</th>
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<td>Log events. Log sheet Blanks attached</td>
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<td>Swipe System</td>
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<td>Check evacuation, report missing persons to Incident Room</td>
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<td>Fire Checker</td>
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<td>vapour evacuate to 200m</td>
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<td>Roll call fire checkers</td>
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<th>By whom</th>
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5.5.1.6 Instructions for Roll Call Marshall Co-ordinator

- When alarm is activated collect the Swipe Muster List and Visitor and One Day Pass Book from Reception/Security.

- Ensure you have your two-way Radio for Communication and loud haler.

- Enforce a disciplined evacuation.

- Report to the Controller either that:
  - all personnel are present and correct;
  - some people are missing and, if possible where last seen.

- When the “All Clear” has been given by the Controller, inform personnel to swipe their ID Badge at the swipe system and return directly and in an orderly way to their work station.

- Ensure access to the factory is kept clear for emergency services.

5.5.1.7 Instructions for First Aiders

If the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid:

5.1 Move the victim from the immediate area of fire, explosion, gas leak or spill (if this can be done without further injury to the victim or you).

5.2 Locate nearest emergency eyewash or safety shower. Remove any contaminated clothing from the victim under the shower and flush all areas of the body contacted by chemicals with copious amounts of water for 15 minutes.

5.3 Call for first aid assistance and seek medical attention.

5.5.1.8 Instructions for BA Responders

- Don BA and carry oxygen monitor and radio

- Under instruction from the Incident Controller, proceed cautiously to the location of the gas leak.

- A search of the area should be carried out, if safe to do so, to determine whether:

  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.

  - The cause of the alarm is minor (O2 concentration>19.5%) and can be easily dealt with within a short time frame, again this information needs to be conveyed by radio to the Incident Controller so resources as required can be developed to assist.

  - If the leak is not easily controllable and full evacuation alarm has not yet activated, break the nearest Break Glass Unit to sound the Full Evacuation Alarm.

  - The alarm is serious or major and will require full phase evacuation/emergency shutdown of N2 supplies/the assistance of additional responders and the external emergency services; this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.

- Call Incident Controller; give details of the location and gas concentration if possible.

- Upon locating the source of the leak, the nitrogen that feeds the affected area should be verified shut or shut off if the valve is still open.

- If the leak becomes large or un-manageable, use the emergency Nitrogen shut off. Each line has an emergency shut off valve and there is also an emergency shut-off valve located at the nitrogen plant for each phase.
IREHS-0004 (7) Emergency Response Plan

- The area should be allowed to ventilate. The ventilation exhaust system will clear the area where the leak has occurred.

- Continue to check the Oxygen levels with a portable oxygen meter to determine when the area is safe to re-enter. Oxygen level must be return to 20.9% before personnel are allowed to re-enter the area.

- If the accident involves personal injury or gas contamination/asphyxiation, the first priority is to rescue any injured personnel and provide immediate first aid treatment as outlined in section 5 below.

- Communicate your location by two way Radio to be accounted for by the Controller and evacuate immediately.

- Attempt to stop the source of the leak WITHOUT endangering yourself in the process e.g. turn off supply, close valve, shut down pump, get container upright, place receptacle under leak.

- ERT open all doors and ventilate to remove Chemical vapours.

- When the initial alarm is activated, ensure that you have your two way radio for clear communication.

5.5.2 Ammonia Gas Leak

The procedures below outline the steps to be taken in the event of an Ammonia gas leak on-site.

Ammonia is a toxic and flammable hazard. 25kg of ammonia is present in an enclosed Heat Pump the Phase 1/2 Facilities area. The system is designed with in-situ gas detectors. In the event of an alarm the heat pump enclosure fans activate and expel the room contents to the outside. ERT will be called as the alarm is also picked up by the fire alarm system. The ERT role is to check immediate area and area outside the facilities building where emergency fan discharges is safe, no personnel in the area and inform facilities to come and investigate the alarm. ERT personnel are not to enter heat pump enclosure. ERT not to enter any area with excessive ammonia concentrations as per schematic below:
5.5.2.1 General Instruction to all Employees on Discovery of an Ammonia Leak

- Evacuate the area, warn other personnel in area to leave
- Emergency call -1234
- Break glass in Utilities area.
- Proceed to the nearest Muster Point and swipe your ID Badge which will record that you have safely left the building and then go to designated assembly point.
- No employee should put themselves or other employees at risk.

5.5.2.2 Instructions for Security on Ammonia Leak

5.5.2.3 Receiving an Emergency call – proceed as per section 3.1.1.

5.5.2.4 Fire Alarm Activation due to gas alarm
5.5.2.5 Instructions for Emergency Response Team (ERT):

In the event of ammonia leak emergency the ERT proceeds immediately to the Security Office to receive further instruction from the Incident Controller. The assigned responsibilities of the Incident Controller (Section 5.5.3.1), Roll Call Marshalls (Section 5.5.3.2), BA Responders (Section 5.5.3.3), and First Aiders (Section 5.5.3.4) are outlined below.

ERT members must always use buddy system when investigating a gas leak. First priority is area search and rescue and ensuring personnel have been evacuated from the affected area. ERT must decontaminate equipment after use and ensure used BA bottles are returned for filling. Any injuries sustained must be reported to supervisor promptly.

5.5.2.6 Instructions for the Controller

- When alarm is activated go directly to Reception, obtain any available information on gas leak from security and fire panel and communicate by two-way Radio with Roll Call Marshall Co-ordinator/BA Responders. Evaluate the information available (employee observations, gas information, ERT observations and any monitoring data) to enable a satisfactory hazard evaluation.

- Look at camera and check if any visual of ammonia (white mist) in facilities yard at fan discharge point.

- Commence emergency response routine using Incident Controller Checklist as an aid.

- Assign Deputy Incident Controller to commence log of events as per Incident Controller emergency log.

- Advise the BA Responders to Don BA, Ammonia (NH₃) Gas Detectors (turned on before leaving security) and radios to Utilities Door via the Facilities corridor.

The controller must check cameras to view ammonia release and if persons in area. Also, the wind sock should be checked to determine wind direction.

- The area should be allowed to ventilate. The ventilation exhaust system will clear the area where the leak has occurred.

- Communicate with BA personnel and determine extent of emergency:

  - The alarm is a false alarm (ammonia level < 10 ppm). The BA ERT Team confirm that no NH₃ gas is detected at chiller door or outside external door and advise controller that it is a false alarm and reset fire panel. The BA ERT Team returns to base and advise contact facilities to investigate the alarm activation. Facilities to investigate and sort out issue or call in Johnson Controls.

  - The cause of the alarm is moderate (ammonia level >10 ppm but <200ppm). Report ammonia leak to Incident Controller. Wearing BA proceed with caution to Heat Pump enclosure and verify that there are no personnel in the area. Check that ventilation fan is operational and vacate the area. Incident controller to restrict access to vicinity of exhaust – 200m. The BA Team to remain at safety distance (NH₃ <25ppm) in vicinity of roller shutter door/exhaust externally and monitor gas dissipation. Gas should dissipate within 20 minutes. Incident controller to restrict access to all facilities utility areas and back corridor. Incident controller to deploy personnel to restrict access to back of building from warehouse barrier to CCP entrance. Personnel to carry gas detectors, if level exceed 10ppm move back. The incident controller is to call a facilities technician on call and request additional facilities back-up team to investigate and call Johnson Controls to attend area. When the ammonia level has reached less than 10ppm, the ERT returns to base. The BA ERT Team returns to base and advise contact facilities to investigate the alarm activation. Facilities to investigate and sort out issue or call in Johnson Controls.
The alarm is **serious or major (ammonia level > 200ppm) internally.** Area must be evacuated immediately. The incident controller is to evacuate the main building and advise personnel. The building must not be exited through the back. The incident controller is to deploy personnel to restrict access to the back of the building from warehouse barrier to CCP entrance. Personnel to carry gas detectors. If level exceeds 10ppm – move back. Facilities personnel are to investigate the leak using full BA and encapsulating suit. If facilities personnel are not available, contact the Fire Brigade if persons are suspected missing. When the ammonia level has reached less than 10ppm, the ERT returns to base. The BA ERT Team returns to base and advise/contact facilities to investigate the alarm activation. Facilities to investigate and sort out issue or call in Johnson Controls.

