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## CS ENERGY PROCEDURE

### LEARNING FROM INCIDENTS

#### CS-IM-01

Responsible Officer: Head of Health, Safety and Environment  
 Responsible Manager: Head of Health, Safety and Environment  
 Responsible Executive: Executive General Manager Plant Operations

#### DOCUMENT HISTORY

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## 1 PURPOSE

This procedure details the processes required to effectively report, notify, investigate and learn from incidents. The purpose of this procedure is to ensure that incidents are met with an immediate and appropriate response and where required notified, reported and investigated effectively.

This procedure gives details of the steps required to effectively manage incidents.

## 2 SCOPE

This procedure applies throughout CS Energy, all its sites and activities under CS Energy's control. It applies to all CS Energy employees and contractors, including visitors to CS Energy workplaces. This procedure applies to all Health, Safety, Environmental, Operational, Security and Process Safety incidents.

## 3 INCIDENT TYPES

CS Energy has five different incident types. Refer to Attachment 1 – Incident Category Matrix for further information.

- Health and Safety;
- Environment;
- Operations;
- Security;
- ICT; and
- Process Safety.

## 4 RESPONSIBILITIES AND ACCOUNTABILITIES

Roles and accountabilities of each step in the incident management process are outlined in Attachment 2 – Incident Management Process.

## 5 ACTIONS

### 5.1 All Employees and Contractors are required to report all incidents and injuries

Personnel who observe or are involved in an incident shall report details of the incident immediately to their manager.

### 5.2 Deliver immediate post incident response

To ensure that incidents are responded to promptly, any damaging impact is contained, and an investigation can be subsequently conducted, the response from the Supervisor and other site personnel shall be immediate and effective and ensure preservation of the scene / area.

Immediately following an incident at CS Energy, the worker and/or responsible supervisor shall:

- take any action necessary to prevent further harm e.g. isolating plant, turning ignition sources off, minimising chemical spills, etc;
- initiate emergency response, if required, in accordance with the site Emergency Response Plan;
- secure the incident scene; and
- notify the required roles as per Section 5.6.1 - Internal Notification.

The worker(s) and supervisor shall ensure the incident scene is preserved. The incident scene can be released when authorised by the Health & Safety team and/or any relevant regulatory agency (i.e. WHSQ).

Where the incident scene relates to a notifiable incident to Workplace Health and Safety (WHSQ), the scene is under the control of WHSQ or the Electrical Safety Office. There are penalties where incident scenes are disturbed without permission of an inspector or a police officer.

### **5.2.1 Respond to injury**

The supervisor, in consultation with the site Health and Safety team and Emergency Response Team (ERT), is responsible for ensuring:

- that all work-related injuries or illnesses are promptly assessed by a qualified First Aider in accordance with the site Emergency Response Plan (ERP);
- arrangements are made to transport injured workers to a certified medical practitioner or hospital depending on the assessment, where applicable;
- that the treating doctor or hospital receives a letter setting out the availability of CS Energy's Rehabilitation and Return to Work procedures and suitable duties programs; and
- arrangements are in place to inform next of kin and family as required.

### **5.2.2 Consider / Establish Legal Professional Privilege**

Legal Professional Privilege (Privilege) attaches to certain confidential, oral and written communications between CS Energy and its legal advisers (including In House Legal) conducted for the dominant purpose of providing legal advice on an incident or preparing for anticipated legal proceedings arising from an incident. The privilege can attach to investigations and reports commissioned for those purposes.

Privilege supports CS Energy's comprehensive consideration and legal / operational response to an incident, while protecting aspects of that analysis and response from compulsory disclosure. However, Privilege will be lost where confidentiality is not maintained, or privileged information is voluntarily disclosed.

Privilege does not ordinarily attach to investigations and incident reports prepared in compliance with a statutory reporting obligation. Accordingly, care should be taken when complying with statutory reporting obligations not to waive CS Energy's rights by disclosing information that is properly protected by Privilege.

Where an incident could give rise to a potential legal exposure for CS Energy under either statute or common law, the Head of Health and Safety/ Environment/ Operations should immediately contact In House Legal to determine whether Privilege may apply to aspects of the incident investigation and response. A legal exposure could arise from a range of incidents, including:

- Incidents involving single or multiple fatalities, or significant injuries;
- Breach of material compliance obligations;
- Reportable incidents (to external authorities); and
- Incidents where the community is or may be affected.

