**Gastech Australia Pty Ltd**

**Health Safety and Environmental Procedure**

**Incident Notification Investigation and Reporting**

**Procedure 4.5.3**

***“ Committed to HSE”***

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| --- | --- | --- | --- |
| **Rev Number** | **Summary of Revision** | **Signed (Director)** | **Date** |
| **Rev 0** | **New Procedure** |  |  |
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# 1. PURPOSE

The purpose of this procedure is to ensure that incidents are reported and investigated in a timely manner, and to ensure that unsafe acts, unsafe conditions, root (real) causes and required risk mitigation measures are identified.

Compliance with this procedure plays a key role in reducing the occurrence of incidents at Gastech.

# 2. SCOPE AND APPLICATION

This Procedure is applicable at all Gastech projects/Tasks and all Gastech employees. In the event of actual or near miss incidents, the process detailed in this procedure must be applied. The scope of this procedure includes:

* + initial incident scene response and preservation
  + initial incident notification
  + incident classification
  + establishment of an appropriate Incident Investigation Team
  + incident investigation and analysis
  + final reporting and communication of incidents internally and externally
  + recording of lessons learned from incident investigations

This Procedure is supported by formal training in incident notification, investigation and reporting techniques.

**When carrying out work at client premises, this Procedure must be followed in conjunction with client procedures.**

# 3. DETAIL

## 3.1 Overview

The incident investigation process at Gastech relies upon thorough investigation of all incidents by personnel who are trained and competent in investigation techniques.

This section provides the step by step process for incident notification, investigation and reporting. Effective incident investigation can be a complex process and further detail is provided in training material.

The overall process for incident notification, investigation and reporting is depicted in Figure 1.

3.2 Initial Response

The immediate priority following any incident is to control incident related hazards and to minimise harm to personnel and the environment.

The following key steps relate to initial response:

1. Do not take any intervention actions until it is safe to do so
2. Provide for medical treatment for any injured personnel
3. If relevant, request assistance as per the Gastech Emergency Response Plan or the relevant client Emergency Response Plan
4. If safe to do so, secure the incident scene to prevent further impacts and to preserve evidence
5. Isolate the incident area using danger bunting or by erecting solid barricades for high risk areas
6. Isolate equipment where necessary and if authorised to do so
7. Erect signs stating “Incident Scene – No Unauthorised Entry”

## 3.3 Incident Classifications

Incident classifications used at Gas Tech are based on severity of injury, damage to equipment or damage to the environment. Classifications are as follows:

***Serious***

Fatal or permanent disability

>$200,000 damage

***Moderate***

Disabling injury/Medical Treatment

$20,000 – $200,000 damage

***Minor***

First Aid Treatment

<$20,000 damage

## 3.4 Internal Incident Notification

Notification of incidents at Gastech is first provided verbally and then via completion of an  [Incident Notification Form(F/HSE/07/1).](#_APPENDIX_1:_R&D)

All incidents must be reported immediately. The process for initial notification of incidents is as follows:

1. The incident must first be notified to the relevant Supervisor (at client premises, the Gastech Supervisor and the client Sponsor/Supervisor must be notified)
2. The Gastech Supervisor and/or client Supervisor must ensure that, if needed, emergency response is mobilised. The Gastech Supervisor and/or client Supervisor must also ensure that the incident scene is isolated and made safe
3. As soon as practicable, the Gastech Supervisor and person involved in the incident must determine the incident classification and verbally report incidents to the Gas Tech Director
4. The Gastech Director must then confirm the classification
5. The Gastech Supervisor must then formally report all classifications of incident using the  *Incident Notification Form(F/HSE07/1)* by sending the completed form to the Gas Tech Director via email or fax
6. The Gastech Director must ensure that an HSE Alert is issued for all serious and moderate classifications and may decide to issue alerts for minor classifications. The HSE Alert is issued in compliance with the *Gastech HSE Procedure for HSE Communication and Consultation (PR/HSE/06)*

## 3.5 External Incident Notification

There are legislative requirements related to notification of incidents to external regulators. At client premises, all notifiable incidents must be communicated to external regulators by the Client Sponsor or Supervisor.

Incidents on Gastech premises must be notified to external regulators by the Gastech Director.

## 3.6 Incident Investigation Team

Table 1 is a guide to assist in selection of the Incident Investigation Team.

**Table 1: Guidance for Investigation Team Selection**

| **Incident Category** | **Team Composition** |
| --- | --- |
| Serious | * Gastech Director * Gastech Supervisor * External Specialist |
| Moderate | * Gastech Supervisor * Selected employees/contactors |
| Minor | * Gastech Supervisor * Selected employees/contractors |

## 3.7 Incident Investigation

This section provides guidance on effective incident investigation. The level of detail to be assessed will be dependent on the circumstances of the incident and classification.

### 3.7.1 Evidence and Data Collection

Evidence and data collection involves collection of physical data, incident data, witness statements, and records of interview. Investigation Team Leaders must ensure that a clear plan is in place for data collection. This plan must include, **dependent on the type of incident and classification**:

* a list of people to be interviewed, interview schedule and assigned interviewers
* a prepared list of (open ended) interview questions
* requirements for documentation, eg:
  + - Process and Instrument Diagrams
    - Process Flow Diagrams
    - Work Instructions and Operating Instructions
    - Job Safety Analyses
    - External regulations
    - Minutes of meetings
    - Handover notes
    - Monitoring and results of analyses
    - Calculations
    - Photographs
    - Incident scene sketches
* physical evidence, eg broken components

This data will assist with incident analysis and identification of root causes.