- On the advice of the BA Responders, if persons injured or missing call the Emergency Services (Fire, ambulance or guards as required) @ 112 (*This is Vistakon at the National Technology Park Plassey, we have an emergency ........ and require assistance from....*).

- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.

- Assign First Aiders if required

- If a major incident Send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site.

- Communicate with Roll Call Marshalls Co-ordinator for missing Persons in the event of a gas leak. If search is required assign 2 BA trained members to dispatch and search if safe to do so. If not await arrival of fire brigade and provide information on any missing persons.

- Take Roll Call of ERT Team – assign Deputy to check at 5 minute intervals.

- Call Crisis Management Team Leader (General Manager) and request him to mobilise Crisis Management Team if required

- Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to gas leak and inform him of any missing persons and any other details - reports any missing persons and last known whereabouts a and maps of the area.

- The controller with support from the EHS Team is responsible for the overall incident report and investigation.

- Incident Controller will contact EHS Manager. EHS Manager is responsible for contacting Regulatory Agencies such as EPA and HSA.
# Incident Controller Checklist

## 1. Attendance in Incident Control Room

<table>
<thead>
<tr>
<th>Person</th>
<th>Present</th>
<th>Assigned to</th>
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<tbody>
<tr>
<td>Fire Checker 1/2</td>
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<td>Fire Checker 4/5</td>
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<td>First Aider 1</td>
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<td>First Aider 2</td>
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<td>Spill Responder 1</td>
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<td>Spill Responder 2</td>
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<td>Security</td>
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<tr>
<td>Person to restrict access to back yard area</td>
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</table>

## 2. Notification

- **Fire Brigade**
- **Ambulance**
- **General Manager**
- **Deputy – Facilities Director**

## 4. Assignment of Responsibilities

<table>
<thead>
<tr>
<th>Issue</th>
<th>Who</th>
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### Incident Controller Emergency Response Log

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<th>Time</th>
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<th>Further Action Required</th>
<th>By whom</th>
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**5.5.2.7 Instructions for Roll Call Marshall Co-ordinator**

- When alarm is activated collect the Swipe Muster List and Visitor and One Day Pass Book from Reception/Security.
- Ensure you have your two-way Radio for Communication and loud haler.
- Enforce a disciplined evacuation.
- Report to the Controller either that :-

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5.5.2.8 Instructions for First Aiders
If the accident involves personal injury or chemical contamination, the first priority is to rescue any injured personnel and provide immediate first aid:

5.1 Move the victim from the immediate area of fire, explosion, or spill (if this can be done without further injury to the victim or you).
5.2 Locate nearest emergency eyewash or safety shower. Remove any contaminated clothing from the victim under the shower and flush all areas of the body contacted by chemicals with copious amounts of water for 15 minutes.
5.3 Call for first aid assistance and seek medical attention.

5.5.2.9 Instructions for BA Responders

- Don BA, gloves and carry NH3 Gas Detector and radio.
- The BA ERT Team assembles at the Utilities door read ppm level on the Ammonia (NH3) gas detectors. BA face mask ready and activated. If any odour of ammonia detected or ammonia reading >10 ppm put on BA.
- Under instruction from the Incident Controller, proceed cautiously to the location of the gas leak.
- A search of the area should be carried out if safe to do so, to determine whether:
  - The alarm is a false alarm (ammonia level < 10 ppm). The BA ERT Team confirm that no NH3 gas is detected at chiller door or outside external door and advise controller that it is a false alarm and reset fire panel. The BA ERT Team returns to base and advise contact facilities to investigate the alarm activation.
  - The cause of the alarm is moderate (ammonia level >10 ppm but <200ppm). Report ammonia leak to Incident Controller. Wearing BA proceed with caution to Heat Pump enclosure and verify that there are no personnel in the area. Check that ventilation fan is operational and vacate the area. Incident controller to restrict access to vicinity of exhaust – 200m. The BA Team to remain at safety distance (NH3 <25ppm) in vicinity of roller shutter door/exhaust externally and monitor gas dissipation. Gas should dissipate within 20 minutes. Incident controller to restrict access to all facilities utility areas and back corridor. Incident controller to deploy personnel to restrict access to back of building from warehouse barrier to CCP entrance. Personnel to carry gas detectors, if level exceed 10ppm move back. The incident controller is to call a facilities technician on call and request additional facilities back-up team to investigate and call Johnson Controls to attend area. When the ammonia level has reached less than 10ppm, the ERT returns to base. The BA ERT Team returns to base and advise/contact facilities to investigate the alarm activation. Facilities to investigate and sort out issue or call in Johnson Controls.
  - The alarm is serious or major (ammonia level >200ppm) internally. Area must be evacuated immediately. The incident controller is to evacuate the main building and advise personnel. The building must not be exited through the back. The incident controller is to deploy personnel to restrict access to back of the building from warehouse barrier to CCP entrance. Personnel to carry gas detectors. If level exceeds 10ppm – move back. Facilities personnel are to investigate the leak using full BA and encapsulating suit. If facilities personnel are not available, contact the Fire Brigade if persons are suspected missing. When the ammonia level has reached less than 10ppm, the ERT returns to base. The BA
ERT Team returns to base and advise contact facilities to investigate the alarm activation. Facilities to investigate and sort out issue or call in Johnson Controls

- Keep in regular contact with Incident Controller; keep giving details of the location and gas concentration if possible.

- The area should be allowed to ventilate. The ventilation exhaust system will clear the area where the leak has occurred.

- If the accident involves personal injury or gas contamination/asphyxiation, the first priority is ERT safety then if safe to do so to rescue any injured personnel and provide immediate first aid treatment as outlined in section 5 below.

- ERT open all doors and ventilate to remove Chemical vapours.

- When the initial alarm is activated, ensure that you have your two way radio for clear communication.

### 5.5.3 Natural Gas Leak

Natural gas supply is immediately shut down in the event of a fire alarm in the boiler house, kitchen and laboratories. In event of a gas leak follow schematic below:
5.6 Bomb Threat and/or Suspicious Letter or Package

5.6.1 Instructions for Security

Receiving an Bomb Threat Call:

- The Security Officer receiving the call completes the Bomb Threat Record Sheet:

  **Bomb Threat Record Sheet**
  **Exact wording of threat**
  ………………………………………………………………………………………………………
  ………………………………………………………………………………………………………

  **Questions To Ask ?**
  When is the bomb going to explode?
  Where is the bomb?
  What does the bomb look like?
  Why was the bomb placed?
  Who placed the bomb?
  What will make the bomb explode?
  What is your name?
  Where are you?
  What is your address?
  Why are you doing this?
  Call Taken:  Time call was taken    Date call was taken
  Duration
  Number called:   Received by:

- Activate the Emergency Fire Alarm Button if evacuation required
- Contact the Emergency Response Team on bleepers, radios & tannoy system, direct first aiders to scene if required.
- Convey all information to the Incident Controller and First Aiders.
- Contact Crisis Management Team Leader

Receiving a Suspicious Letter or Package

- On receipt of a suspicious letter (guidance on identification is provided in Appendix2) or parcel, don’t move handle, shake or sniff it.
- Leave the area close any doors.
- Contact the Emergency Response Team on bleepers, radios & tannoy system.
- Convey all information to the Incident Controller and First Aiders.
- Contact Crisis Management Team Leader

Incident Controller and Crisis Management Team Leader follow procedures outlined in the BCP for dealing with suspicious letters/parcels.

5.7 Emergency Incident in CCP Plant

5.7.2 General Information
IREHS-0004 (7) Emergency Response Plan

The combined Cooling and Power Plant (CCP) consists of two MV/LV Switch Rooms and two CCP Engine Unit Rooms with associated external facilities equipment consisting of pumps, cooling fans, electrical panel and cooling towers.

Inergen Fire Supression System

In the event of a fire in the CCP (MV Switchroom, LV Switchroom, CCP Engine Room 1 or CCP Engine Room 2), there is an Inergen Fire Suppression System that will activate to quench the fire:

- MV/LV Switch Rooms will discharge the Inergen system if the detectors reach 70 Deg C.
- CCP Units 1 and 2 will discharge the Inergen system if the detectors reach 150 Deg C

A visual and audible alarm will sound outside each unit if the system discharges.

Inergen is composed of the non-toxic gasses argon, nitrogen, and carbon dioxide (CO₂). Although the Inergen gas is nontoxic, you should not enter a room where Inergen has been released to suppress a fire for 15 minutes after release to avoid exposure to toxic combustion products.