Where legal advice is required, or legal proceedings are anticipated in connection with an incident, consideration should be given to the structure and scope of investigations and reports - to maintain appropriate segmentation of Privileged and non-privileged material. This could include the preparation of separate factual reports, and analysis and recommendation reports.

If an incident is to be investigated under Privilege, incident information should not be added to Insight without In House Legal guidance or approval.

Where Privilege applies, internal and external communications should be restricted and clearly marked to preserve confidentiality, and not circulated without approval from In House Legal.

The potential application of Privilege should be considered as an investigation progresses.

### 5.3 Undertake preliminary investigation including data collection and analysis

The supervisor (or delegate) shall attend the scene and arrange for the preliminary gathering of all relevant information, for example:

- collect photographs already taken by others and take additional ones;
- gather documents or other artefacts in conjunction with that work e.g. PTW, JSEA, KKS, plant drawings, training, etc;
- take measurements or re-enact the event (if suitable); and
- take statements using S2034 Witness Statement form or S2241 Record of Interview form (for further information on the interview process please refer to Section 5.9 of this Procedure).

The supervisor shall analyse information captured to support classification, notification, investigation and other activities required by this Procedure.



- Data collection and analysis may be ongoing and continue concurrently with other activities. S1937 ICAM PEEPO tool can provide a useful checklist of data sources to consider during this phase of investigation.



- If an incident is reportable as Process Safety Event (either as the only incident type or as an additional impact to other incident types) and involves hazardous material Loss of Primary Containment (LOPC), the following information is to be gathered to support categorisation of the Process Safety Event:
  - Operating parameters (as applicable) at the time of incident e.g. flow, pressure, temperature, level and volume;
  - Release duration – from the time of release is identified up to the time of release is isolated or stopped;
  - Material/s released during incident and if released indoors or outdoors;
  - Estimated volume or mass of material/s released during incident;
  - Estimated release hole size (as applicable);
  - Relevant drawings that support the report (e.g. P&IDs, plant layout, GA, etc); and
  - Direct cost

The Station Performance Engineer shall verify the above information before submitting for categorisation of Process Safety Event.

### 5.4 Categorise incident and determine appropriate investigation actions

The Site Manager (or delegate), in consultation with the relevant Site Functional Coordinator, shall categorise the incident based on the **actual outcome** and **maximum reasonable potential consequence**<sup>1</sup> in accordance with Incident Category Matrix – Attachment 1. The Head of Health, Safety and Environment, EGM Operations and EGM Asset Management may be consulted (and the incident re-

<sup>1</sup> The maximum reasonable consequence (Potential) is the largest realistic or credible consequence from an event, considering the quality of controls in place for that event (if any) and credible failure (energy release) of these at the time of the event.

categorised) as required to determine incident categorisation. Both **actual outcome** and **maximum reasonable consequence** is to be included in red/green banners and the incident report.

Following incident categorisation, the follow is to be determined and actioned:

- Internal and external notification requirements (see section 5.6.2);
- The level of investigation required (see section 5.8); and
- The investigation leader and investigation team, if required.

## 5.5 Categorisation of Process Safety incidents

CS Energy takes an integrated and collaborative approach to manage Safety. This is through the application of hazard identification, risk assessment and control principles for both Process Safety and Health and Safety.

The categorisation of Process Safety Events (PSE) at CS Energy is based on the Tier system prescribed by the American Petroleum Institute (API)<sup>2</sup> and used world-wide as a guide for Process Safety performance indicators. Figure 1 illustrates the relationship between these Tiers and CS Energy's incident categories for Health and Safety.