### 3.7.2 Timeline

Once sufficient evidence and data has been collected, a timeline of events before, during and after the incident must be developed. This timeline must record:

* + status immediately before the incident
  + any events before the incident that may have contributed or provide evidence
  + probable time of each event
  + intervention times of specific personnel
  + responses and reactions of employees and responders
  + status of protective systems and performance

### 3.7.3 Root Cause Analysis

A Root Cause Analysis is required to determine root causes and contributing factors. In general, this process involves analysing the identified physical and human causes so that system failures (root causes) can be identified.

This is a process which involves asking the question “why” until a primary system failure is identified, eg poor procedures, lack of training etc.

*Note: Formal Root Causes Analysis is not mandatory for minor incidents and may not be required for lower level moderate incidents. However, general Why-Tree philosophy should be used to identify root causes.*

## 3.8 Reporting

The Investigation Team Leader is responsible for producing the final Incident Investigation Report on the  [Incident Report Form (F/HSE/07/2)](#_APPENDIX_2:_R&D) and supplying the report to the Director.

All recommendations in reports must be approved by the Gastech Director before they are implemented.

The Gastech Director has the responsibility to discuss and agree recommendations with the client if they are relevant to client operations.

## 3.9 Communication

Once incidents have been investigated, the finding must be communicated to the Gastech workforce. This is undertaken through review at Gastech HSE Committee Meetings, Tool Box Meetings and via notices/emails. Communications must summarise:

* the incident
* determined unsafe acts
* determined unsafe condition
* determined root causes
* corrective actions and close out dates

Lessons learned from incidents must be entered into the HSE Database by the Director.

# 4. TRAINING AND COMPETENCY REQUIREMENTS

All employees who are liable to be involved in incident investigation and reporting must attend a formal training session on incident investigation and reporting.

# 5. RESPONSIBILITIES

## 5.1 Gastech Director

The Gastech Director must:

* promote use and ensure compliance with this procedure
* monitor compliance with this procedure
* formally audit compliance with this Procedure on a yearly basis
* form incident investigation teams and participate in investigations for serious incidents
* notify regulatory agencies of incidents on Gastech premises as required
* provide assistance in client investigations as required
* confirm incident classifications provided by the Gastech Supervisor
* approve or reject incident recommendations as required
* publish HSE Alerts for serious and moderate incidents as required
* enter lessons learned into the HSE Data Base

## 5.2 Gastech Supervisors

The Gastech Supervisors must:

* promote use of this Procedure
* monitor compliance with this Procedure
* make safe and secure incident scenes
* report all incidents to the client Sponsor/Supervisor
* form incident investigation teams and participate in incident investigations for serious and moderate incidents
* ensure that investigations are carried out in compliance with this Procedure and established investigation protocols
* report all incidents to the Gastech Director
* assist in client incident investigations as required

## 5.3 All Employees

All employees must:

* report incidents (including near misses) as required
* make safe and secure incident scenes
* participate in incident investigations as required

# 6. RELATED DOCUMENTS

|  |  |
| --- | --- |
| **Document Title** | **Document Location** |
| **Related Procedures** | |
| Gastech Procedure for HSE Communication and Consultation | PR/HSE/06 |
| **Related External Documentation** | |
| NA |  |

# 7. DEFINITIONS AND ABBREVIATIONS

| **Term or Acronym** | **Definition** |
| --- | --- |
| **Environmental**  **Incident** | All unintentional releases from primary and secondary containment of any environmental contaminant. |
| **Fire Incident** | All unplanned fires involving destructive and uncontrolled burning. |
| **First Aid Injury Incident (FAI)** | Any immediate treatment or any subsequent observation of cuts, burns, splinters etc which do not necessarily require medical care from a practitioner. |
| **Incident** | Any unplanned event that results in, or has the potential to result in, personal injury, ill health or harm, property or equipment damage, environmental damage, disruption to operations or **any near miss occurrence**. |
| **Lost Time Injury Incident (LTI)** | An injury or occupational illness that results in a fatality, permanent disability or time lost of one complete shift or day or more, as defined on a medical certificate. |
| **Lost Time Injury Frequency Rate (LTIFR)** | The number of Lost Time Injuries/Illnesses per million total hours worked by all employees and contractors. |
| **Restricted Work Injury (RWI)** | An injury which prevents normal work duties being undertaken without lost time. |
| **Medical Treatment Injury Incident (MTI)** | Any work-related loss of consciousness, injury or disease requiring more than minor First Aid Treatment by a nurse or paramedic but not resulting in lost time or alternate/restricted duties. |
| **Near Miss (Hit) Incident** | An event where there is no loss or consequential damage but when it is reasonable to assume, under different circumstances, loss or damage may have occurred. |
| **Root Cause** | Underlying causes of incidents, identified by investigation, which are found to be as a result of requirements for management system improvements. |
| **Total Recordable Injuries (TRI)** | Refers to the total number of LTIs, MTIs and RWIs only. |
| **Unsafe Act** | An act carried out by an individual or individuals which, through intentional or unintentional acts, results in an incident. |
| **Unsafe Condition** | A defective condition related to equipment or environment which results in an incident. |
| **Work-Related** | An event or incident is considered work related if R&D has the Prevailing Safety Influence over the activity. |