Main plant fire alarm & full evacuation

Upon operation of any break glass unit within the CCP plant there will be full evacuation including the main Vistakon building.

Detection via any of the smoke heads within the CCP plant will only activate local sounder/strobes. A signal will be sent to the main Fire Alarm Panel, there will not be an automatic full evacuation.

Control of CCP

CCP Engine units are controlled remotely by Dresser Rand (start / stop functions). All Alarms are monitored by Dresser Rand remotely.

ERT - Do NOT enter CCP Units in the event of an alarm without having approval from The Dresser Rand 24-hour Contact (number held at Security)

Vistakon personnel entering the area under normal operations, sign the CCP entry log at Security and collect a man-down radio and QRAE gas detector.

5.7.3 General Instruction to all Employees and Contractors in CCP area on Discovery of a Fire:

- Fight fire (with extinguisher) if appropriate ensuring that the exit isn’t blocked. Only minor fires, (office dust bin size or smaller) should be tackled in this manner, and only by personnel trained in the use of extinguishers.
- If Inergen fire extinguishing system activates – loud noise, leave the area immediately
- If the fire is not easily controllable, exit the area immediately and request immediate ERT assistance on your man down radio.
- Inform Security immediately once you have safely evacuated from the area and proceed to Security & sign-off the CCP entry log.
- No employee should put themselves or other employees at risk.

5.7.4 General Instruction to all Employees and Contractors in CCP area on Hearing
IREHS-0004 (7) Emergency Response Plan

Fire Alarm:

- Exit the area immediately and Inform Security immediately once you have safely evacuated from the area and proceed to Security & sign-off the CCP entry log.

5.7.5 General Instruction to all Employees and Contractors if you are trapped in Fire/Smoke:

What to do if you are caught in smoke:

- Drop to the floor and crawl toward an exit;
- Stay as low as possible;
- Take shallow breaths through your nose and use a shirt or towel as a filter.

If trapped in fire - request immediate ERT/Fire Brigade assistance on your man down radio

5.7.6 General Instructions for Security

Receiving an Emergency call – proceed as per section 5.1.4

Fire Alarm Activation CCP area:

- When the alarm is activated pin point the location of fire on the Fire Panel for the Emergency Response Team and cal ERT immediately by pagers, radios (Incident Controller) and tannoy system.
- Remain at the switchboard until the Incident Controller takes over your post.
- Check the ERT entry log for names of any persons in the CCP area, attempt radio contact and advise Incident Controller of last known whereabouts
- In a full evacuation Ensure Muster Point Print List 1 prints off within 5 minutes. This lists records details of everyone who is swiped into the building at the time of the evacuation.
- Ensure to prompt Muster Points List 2, this lists records everyone who has not swiped out using the muster points, in other words it is the missing persons list.
- This list must be given to the Roll Call Marshall Co-ordinator.
- If requested by Incident Controller you must go to main entrance to stop all persons / vehicles entering site and log all vehicles leaving site.

5.7.7 ERT Response

General ERT Response – CCP Alarm

In the event of an alarm from the CCP area, ERT proceeds immediately to the Security Office to receive further instruction from the Incident Controller. The assigned responsibilities of the ERT Incident Controller, Roll Call Marshalls, Fire Checkers and Security are outlined below for the following incidents:

- CCP MV or LV Switch Room Incident (Section 5.7.6.1)
  - Activation of Break Glass Unit MV or LV Switch Room (Section 5.7.6.1.1)
  - Activation of Smoke Head MV or LV Switch Room (Section 5.7.6.1.2)
  - Activation of man down radio MV or LV Switch Room (Section 5.7.6.1.3)
  - CCP MV Power Isolation (Section 5.7.6.1.4)

- CCP Units 1& 2 (Engines) Incident (Section 5.7.6.2)
  - Activation of fire alarm CCP Unit 1 or 2 (Section 5.7.6.2.1)
5.7.6 Activation of man down radio MV or LV Switch Room (Section 5.7.6.2.2)
- CCP Gas Leak Alarm (Section 5.7.6.2.3)
- CCP Gas Isolation (Section 5.7.6.2.4)
- CCP Chemical Spill (Section 5.7.6.3)

If fire has already taken hold when ERT arrive on scene leave it to the Inergen Fire Suppression System and the external fire brigade, ERT members must always use buddy system when investigating a fire. First priority is area search and rescue and ensuring personnel have been evacuated from the affected area. Any injuries sustained must be reported to Incident Controller promptly.

5.7.7 CCP MV or LV Switch Room Incident

The CCP switch rooms contain 2No. thermal detectors. If both of these reach 70°C the Inergen suppression system will activate, local alarm and strobes will sound and an alarm will be sent to the Vistakon fire alarm panel.

There are also 2No. smoke detectors from the Vistakon fire alarm loop in the rooms.

An alarm at any detector in the CCP switch rooms will activate local sounders/strobes. CCP compound sounders will continue to ring and will activate ERT pagers. (Note that the Vistakon Ireland CCP switch room will appear on the Fire Alarm Control Panel Display as ‘CCP switch room’).

5.7.7.1 Activation of Break Glass Unit MV or LV Switch Room

- L05M83 / L05M82 – LV Room
- L05M81 / L05M80 – MV Room

If any Break Glass Unit is activated all zone alarms will activate continuously, message will be sent to ERT pagers and alarm will sound at Main Fire Panel at Reception. A break glass alarm will evacuate the whole Vistakon Plant. ERT will proceed to reception.

Instructions for Incident Controller:

- Obtain any available information on emergency from security and fire panel and communicate by two-way Radio with Roll Call Marshall, Co-ordinator/Fire Checkers.
- Commence emergency response routine using Incident Controller Checklist as an aid.
- Send Fire Checkers (x2) to CCP compound access gate to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / CCP Electrical Room / CCP 1&2 / 501) & await instructions.
- Assign Deputy Incident Controller to commence log of events as per Incident Controller Emergency Log.
- Verify with Security if any persons are unaccounted for on the CCP entry log.
- If flames visible or gas leak and persons missing in CCP area, call the Emergency Services (Fire, ambulance or guards as required) @ 112 (This is Vistakon at the National Technology Park Plassey, we have an emergency ……… and require assistance from…..). Advise fire checkers to leave the area
- If alarms sounding in the area and Inergen system has released - advise fire checkers not to enter area until 15 minutes after Inergen has released the area and no evidence of fire or smoke.
- If no audible/visual at MV rooms and safe to enter CCP units, fire checker to proceed with gas detector turned on and in constant radio contact with controller.
- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.

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- Assign First Aiders if required
- Send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site if required.
- Take regular Roll Call of Fire Checkers – assign Deputy to check at 3 minute intervals, if not in communication.
- Call Crisis Management Team Leader (General Manager) and request mobilisation of Crisis Management Team if required
- Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to fire and inform him of any missing persons and any fire details - reports any missing persons and last known whereabouts and advise if there is any hazardous material in the area and provide copy of MSDS and maps of the area.
- The controller with support from the EHS Team is responsible for the overall incident report and investigation.

Instructions for Fire Checkers

- When the initial alarm is activated, ensure that you have your two way radio for clear communication, Torches, QRAE Gas Meter (ON), Keys (Master / CCP Electrical Room / CCP 1&2 / 501) & await instructions
- Follow instructions from the Controller / who will direct you to the perimeter of the CCP compound to investigate, report any evidence from the area – flames/smoke/noise etc.
- If alarms sounding in the area and Inergen system has released - do not to enter area until 15 minutes after Inergen has released the area and no evidence of fire or smoke.
- On confirmation with the controller that safe to proceed, proceed cautiously to the alarm zone. A search of the area should be carried out, if safe to do so, to determine whether:
  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.
  - The alarm is serious or major and will require the assistance of the first aid team or external emergency services, this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.
- Communicate your location by two way radio to be accounted for by the Controller at least every 3 minutes.
- Await further instructions from the controller.

In the event of a full plant evacuation, Roll Call Marshall proceeds as per section 5.3.5.2.

5.7.7.1.2 Activation of Smoke Head MV or LV Switch Room

- L05S96 – LV Room
- L05S95 – MV Room

Activation of any smoke head, all “external” zone alarms only will activate continuously, message will be sent to ERT pagers and alarm will sound at Main Fire Panel at Reception. Incident Controller will send Fire Checkers (x2) to CCP to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / CCP Electrical Room / CCP 1&2 / 501).
IREHS-0004 (7) Emergency Response Plan

Instructions for Incident Controller & Fire Checkers – proceed as per Section 5.7.1.1

In the event of a full plant evacuation, Roll Call Marshall proceeds as per section 5.3.5.2.