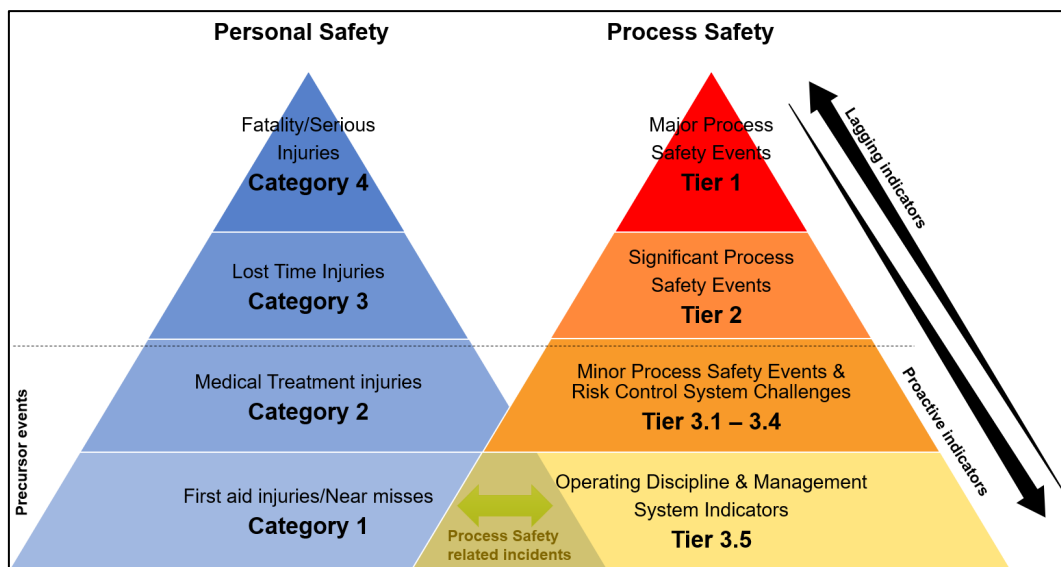


Figure 1. Process Safety Tiers and CS Energy's Incident Categories

A Process Safety Event (PSE) is defined as an asset related incident that could escalate to a major event. Major events have the potential for Significant Injury Fatality (SIF) and other relative consequence types (Refer Attachment 1). Process Safety Events include a loss of control of energy or hazardous materials, such events will likely be related to one of the Major accident hazards (MAHs):

- High energy electricity;
- High energy/pressure fluids;
- Rotating plant;
- Explosive/flammable substances;
- Civil structures; and
- Toxic/ corrosive chemicals.

<sup>2</sup> The ANSI/API Recommended Practice 754 have been adapted to align thresholds and materials with CS Energy's operations and incident categorisation matrix.



The below diagram provides triggers for PSE incidents:

Reporting Trigger	Example
Asset failures or unplanned events related to assets that have the potential for serious impacts	<b>Structural Failure, Arc Flash Explosion, Turbine Rundown without Lube Oil</b>
Loss of control / containment of hazardous materials or energy	<b>Pressure System Explosion, Hydrogen Release, Fuel Oil Discharge to Environment</b>
Process Safety systems have activated or failed	<b>Protection operated, E-Stop activated, EDGs Fail Functional Test, PSVs Found Inoperable During Maintenance</b>
Hazards related to Process Safety-related plant, process, people or performance	<b>Minor Steam Leak in High Energy Piping, Cracked Steel Structures</b>
Breach or Weakness in Process Safety practices or elements from the framework	<b>MOC Not Followed, Priority Maintenance Deferred without Approvals, Incorrect Application of the Permit to Work, Breach of Hazardous Area Exclusion Zones</b>

Figure 2. Process Safety Incident Triggers

### 5.5.1 Lagging indicators

Analysis of Tier 1 and 2 Process Safety events through incident investigations provide lessons to prevent recurrence. To note, this analysis is retrospective and based upon relatively infrequent events. Incidents classified as Tier 1 PSE (Category 3 and 4 incidents) are to have actual or potential to cause multiple fatalities or major loss of containment.

### 5.6 Incident notification

All external and internal notifications shall be completed by the responsible person within required timeframes and using approved notification methods. Environmental incidents required to be reported to the regulator must be notified as soon as possible, but within regulatory or approval requirements of becoming aware of the incident. Callide C incidents are to be reported to the CS Energy Joint Venture (JV) representative as soon as practicable to ensure applicable parties are promptly informed.

#### 5.6.1 Internal notifications

There are various methods of communicating incidents within CS Energy, as outlined in Table 1.

Incident Type	Communication Activity	Format	Timeframe	Template	Report to	Internal Stakeholders to be Consulted	Responsible Person
All incidents	Initial notification	Verbal	As soon as practicable	N/A	Up through line management chain to the Site Manager	Health & Safety/ Environment/ Process Safety Team, Executive Leadership Team	Supervisor/ Investigation leader
	Incident record	Insight entry	Before end of shift	S0024	Line Manager	Functional Site Business Partner (H&S, OPS, ENV, PSE)	Supervisor/ Investigation leader
Medical Treatment or Category 3 & 4 incidents	Incident summary notification (initial)	Email	48 hours	S1819 (1) (Red banner)	All CS Energy personnel	Site Manager, Legal (if incident is under LPP)	Site Business Partners, Head of department
Category 3 & 4 Incidents	Investigation report	Report saved in TRIM/ Insight	21 days – report drafted for review 30 days – to finalise incident	S1937 RCA <a href="#">S2189 (1)</a>	From Investigation Lead to nominated ELT member	Site Leadership Team, Executive Leadership Team, Legal (if incident is under LPP)	Site Manager
	Incident investigation outcomes (final notification)	Email	30 days	S1819 (3) (Green banner)	All CS Energy personnel	Legal (if incident is under LPP)	Site Business Partners, Head of department