5.7.7.1.3 Activation of man down radio MV or LV Switch Room

Security will contact ERT pagers and tannoy. Incident Controller will send Fire Checkers (x2) to CCP to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / CCP Electrical Room / CCP 1&2 / 501).

Instructions for Incident Controller & Fire Checkers – proceed as per Section 5.7.1.1

In the event of a full plant evacuation, Roll Call Marshall proceed as per section 5.3.5.2.

5.7.7.1.4 CCP MV Power Isolation

Two Emergency stops are located in the CCP area, one outside the MV Room, second located inside the MV Room. Operation of either Emergency stop will “Open” Q91 and Q07 10KV Breakers – isolating all MV power.

10KV Single

5.7.7.2 CCP Units 1 & 2 (Engines) Incident

Each CCP unit contains thermal detectors. The 1st knock is set at 95degC. At 1st knock the engines are shut down. The 2nd knock is set at 150degC. At 2nd knock the Inergen system is activated. The main fire alarm panel will be notified that there is a fire situation at the CCP plant at 95degC. (Note that the Vistakon Ireland CCP Plant will appear on the Fire Alarm Control Panel Display as ‘CCP Plant’).

5.7.7.2.1 Activation of fire alarm CCP Unit 1 or 2

A “first knock” at 95 Deg C will trigger an ERT Pager Alarm and alarm at the Main Fire Panel – this will shut down the engines.

CCP Units 1 and 2 will discharge the Inergen system if the detectors reach 150 Deg C

A visual and audible alarm will sound outside each unit if the system discharges.

Incident Controller will send Fire Checkers (x2) to CCP to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / CCP Electrical Room / CCP 1&2 / 501).

Incident Controller will:

- Obtain any available information on emergency from security and fire panel and communicate by two-way Radio with Roll Call Marshall, Co-ordinator/Fire Checkers.

- Commence emergency response routine using Incident Controller Checklist as an aid.

- Send Fire Checkers (x2) to within 200m of CCP to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / CCP Electrical Room / CCP 1&2 / 501) & await instructions.

- Assign Deputy Incident Controller to commence log of events as per Incident Controller Emergency Log.

- Verify with Security if any persons are unaccounted for on the CCP entry log.

- Contact Dresser Rand 24 hour service & provide information on nature of mandown alarm & any visible evidence available from Fire checkers. Request confirmation from Dresser Rand that it is safe to enter CCP Unit area and that there is no evidence of fire/Inergen release or gas release.
IREHS-0004 (7) Emergency Response Plan

- If flames visible or persons missing in CCP area, call the Emergency Services (Fire, ambulance or guards as required) @ 112 (This is Vistakon at the National Technology Park Plassey, we have an emergency ........ and require assistance from....).

- If flames, smoke visible or gas leak involved, evacuate to 200m, advise fire checkers to leave the area.

- If alarms sounding in the area and Inergen system has released - advise fire checkers not to enter area until 15 minutes after Inergen has released the area and no evidence of fire or smoke.

- If Dresser Rand indicate safe to enter CCP units, fire checker to proceed with gas detector turned on and in constant radio contact with controller.

- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.

- Assign First Aiders if required

- Send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site if required.

- Communicate with Roll Call Marshalls Co-Ordinator for missing Persons in the event of a fire, search if safe to do so. If not await arrival of fire brigade and provide information on any missing persons.

- Take regular Roll Call of Fire Checkers – assign Deputy to check at 3 minute intervals, if not in communication.

- Call Crisis Management Team Leader (General Manager) and request mobilisation of Crisis Management Team if required

- Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to fire and inform him of any missing persons and any fire details - reports any missing persons and last know whereabouts and advise if there is any hazardous material in the area and provide copy of MSDS and maps of the area.

- The controller with support from the EHS Team is responsible for the overall incident report and investigation.

Instructions for Fire Checkers

- When the initial alarm is activated, ensure that you have your two way radio for clear communication., Torches, QRAE Gas Meter (ON), Keys (Master / CCP Electrical Room / CCP 1&2 / 501) & await instructions.

- Follow instructions from the Controller / who will direct you to within 50m of CCP to investigate, report any evidence from the area – flames/smoke/noise etc.

- If alarms sounding in the area and Inergen system has released - do not to enter area until 15 minutes after Inergen has released the area and no evidence of fire or smoke.

- On instruction from the controller once safe clearance obtained from Dresser Rand, proceed cautiously to the alarm zone. A search of the area should be carried out, if safe to do so, to determine whether:

  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.
The cause of the alarm is **minor** (a smoldering bin or minor fire) and can be easily dealt with within a short time frame by using a fire extinguisher. Again this information needs to be conveyed by radio to the Incident Controller so resources as required can be developed to assist.

- The alarm is **serious or major** and will require the assistance of the external emergency services, this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.

- Only minor fires (low risk), shall be tackled with a fire extinguisher. If safe to do so, attempt to control or extinguish fire with appropriate extinguisher, using a back up support person to act as an observer and to provide emergency assistance if required. **DO NOT ENTER THICK SMOKE OR CROSS-THROUGH BURNING AREA TO GET TO FIRE FIGHTING POSITION.**

- If fire out of control, communicate your location by two-way Radio to be accounted for by the Controller and evacuate immediately.

- Await further instructions from the controller.

In the event of a full plant evacuation, **Roll Call Marshall** proceed as per section 5.3.5.2.

### 5.7.7.2.2 Activation of man down radio MV or LV Switch Room

Security will contact ERT pagers and tannoy. Incident Controller will send Fire Checkers (x2) to CCP to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / CCP Electrical Room / CCP 1&2 / 501).

**Instructions for Incident Controller & Fire Checkers** – proceed as per Section 5.7.2.1

In the event of a full plant evacuation, Roll Call Marshall proceed as per section 5.3.5.2.

### 5.7.7.2.3 CCP Gas Leak Alarm

Gas is supplied to both CCP 1 and CCP 2 units, from the main Gas Skid at the rear of the Facilities Area, back of Phase 1. Gas detection is located in the centre of each CCP unit, linked to a double slam shut safety valve.

If a leak is detected, the slam shut operates, shuts down the CCP. The fans continue to run and ventilate the unit.

Alarm is sent to Dresser Rand remote monitoring system, who will contact Vistakon Security to advise the onsite team of the situation. Vistakon Security will contact Facilities. CCP will not be started until Dresser Rand Engineer comes on site, investigates cause of alarm.

### 5.7.7.2.4 CCP Gas Isolation

The Main Gas Isolation Valve located outside each CCP unit. (Additional isolation valves on roadway outside CCP units, outside Air Products compound – long reach key required).

### 5.7.7.3 CCP Chemical Spill

A Level 5 Spill Kit is located in the CCP area – which includes a PPE Bag.

Prevent any chemicals “going to the storm drains – using the Drain blockers from the Spill Kit.

**Chemicals in use:**

- Cooling Tower Dosing Chemicals x 3 – contained in bunded chemical hut
5.8 Wind Turbine

The Wind Turbine is located externally from the Vistakon facility. The tower is monitored by its own independent fire alarm system which is maintained and monitored by Enercon scada system.

The Vistakon fire alarm system is connected to the wind turbine for monitoring purposes only. One standalone smoke detector is located in the Nacelle enclosure at the top of the wind turbine and one smoke detector and break glass unit is located on the ground floor. The fire panel termination enclosure is located on the ground floor. Vistakon fire alarm activation will not evacuate the plant as it is external from the building. The ERT Controller will inform the Facilities department who will inform Enercon. Facilities will decide whether further investigation of the alarm activation in the wind turbine is required.

5.9 PG Tank Farm

The PG Tank Farm is located externally at the north side, back adjacent to the phase 5 & 6 area of the facility. The PG tank farm process incorporates virgin and spent PG tanker delivery staging areas, 2 - Virgin PG storage tanks and 2 - Spent PG storage tanks with a capacity for 290 cubic meters for each tank, (Installation of two further tanks has been factored for a later date) Fresh PG tank pumping skid area, Process effluent retention tank area, A PG process pipe bridge spans the tank farm from the staging area entering the building at phase 5 area, The loading & unloading area is bunded. The storm water runoff is monitored by TOC M2.
IREHS-0004 (7) Emergency Response Plan

Emergency Response CCP Plant - October 2010

Smoke Head
Local Alarm Strobes

Inergen Release
Local Alarm Strobes

Break Glass
Full Evacuation

Man Down radio

MV/LV Switch Room Alarm

CCP Units 1 & 2 (Engines) Alarm

Incident Controller gather information, send Fire Checkers, check CCP log for missing persons, deploy Fire Marshalls (if full evac)

Incident Controller gather information, send Fire Checkers, check CCP log for missing persons, deploy Fire Marshalls (if full evac)

Heat Detector @95°C
Inergen Release @ 150°C
Main fire panel alarm

Man Down radio

Gas Alarm
BMS Alarm to facilities
Dresser Rand may request assistance

Call Dresser Rand 24 hour support line & confirm CCP status/Inergen release/Gas release/if safe to enter

Fire Checkers take Radios, Torches, QRAE Gas Meter (ON), Keys (Master / CCP Electrical Room / CCP 1&2 / 501)

Fire Checkers proceed to outside perimeter of CCP - if flames visible or person missing request call fire brigade

Fire Checkers proceed to within 50m perimeter of CCP - if flames visible or person missing request call fire brigade

No smoke or flames or Inergen release

Proceed slowly with gas detector on and radio communication with controller

If hear Inergen release

Do not enter until 15 mins after release ends

If flames/smoke visible or person missing

Request call fire brigade & evacuate to a safe distance

If find evidence of extinguished fire - Shut down power supply to area & if area safe, stand down ERT and advise facilities of incident

If false alarm stand down ERT and advise facilities of incident

If person injured request normal ERT assistance

Incident Controller prepare for fire brigade arrival & call Crisis Management Team

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## Incident Controller Emergency Response Log

**Date:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Sequence of Events</th>
<th>Further Action Required</th>
<th>By whom</th>
<th>By when</th>
<th>Complete</th>
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<tbody>
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## Incident Controller Checklist – CCP Incident

### 1. Attendance in Incident Control Room

<table>
<thead>
<tr>
<th>Person</th>
<th>Present</th>
<th>Assigned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Checker Phase 1/2/3</td>
<td></td>
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<tr>
<td>Fire Checker Phase 4/5</td>
<td></td>
<td></td>
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<tr>
<td>First Aider 1</td>
<td></td>
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<tr>
<td>First Aider 2</td>
<td></td>
<td></td>
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<tr>
<td>Spill Responder 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill Responder 2</td>
<td></td>
<td></td>
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<tr>
<td>Roll Call Marshall</td>
<td></td>
<td></td>
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<tr>
<td>Security</td>
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### 2. Notification

<table>
<thead>
<tr>
<th>Contact</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>Dresser Rand 24</td>
<td>Dresser Rand 24 contact number: 00447870250744</td>
</tr>
<tr>
<td>Facilities on-call technician</td>
<td></td>
</tr>
<tr>
<td>Fire Brigade</td>
<td></td>
</tr>
<tr>
<td>Ambulance</td>
<td></td>
</tr>
<tr>
<td>General Manager*</td>
<td>Incident, be on standby/report to site</td>
</tr>
<tr>
<td>Deputy – Facilities Director</td>
<td>Incident, be on standby/report to site</td>
</tr>
</tbody>
</table>

### 4. Assignment of Responsibilities

<table>
<thead>
<tr>
<th>Issue</th>
<th>Who</th>
<th>What</th>
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<tbody>
<tr>
<td>Deputy</td>
<td></td>
<td>Log events. Log sheet Blanks attached</td>
</tr>
<tr>
<td>Swipe System</td>
<td></td>
<td>Check evacuation, report missing persons to Incident Room</td>
</tr>
<tr>
<td>Fire Checker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill</td>
<td></td>
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<tr>
<td>Photographic record</td>
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<tr>
<td>Radios</td>
<td></td>
<td>Bring to Incident Room</td>
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<tr>
<td>Security</td>
<td></td>
<td>Guard site entrance, no persons to enter, log all leaving</td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas vapour evacuate to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll call fire checkers</td>
<td></td>
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</tbody>
</table>
5.7.5.2 Instructions for Roll Call Marshall Co-ordinator

- When alarm is activated collect the Swipe Muster List and Visitor and One Day Pass Book from Security.
- Ensure you have your two-way Radio for Communication and loud haler.
- Enforce a disciplined evacuation.
- Report to the Controller either that:
  - all personnel are present and correct;
  - some people are missing and, if possible where last seen.
- When the “All Clear” has been given by the Controller, inform personnel to swipe their ID Badge at the swipe system and return directly and in an orderly way to their work station.
- Ensure access to the factory is kept clear for emergency services.

5.7.5.3 Instructions for Fire Checkers

- When the initial alarm is activated, ensure that you have:
  - Two way radio for clear communication.
  - Torch,
  - QRAE Gas Meter,
  - Keys (Master / CCP Electrical Room / CCP 1&2 / 501)
- Follow instructions from the Controller / who will direct you towards the location of fire alarm.
- Proceed cautiously to the alarm zone. A search of the area should be carried out, if safe to do so, to determine whether:
  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.
  - The cause of the alarm is minor (a smoldering bin or minor fire) and can be easily dealt with within a short time frame by using a fire extinguisher, water hose, etc. again this information needs to be conveyed by radio to the Incident Controller so resources as required can be developed to assist.
  - The INERGEN fire suppression system has activated, local alarm and strobe is active, move away and observe form a safe distance ~ 200m
  - The alarm is serious or major and despite the activation of the Inergen system, smoke/fire is seen coming from the area, you will require the assistance of the external emergency services, this information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.
  - Only minor fires (low risk), shall be tackled with a fire extinguisher. If safe to do so, attempt to control or extinguish fire with appropriate extinguisher, using a back up support person to act as an observer and to provide emergency assistance if required. DO NOT ENTER THICK SMOKE OR CROSS-THROUGH BURNING AREA TO GET TO FIRE FIGHTING POSITION.
  - If the fire is not easily controllable and full evacuation alarm has not yet activated, break the nearest Break Glass Unit to sound the Full Evacuation Alarm.
  - Communicate your location by two way Radio to be accounted for by the Controller and evacuate immediately.
5.7.5.4 Instructions for First Aiders

Follow instructions as outlined in section 5.1 above.

5.7.6 ERT Response

General ERT Response – Gas Alarm on fire panel – natural gas alarm only (nitrogen alarms are not registered on fire alarm panel)

In the event of an alarm from the boiler area, microbiology laboratory or kitchen area, ERT proceeds immediately to the Security Office to receive further instruction from the Incident Controller. The assigned responsibilities of the ERT Incident Controller, Roll Call Marshalls, Fire Checkers and Security are outlined below.

In the event of an activation of a gas alarm on any of the detectors, the gas slam shut valve for the area is immediately activated. In addition the gas supply to the Main Kitchen is also cut off on operation of the sounders in the administration area. The gas supply to laboratories is cut-off in the event of a fire condition occurring in that principal zone.

The gas supply to the boiler house is cut off on operation of a gas detector over the burners - note that this system is independent of the fire alarm system.

Instructions for Incident Controller:

- Obtain any available information on emergency from security and fire panel and communicate by two-way Radio with Roll Call Marshall, Co-ordinator/Fire Checkers.
- Commence emergency response routine using Incident Controller Checklist as an aid.
- Send Fire Checkers (x2) to gas alarm location to investigate (Ensure Radios, Torches, QRAE Gas Meter, Keys (Master / 501) & await instructions.
- Assign Deputy Incident Controller to commence log of events as per Incident Controller Emergency Log.
- If flames visible or gas leak and persons missing in area, call the Emergency Services (Fire, ambulance or guards as required) @ 112 (This is Vistakon at the National Technology Park Plassey, we have an emergency ......... and require assistance from....). Advise ERT fire checkers to leave the area.
- If ERT QRAE detector alarming - advise fire checkers to evacuate and request external emergency assistance.
- If no alarm and safe to enter, fire checker to proceed with gas detector turned on and in constant radio contact with controller.
- If it is a False Alarm, silence the Alarm, advise the Roll Call Marshall Co-ordinator by Radio that the "All Clear" has been given and it is safe to return to the building.
- Assign First Aiders if required.
- Send ERT member (security personnel if available) to main entrance to stop all persons/vehicles entering site and log all vehicles leaving site if required.
- Take regular Roll Call of Fire Checkers – assign Deputy to check at 3 minute intervals, if not in communication.
IREHS-0004 (6) Emergency Response Plan

- Call Crisis Management Team Leader (General Manager) and request mobilisation of Crisis Management Team if required

- Co-ordinate Search & Rescue with the Emergency Services i.e. when fire brigade arrives. Direct Fire Chief to fire and inform him of any missing persons and any fire details - reports any missing persons and last known whereabouts and advise if there is any hazardous material in the area and provide copy of MSDS and maps of the area.