Table 1: Internal notification requirements

## 5.6.2 External notifications

The Head of Health, Safety & Environment is responsible for notifying statutory authorities as outlined in Table 2 and consulting In House Legal (if the incident gives rise to a potential legal exposure) prior to external notification as required to manage risk.

Incident Type	Communication Type	Communication Format	Time Frame	Template	External Stakeholders	Internal Stakeholders	Responsible Person
<b>Notifiable Incident</b> (Work Health and Safety Act 2011)	Notification	Verbal Ph: 1300 369 915	As soon as practicable	Not Applicable	– Department of Workplace Health and Safety QLD	Site Manager, EGM Ops	Health & Safety Business Partner in consultation with Head of Health, Safety and Environment (HoHSE)
		Written	48 Hours	<a href="#">Online Form from WHS Website</a>	– Department of Workplace, Health and Safety QLD	Site Manager, EGM Ops	
<b>First Aid, or injury/illness Event</b> (as per s16 of Coal Mining Safety Health Regulation (CMSHA) 1999)	Notification	Written	30 Days	<a href="#">Online Monthly Incident Summary Form</a>	– Mines Inspectorate	Site Manager Mine Manager	Nominated SSE for the mine
<b>Notifiable Incident Serious Accident, High Potential Incident or a death (CMSHA s198 &amp; 201)</b>	Notification	Verbal	As soon as practicable	<b>Form 1A</b>	– Mines Inspectorate – Industry Health & Safety Representative – Site Safety Health Representatives	Site Manager, HoHSE, EGM OPS	Nominated SSE for the mine
		Written	48 hours (24 hrs for a fatality)	<b>Form 1A</b>	– Mines Inspectorate – Industry Health & Safety Representative	Site Manager, HoHSE, EGM OPS	Nominated SSE for the mine
	Report	Written (When required CMSHR Schedule 2 Part 2)	30 Days	<a href="#">Online Form 5A</a>	– Mines Inspectorate	Site Manager, HoHSE, EGM OPS	Nominated SSE for the mine
<b>Notifiable Environmental Incident and Significant Environmental Incident (SEI)</b>	Notification	Verbal	As soon as practicable (within EA specified timeframe)	Not applicable	– Environment Administering Authority – Queensland Government	Site Manager, EGM OPS	Head of Health, Safety and Environment (HoHSE)
		Written	48 Hours (within EA specified timeframe)	Not Applicable	– Environment Administering Authority – Queensland Government	Site Manager, EGM OPS	Head of Health, Safety and Environment (HoHSE)
	Report (If required)	Written	14Days (within EA specified timeframe)	Not Applicable	– Environment Administering Authority – Queensland Government	Site Manager, EGM OPS	
<b>Serious Electrical Incident, or Dangerous Electrical Event</b>	Notification	Written	24 hours	In addition to reporting under the WHSA, <a href="#">Online Form 3</a>	– Electrical Inspectorate	Site Manager EGM OPS	Health & Safety Business Partner in consultation with Head of Health, Safety and Environment (HoHSE)
<b>Radiation incident or dangerous event</b> (Radiation Safety Act 1999)	Notification	Verbal or in writing	Immediately	Not applicable	– Chief Executive, Queensland Health	Radiation Safety Officer (RSO), Site Manager, HoHSE, EGM OPS	CS Energy Radiation Possession License nominee
	Confirmation	Only if initial notification provided verbally	Within 7 days	Not applicable	– Chief Executive, Queensland Health	Radiation Safety Officer (RSO), Site Manager, HoHSE, EGM OPS	CS Energy Radiation Possession License nominee
<b>Prescribed Incident</b> (Petroleum and Gas (Production and Safety) Act and Regulation 2004)	Notification	Verbal (1300 910 933)	Immediately	Not applicable	– Petroleum and Gas Inspectorate	Site Manager, EGM OPS	Head of Health, Safety and Environment (HoHSE)
	Confirmation	Written (pgihotline@dnrm.qld.gov.au)	Within 5 days	Not applicable	– Petroleum and Gas Inspectorate	Site Manager, EGM OPS	