- The controller with support from the EHS Team is responsible for the overall incident report and investigation.

Instructions for Fire Checkers

- When the initial alarm is activated, ensure that you have your two way radio for clear communication., Torches, QRAE Gas Meter (ON), Keys (Master / 501) & await instructions

- Follow instructions from the Controller / who will direct you to the external doors to the area to investigate with QRAE gas meter turned on, report any evidence from the area – flames/smoke/noise etc.

- If ERT QRAE detector alarming - evacuate and request external emergency assistance.

- If no QRAE alarm, on confirmation with the controller that safe to proceed, proceed cautiously to the alarm zone. A search of the area should be carried out, if safe to do so, to determine whether:
  - The alarm is a false alarm and this should be immediately conveyed to the Incident Controller, who will cancel the alarm and have personnel returned to their work areas.

- The alarm is serious or major and will require the assistance of the first aid team or external emergency services. This information needs to be conveyed immediately to the Incident Controller who will call the emergency services and inform those in command.

- Communicate your location by two way radio to be accounted for by the Controller at least every 3 minutes.

- Await further instructions from the controller.

In the event of a full plant evacuation, Roll Call Marshall proceeds as per section 5.3.5.2.

Instructions for First Aiders

Follow instructions as outlined in section 5.1 above.
### Incident Controller Emergency Response Log

**Date:**

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<th>Time</th>
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</tbody>
</table>

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Emergency Response  Natural Gas Alarm - November 2010

**Boiler Room Gas Alarm**
Once gas alarm located over a boiler activates, main gas supply slams shut. 
*This system is independent of the fire alarm system*

**Microbiology Laboratory Gas Alarm**
*Main Fire Panel Alarm*
Once gas alarm activates, main gas supply slams shut. 
*The gas supply to laboratories is also cut-off in the event of a fire condition occurring in that principal zone.*

**Kitchen Gas Alarm**
*Main Fire Panel Alarm*
Once gas alarm activates, main gas supply slams shut. 
*The gas supply to the Main Kitchen is also cut off on operation of the sounders in the administration area.*

---

**Fire Checkers** take Radios, Torches, QRAE Gas Meter (ON), Keys (Master / 501)

Incident Controller gather information, send Fire Checkers, deploy Fire Marshalls *(if full evac)*

Fire Checkers proceed to outside door - if flames visible or person missing request call fire brigade, evacuate to safe distance, prepare for fire brigade arrival

No smoke or flames proceed slowly with gas detector on and radio communication with controller. 
*RAE gas detector will alarm at least 10% of the Lower Explosion Limit for Natural Gas*

If Gas meter alarms evacuate the ERT from the area and request assistance from Fire Brigade.

ERT leader to deploy resources to shut down gas supply to the area as per external locations on 3D map if safe to do so.

ERT Leader request assistance from Facilities on-call

If false alarm stand down ERT and advise facilities of incident

If person injured request normal ERT assistance

**Note:** The only gas alarm on the Fire panel is for a natural gas alarm (methane) either in boiler area, canteen of micro lab
## Incident Controller Checklist – Gas Incident

### 1. Attendance in Incident Control Room

<table>
<thead>
<tr>
<th>Person</th>
<th>Present</th>
<th>Assigned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Checker Phase 1/2/3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Checker Phase 4/5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aider 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aider 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill Responder 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill Responder 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll Call Marshall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. Notification

- **Dresser Rand 24 contact number:**
  
  0047870250744

- Facilities on-call technician
- Fire Brigade
- Ambulance
- General Manager*: Incident, be on standby/report to site
- Deputy – Facilities Director: Incident, be on standby/report to site

### 4. Assignment of Responsibilities

<table>
<thead>
<tr>
<th>Issue</th>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deputy</td>
<td></td>
<td>Log events. Log sheet Blanks attached</td>
</tr>
<tr>
<td>Swipe System</td>
<td></td>
<td>Check evacuation, report missing persons to Incident Room</td>
</tr>
<tr>
<td>Fire Checker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photographic record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radios</td>
<td></td>
<td>Bring to Incident Room</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td>Guard site entrance, no persons to enter, log all leaving</td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas vapour evacuate to 200m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll call fire checkers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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# 6.0 Directory of Emergency Contacts

## EXTERNAL

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>PHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. D. Madden (Occ. Health Physician)</td>
<td>Limerick City</td>
<td>061-444888</td>
</tr>
<tr>
<td>Dr. Magner (GP Off Site Service)</td>
<td>Castletroy, Limerick</td>
<td>061-331917</td>
</tr>
<tr>
<td>Dr. B. McCurtin (GP On Site Service)</td>
<td>Castleconnell, Limerick</td>
<td>061-377696/087-2530182</td>
</tr>
<tr>
<td>Hospitals, (St John’s)</td>
<td>Limerick City</td>
<td>061-462222/415822</td>
</tr>
<tr>
<td>University Hospital Limerick</td>
<td>Dooradoyle Raheen, Limerick</td>
<td>061-301111</td>
</tr>
<tr>
<td>Ambulance</td>
<td>Limerick City</td>
<td>122</td>
</tr>
<tr>
<td>Fire Station</td>
<td>Limerick City</td>
<td>112</td>
</tr>
<tr>
<td>Gardai</td>
<td>Henry Street</td>
<td>112</td>
</tr>
<tr>
<td>Limerick Co. Council</td>
<td>Limerick City</td>
<td>061-496000/318477</td>
</tr>
<tr>
<td>Shannon Development</td>
<td>Shannon, Co. Clare.</td>
<td>061-361555</td>
</tr>
<tr>
<td>Clean Habit</td>
<td>Shannon, Co. Clare.</td>
<td>061-361461/086-8304755</td>
</tr>
<tr>
<td>Health &amp; Safety Authority (H.S.A)</td>
<td>10 Hogan Place, Dublin 2</td>
<td>01-6147000</td>
</tr>
<tr>
<td>William Power – Waste Management</td>
<td>Vistakon Site Office</td>
<td>086-3804661</td>
</tr>
<tr>
<td>Fr. Campion</td>
<td>Milford, Limerick.</td>
<td>061-330268</td>
</tr>
<tr>
<td>Dean M. Sirr or Jane Galbraith</td>
<td>Limerick</td>
<td>087-254112/085-1450804</td>
</tr>
<tr>
<td>Colette Horgan, HSE Manager (ENVA)</td>
<td>Shannon, Co. Clare.</td>
<td>086 – 6094128</td>
</tr>
<tr>
<td>Ian Lynch, Plant Supervisor (ENVA)</td>
<td>Shannon, Co. Clare.</td>
<td>086 - 1702342</td>
</tr>
<tr>
<td>ENVA (Spill Clean Up)</td>
<td>Shannon, Co. Clare.</td>
<td>061-707400/1850-504-504</td>
</tr>
<tr>
<td>O’Brien Communications</td>
<td>Limerick City.</td>
<td>061-457999/086-6019214</td>
</tr>
<tr>
<td>EPA</td>
<td>Wexford</td>
<td>021-4875540</td>
</tr>
<tr>
<td>Castletroy Cabs</td>
<td>Limerick City</td>
<td>061-332266 / 333366 / 0868252019 /</td>
</tr>
<tr>
<td>ACE Energy</td>
<td>Peter Normington</td>
<td>086-1729739</td>
</tr>
</tbody>
</table>

## J&J CONTACTS FOR 72 HOUR REPORTING

<table>
<thead>
<tr>
<th>NAME</th>
<th>JOB TITLE</th>
<th>PHONE &amp; NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johan Geerinck</td>
<td>Senior Director EHS S EMEA</td>
<td>00 32 14606349</td>
</tr>
<tr>
<td>Vivian Pai</td>
<td>Dir. WW EHS Perf. Assurance</td>
<td>001-732-524-3096</td>
</tr>
</tbody>
</table>