Table 2: External notification requirements

For any incident that requires reporting to a statutory authority, the following shall be done:

- Liaise with In House Legal to provide a report to the statutory authority within the prescribed time period, particularly if aspects of the incident investigation and response could be subject to Legal Professional Privilege;
- Upload a copy of the report directly in Insight or to the relevant incident folder in TRIM;



- If applicable, liaise with In House Legal to distribute and communicate the report to internal stakeholders as per Table 2 above; and
- Keep a record of all verbal and written communications including time, date, who and what was communicated (information provided by verbal communication should be confirmed in writing to prevent misunderstanding).

For ICT incidents, refer to the linked document B/D/22/6353 Cyber Instruction – Incident Response Procedure (IT) which provides details on when an ICT Cyber incident requires notification to an external authority, and which authority needs to be notified.



- Information provided during notification shall be factual (e.g., who, what, where, when) and should not include opinion or assumption (e.g. why, cause).
- Form **S2301 – WHS Notifiable Incident Checklist** [B/D/20/9260](#) must be used for all CAT 3 / 4 events that are unclear if it meets the criteria for a notifiable event. Notifiable environmental incidents shall be reported to the relevant authorities as prescribed in legal requirements and site license conditions refer to [B/D/11/31092](#) - Procedure - CSE - ENV - CS-ENV-04 - Environmental Incident Management (03/22).

## 5.7 Develop incident notification report and record incident data in Insight

Site Functional Coordinators (H&S, OPS, ENV, PSE, ICT) are responsible for reviewing and approving all incidents entered into Insight. Refer to Attachment 3 - Insight Incident Management Process Flow. All information entered into Insight shall be factual and contain no admission of liability.

The EGM Asset Management and EGM Operations shall assign competent persons to collate and coordinate incident reporting for the specific incident types.

All personnel reporting and recording incident data shall have received appropriate training, as outlined in the site training matrix.



- When creating an Insight record, restrict the use of the names of the people involved in the description fields. Role title or Involved or worker can be used in place of person's name
- Use the 'Individuals' sub-area to record the workers name

## 5.8 Incident investigations

CS Energy has three core incident investigation methodologies – refer to Table 3 for the level of investigation required for each incident:

1. 5 Why – A simple process to highlight probable causes of an incident. . Low level events i.e. Cat 1 actual and potential other than an injury may be deemed not to require investigation. This is at the discretion of the Site General Manager.
2. ICAM – Primary investigation method to be used for significant Health and Safety, Environmental and Security incidents. This is the preferred method where the incident involves people interacting with plant or process.
3. RCA – Primary investigation method to be used for significant Operations incidents. This is the preferred method to identify plant and equipment failure root causes.

More than one incident investigation methodology can be used for each incident. For example, ICAM can be used as the main investigation methodology for any incident at CS Energy when the incident

involves organisational factors or people interacting with Plant or Processes. This investigation can also be complemented with an RCA if the incident has a technical component.



- When Process Safety has been reported as an additional impact to other incident types (e.g. OPS, H&S or ENV) and categorised as Tier 1 or Tier 2 PSE, the Head of Health, Safety & Environment will discuss and agree with relevant Site Functional Coordinators or Site Manager on the appropriate incident investigation methodology for such incidents. The Head of Engineering is to assign a delegate to be included in the investigation of Category 3 and 4 Process Safety incidents (Tier 1 incidents).

The Site Manager is responsible to plan all activities required to execute an investigation, considering scope and timeframe, resources and logistics. For incidents and injuries that occur with contractors, the Site Manager may request the contractor involved to investigate. The investigation method, team and template report<sup>3</sup> is to be agreed prior to commencing the investigation<sup>4</sup>. It is permissible to involve a CS Energy representative in these instances.

CS Energy shall determine the causation of all incidents and near misses. Investigations shall be at a depth commensurate with the actual and potential consequences of the incident.