## VISTAKON IRELAND – INTERNAL EMERGENCY CONTACTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>EXT</th>
<th>JOB TITLE</th>
<th>HOME PHONE OR MOBILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry O’Sullivan</td>
<td>2155</td>
<td>Plant Manager</td>
<td>086-2449438/086-6030168</td>
</tr>
<tr>
<td>Michael Boyle</td>
<td>2486</td>
<td>MD&amp;D Facilities Regional Lead</td>
<td>Mobile :0868532453</td>
</tr>
<tr>
<td>John Higgins</td>
<td>2169</td>
<td>Quality Director</td>
<td>087-9879087</td>
</tr>
<tr>
<td>Frank Curran</td>
<td>2486</td>
<td>Facilities Manager</td>
<td>087-6375846</td>
</tr>
<tr>
<td>Michael Toohey</td>
<td>2660</td>
<td>Facilities Engineer</td>
<td>Mobile : 087 9415566</td>
</tr>
<tr>
<td>John Fitzgibbon</td>
<td>2196</td>
<td>Operations Director</td>
<td>087-6679776</td>
</tr>
<tr>
<td>Noelette Ensko</td>
<td>2105</td>
<td>HR Manager</td>
<td>087-7389534/065-6893101</td>
</tr>
<tr>
<td>Kieran McSherry</td>
<td>2432</td>
<td>Engineering Manager</td>
<td>085-7333540</td>
</tr>
<tr>
<td>Gerard Madden</td>
<td>2130</td>
<td>IM Manager</td>
<td>087-9366659</td>
</tr>
<tr>
<td>James Carey</td>
<td>2269</td>
<td>Sourcing Manager</td>
<td>086-6088158</td>
</tr>
<tr>
<td>Gerry Greaney</td>
<td>2222</td>
<td>Finance Director</td>
<td>061-331949/087-2325749</td>
</tr>
<tr>
<td>Margaret Stokes</td>
<td>2141</td>
<td>EHS Director</td>
<td>087-2663652/061 338036</td>
</tr>
<tr>
<td>Coleman Dillon</td>
<td>2117</td>
<td>EHS Specialist</td>
<td>063-20018/086-8233106</td>
</tr>
<tr>
<td>Anne Irwin</td>
<td>2134</td>
<td>EHS Co-ordinator</td>
<td>087-1221823/086-3306036</td>
</tr>
<tr>
<td>Mary Dwane</td>
<td>2592</td>
<td>EHS Site Lead</td>
<td>061232152/086 6059549</td>
</tr>
<tr>
<td>Darragh Devane/Carol Ann Murray</td>
<td>2238/2228</td>
<td>Occupational Health Nurses</td>
<td>085-7464304/ 086 1693966</td>
</tr>
</tbody>
</table>

INTERNAL & EXTERNAL EMERGENCY CONTACT NUMBER EXT 1234/2209
AFTER HOURS CONTACT NUMBER – SECURITY OR OPERATIONS SUPPORT EXT. 2209
6.1 Emergency Response Procedure

1.0 PURPOSE

1.1 To establish a procedure for the actions to be taken when there is a suspected/actual threat involving a bio-hazardous material.

2.0 SCOPE

2.1 This standard operating procedure is applicable to all Johnson & Johnson companies.

3.0 REFERENCES


3.2 CDC, Notice to Readers: Interim Recommendations for Protecting Workers from Exposure to Bacillus anthracis in Work Sites in which Mail is Handled or Processed, MMWR, Vol. 50, No. 43, November 2, 2001.


4.0 DEFINITIONS

4.1 Bio-hazardous Material—Materials containing biological agents that are potential sources of transmission of such agents to healthy (i.e., non-immunocompromised) humans, animals, or plants (e.g., human blood) and/or that are capable of producing an unfavourable environmental impact outside of the facility.

4.2 Biological Incident—A suspected/actual threat involving a bio-hazardous material.

4.3 Biological Incident Response Coordinator—A management representative responsible for making the decision on the credibility and seriousness of the threat (typically at the plant manager/director level). At Vistakon, this is the Crisis Management Team Leader (General Manager).

4.4 Incident Responders/Incident Response Team—A team of individuals designated by site management who are trained and responsible for responding to biological incidents (e.g., HAZMAT Team, Fire Brigade). At Vistakon, this is the Emergency Response Team.

5.0 RESPONSIBILITIES

5.1 Senior Management is responsible for the development of a biological incident response plan and procedures for all sites, to include all shifts and times. Senior Management is also responsible for naming a “Biological Incident Response Coordinator” (BIRC), providing training for the BIRC, naming an Incident Response Team, and communicating the incident response plan to employees.

5.2 The BIRC is responsible for responding to all reports of suspected/actual threats from a bio-hazardous material, collecting information, internal and external notification and communications, and acts as a liaison with external incident responders. The BIRC in conjunction with site management will make the final decision on the seriousness of the threat and appropriate follow-up actions including contacting local law enforcement authorities.

5.3 The Incident Response Team is responsible for the initial securing of the affected area, decontamination of affected individuals, identifying all personnel who were in the immediate area, and, if appropriate, collection of environmental samples for testing.

5.4 Health & Wellness and/or designated medical personnel are responsible for counselling the individual(s) and medical treatment/surveillance, if deemed necessary.

5.5 Safety & Industrial Hygiene is responsible for training incident responders and oversight of environmental sample collection and analysis, if appropriate.

5.6 Security is responsible for maintaining a current list of emergency contacts and contacting the designated individual(s) per the site’s response plan.

5.7 Johnson & Johnson employees are responsible for attending training provided to them, and for following the steps in Section 6.0.

6.0 PROCEDURES
6.1 Reporting of Suspicious Item/Materials

6.1.1 A suspicious item or material is discovered. Refer to Attachment 7.2 for information on identifying suspicious letters or parcels.

6.1.2 If handled, the item should be put down, or refrain from touching the material. Don’t move, handle, shake or sniff. Do not throw away or show to others.

6.1.3 Notify others in the room or immediate area, leave and secure the area. Identify those in the immediate area.

6.1.4 If direct contact was made with the suspicious item or material, the individual(s) shall go to the nearest washroom, immediately wash hands and other potentially exposed body parts with water. Soap may be used to wash skin. Use water only to rinse eyes. **Do not use bleach or other disinfectants on any body parts.**

6.1.5 Follow the site specific incident reporting procedures.

6.1.6 Site specific incident reporting procedures should include contacting the BIRC and other designated members of the site incident response team.

6.2 Incident Investigation

6.2.1 The BIRC, in conjunction with input from the incident response team will assess the nature and credibility of the incident.

6.2.2 The incident response team should conduct an assessment following prescribed site procedures. (See Attachment 7.4)

6.2.2.1 If the BIRC, in conjunction with site senior management and Johnson & Johnson WW Security determine that a Higher Credibility Event has occurred, local law enforcement should be notified according to site specific response plan. In addition, the appropriate Johnson & Johnson Communications person shall be notified. Coordinate all future actions as directed by the local authorities.

6.2.2.2 If the incident is determined to be a Lower Credibility Event, follow site specific reporting procedures, and initiate site specific incident response procedures. **Do not involve local law enforcement.** Communicate information to employees and document according to site specific procedures.

6.2.3 Medical Counselling & Surveillance

6.2.4 The affected individuals should be referred to Health & Wellness or the designated Medical contact for counselling and treatment as deemed necessary.

6.2.5 Environmental Sampling and Analysis

6.2.6 Environmental sampling and analysis for biological agents shall be performed only at the direction of local authorities. Despite claims to the contrary, no alternative methods for sampling and analysis may be used.

6.2.7 Cleaning/Decontamination

6.2.8 If the incident can be identified or deemed to be a Lower Credibility Event, clean the area following site specific incident response procedures.

6.2.9 If the incident is deemed to be a Higher Credibility Event, decontamination must be performed under the direction of the local authorities.

6.3 Documentation & Reports

6.3.1 Document all response actions, decisions and results.

6.4 Communications

6.4.1 Communicate final results to Health & Wellness/Medical, Company Management, Johnson & Johnson Corporate Communications (or local communications officer), Worldwide Security and others according to site specific incident response procedures.
6.2 Identifying Suspicious Letters & Packages

IDENTIFYING SUSPICIOUS LETTERS OR PARCELS

If it’s **unlike** any letter or parcel you receive and...

- It has a powdery substance, oily stains, an odor or makes noise
- It’s handwritten or poorly typed and has no return address or bears one that you cannot confirm is legitimate
- It’s marked with restrictive endorsements such as “personal”, “confidential”, “do not x-ray” or marked “special delivery”
- It has excessive postage (usually postage stamps)
- It has misspelling of common words
- It has incorrect titles or titles but no names
- It’s lopsided or lumpy in appearance
- It has excessive security material such as masking tape, string etc.
- It shows a city or state in the postmark that differs from the return address
- It has protruding wires or aluminum foil

What to do with a suspicious letter or parcel **Stay Calm**

- Don’t move, handle, shake or sniff it
- Don’t throw it away or show it to others
- Alert others to the suspicious item, leave the immediate area, close any doors
- Take actions to prevent others from entering the area
- Note the persons who were in its vicinity
- Wash your hands thoroughly at the nearest sink or washroom
- If at work, notify your supervisor and call security/emergency response at _______
- If at home, contact local law enforcement authorities

Page 68 of 72
Credibility Assessments for Report of Suspect Powders or Substances

The following are key questions to be asked to help assess the credibility of a bio-incident involving a powder or substance:

A. Is there a distinct threatening message associated with the powder or substance? A distinct threatening message associated with a suspect powder or substance is a more credible event. A powder or substance that is reported without an associated message is a less credible event.

B. Is a suspicious letter or parcel associated with the powder or substance? A suspicious letter or parcel associated with the suspect powder or substance is a more credible event. A powder or substance that is not associated with a suspicious letter or package is a less credible event.

C. Did the powder or substance arrive with something else from an expected source, or from a sender that is easily traced? A suspect powder or substance that arrived with something from an expected source is a less credible event.

Example: White powder found on a pallet shipped from a known source, and the packaging company verified that desiccant is typically used when preparing shipments, and the description of the suspect powder matches the description of the desiccant.

D. Is there a logical explanation for the source of the powder or substance? A logical explanation for the source of the powder or substance is a less credible event.

Example: A previously used plastic food store bag was obtained at the company store, and the bag contained a white powder and smelled like sour milk. Logical explanation: powdered milk leaked into the bag before it was donated to the company store.

Example: White powder is found on the floor of a bathroom or locker room. Logical explanation: baby powder was used by a previous room occupant.

Example: White powder is found near an area where coffee is served. Logical explanation: the white powder is likely to be spilled sugar, sweetener or creamer.

E. Is there a logical explanation for the amount of the powder or substance? A logical explanation for the amount of powder or substance is a less credible event.

Example: A paper envelope is opened and a small amount of white dust is observed, and the amount is consistent with other paper dust observed when opening other paper envelopes.

F. Has anyone else in the area noticed the powder or substance, and know its source? Another person who can provide information about the powder or substance makes it a less credible event.
6.3 Location of Spill Kits

Each spill kit contains absorbent material suitable for containing Chemical spills. The maximum quantity of chemical that could be spilled has been identified for each area. The spill response supplies required for each response level are listed below:

**Level 1 (Total Sorbancy 25L)**
- 2X 1 pair protective goggles.
- 2X 1 pair Nitrile gloves.
- 2X splash-resistant overalls.
- 2X 8cm x 1.2m miniboom.
- 15X 48cm x 43cm Pads.
- 1X Disposal Bag.

**Level 2 (Total Sorbency 25L plus Mercury spill kit)**
- 2X 1 pair protective goggles.
- 2X 1 pair Nitrile gloves.
- 2X splash-resistant overalls.
- 2X 8cm x 1.2m miniboom.
- 15X 48cm x 43cm Pads.
- 1X Disposal Bag.
- 1X Mercury Spill kit

**Level 3 (Total Sorbency 50L)**
- 2X 1 pair protective goggles.
- 2X 1 pair Nitrile gloves.
- 2X splash-resistant overalls.
- 2X 8cm x 1.2m miniboom.
- 45X 48cm x 43cm Pads.
- 1X Disposal Bag.

**Level 4 (Total Sorbency 250L)**
- 2x 1 pair protective goggles.
- 2 x 1 pair nitrile gloves.
- 2 x splash-resistant overalls.
- 4 x 8cm x 3m minibooms.
- 10 x 8cm x 1.2m miniboom.
- 4 x Pillows. 120 x 43cm x 48cm Pads.
- 1 x Plug and Dyke Putty.
- 15 x Disposal Bags.
- 2 X Roll of Cording Tape

**Level 5 (Total Sorbency 230L)**
- 2 x 1 Pair Protective Goggles
- 2 x 1 Pair Nitrile Gloves
- 2 X 1 splash-resistant overalls
- 2 x pairs, Wellington boots.
- 4 X 8 CM X 3M Minibooms
- 10 x 8CM X 1.2M Minibooms
- 4 Pillows
- 120 X 43CM X 48CM Pads
- 1 X Plug and Dyke Putty
- 15 X Disposal Bags
- 2 X Roll of Cording Tape
- 2 X Spill Hazard Sign
- 6 x 200ml Diphoterine Spray
IREHS-0004 (6) Emergency Response Plan

Level 6 (Total Sorbency 1100L)

- 400 x Double weight Chemical Mats
- 750 x Encapsulating/Neutralising Mats
- 10X 8 CM X 3M Chemical Minibooms
- 20 x 8CM X 1.2M Minibooms
- 2 x Re-usable drain blockers
- 1 x Chemical classifier kit
- 1 x pH indicator kit
- 1 x Tube of Epoxy Putty
- 1 x Drainblock inflatable Valve Kit
- 4 x Protective Goggles
- 4x 1 Pair Chemical Gloves
- 4 X Chemical -resistant overalls
- 4 x pairs, Wellington boots
- 50 X Disposal Bags
- 4 X Roll of Cordonning Tape

Each spill kit location is identified with a spill kit number and response level.

Each spill kit will be checked on a monthly basis by the Spill Kit Replenishing Contractor to ensure that the contents of each Spill Kit are complete. The Spill Kit Replenishing Contractor records the following information on the Label which is attached to each Spill Kit.

<table>
<thead>
<tr>
<th>Date Refilled</th>
<th>Date Inspected</th>
<th>Inspected by</th>
</tr>
</thead>
</table>

Any material used to contain a chemical spill must be placed into the plastic bags supplied and labelled. The EHS Department must then be informed of the type of spill and location of spill kit used so that this material can be disposed of as hazardous waste.
Table 1. List of Spill Kits

<table>
<thead>
<tr>
<th>Spill-Kit #</th>
<th>Area</th>
<th>Response Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Phase 1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Phase 2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Phase 3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Phase 4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Phase 5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>3GT</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>3GT Monomer room.</td>
<td>Absorbent pads and disposal bags only</td>
</tr>
<tr>
<td>8</td>
<td>Tool room</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Phase 1 Monomer room</td>
<td>Absorbent pads and disposal bags only</td>
</tr>
<tr>
<td>10</td>
<td>Colours Lab</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Phase 4 Monomer room.</td>
<td>Absorbent pads and disposal bags only</td>
</tr>
<tr>
<td>12</td>
<td>Green Star yard</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>GreenStar yard</td>
<td>5 (plus 30 disposal bags - 750L total sorbancy)</td>
</tr>
<tr>
<td>14</td>
<td>Water Room</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>Boiler Room</td>
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</tr>
<tr>
<td>16</td>
<td>Utilities Room</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>Chemistry Lab</td>
<td>2</td>
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<tr>
<td>18</td>
<td>Microbiology Lab</td>
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</tr>
<tr>
<td>19</td>
<td>Warehouse – Chem Store</td>
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</tr>
<tr>
<td>20</td>
<td>IPA Tank Farm</td>
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</tr>
<tr>
<td>21</td>
<td>Pump House</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
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<td>1</td>
</tr>
<tr>
<td>23</td>
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<td>4</td>
</tr>
<tr>
<td>Mezzanine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Mezz – West – IPA Day Tank Room</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>Mezz – East – L15</td>
<td>5</td>
</tr>
<tr>
<td>26</td>
<td>Mezz – West – Plant Room P5</td>
<td>4</td>
</tr>
<tr>
<td>CCP</td>
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<tr>
<td>27</td>
<td>CCP Cooling Towers</td>
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<td>Waste Water Treatment Plant</td>
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<tr>
<td>PG Temporary Storage Area</td>
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</tr>
<tr>
<td>29</td>
<td>PG Temporary Storage Area</td>
<td>4 1000L total sorbancy</td>
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