For all incidents requiring investigation, incident investigation shall commence no later than 48 hours (but as soon as practicable) of the incident occurrence. Refer to Attachment 2 – Incident Management Process Flow for target investigation completion timeframes. In circumstances where an incident investigation cannot be completed within these timeframes, an extension of time may be requested. The Head of Health, Safety and Environment (HoHSE) shall be consulted, and justification provided in Insight, along with details of the proposed date for completion.

Incident investigations shall be managed in accordance with CS-IM-04 Incident Investigation Standard and CS-AM-017 Root Cause Analysis (RCA) Procedure.

Performance management arising from incidents is to be managed external to incident investigation with involvement by the Human Resources team.

Incident Category (Actual or Potential)	Investigation Type	Responsible	Accountable	Investigation Leader
<b>C1</b>	5 Whys in Insight <a href="#">S0024</a>	Investigation Lead	Site Manager	Lead: Line Leader or as nominated by SFC.
<b>C2</b>	5 Whys in Insight <a href="#">S0024</a>	Investigation Lead	Site Manager	Lead: Line Leader or as nominated by SFC.
<b>C3</b>	ICAM <sup>5</sup> <a href="#">S1937</a> RCA <a href="#">S2189 (1)</a>	Investigation Lead	Site Manager	Lead: Nominated by Site Manager <sup>6</sup>

<sup>3</sup> In the interests of progressing the investigation and its conclusion, CS Energy Management may choose to prepare a cover note containing independent observations to the external investigation report.

<sup>4</sup> The agreed investigation process is to be equal or better than CS Energy's process.

<sup>5</sup> Alternative ICAM templates may be used to document the investigation as approved by the Site Manager.

<sup>6</sup> The investigation of incidents involving external contractors may be led by representatives of that external company. Such occasions are to be approved by the Site Manager. Appointment of an investigation team with members from different companies may also be appropriate. There is no requirement for Contractors leading the investigation to use the CS Energy template. Contractors can use their own template and CS Energy is to provide feedback and document comments to the investigation report when completed.

Incident Category (Actual or Potential)	Investigation Type	Responsible	Accountable	Investigation Leader
<b>C4</b>	ICAM <a href="#">S1937</a> RCA <a href="#">S2189 (1)</a>	Independent Investigator for actual Cat 4 potential can be performed by external to site	Site Manager or Legal Counsel if the incident is an actual category 4	Lead: Nominated by Site Manager or Legal Counsel (if applicable)

Table 3 – Incident investigation level

### 5.8.1 Incident investigation capability

CS Energy shall ensure that there are adequate personnel trained and competent to lead an incident investigation. The incident investigation team shall include one person competent in incident investigation. If an ICAM or RCA is required, the data analysis at a minimum shall be facilitated by someone (internal or external) with the appropriate ICAM or RCA training. The investigation team numbers shall be adequate to support the outcomes required to be achieved.

CS Energy shall consult In House Legal before engaging any third party as a member of an investigation team if the incident is being investigated under Legal Professional Privilege or it is an actual category 4 incident.

### 5.8.2 Retain investigation records in Insight/TRIM

For all incident categories, investigation leaders are responsible for recording the outcome of the investigation in the investigation section in Insight. For category 3 and 4 incidents if applicable (e.g. when an incident report needs to be accessed and updated by multiple users or incident investigated under LPP) the investigation leader is responsible for recording incident investigation reports and/or associated documents in the following TRIM BCS locations:

- Use - HEALTH SAFETY AND SECURITY MANAGEMENT >> INCIDENT MANAGEMENT - for health and safety or security related incidents
- Use - ENVIRONMENTAL MANAGEMENT >> INCIDENT MANAGEMENT - for environmental related incidents
- Use - GENERATION MAINTENANCE AND OPERATION >> INCIDENT MANAGEMENT - for plant operational related incidents
- Use – GENERATION MAINTENANCE AND OPERATION >> INCIDENT MANAGEMENT (PSE) – for Process Safety Events (PSEs).

Any relevant TRIM links are to be included in Insight. ([Instruction](#))

### 5.9 Interview process

An injured person, person who is involved in an incident or a witness to the incident should be interviewed as soon as practicable following the incident. This can be done by the person’s supervisor, the site Health and Safety/ Environment team or assigned investigation team member.

The General Principles of Witness Interviewing includes:

- Timeliness – conduct interview as soon as possible after the incident. Delays in conducting interviews can affect the quality and quantity of information collected as memories deteriorate or are contaminated by outside influences.
- Preparation – preparation is essential to the success of the interview. Take the time to gather background information on the incident prior to the interview. Give some considered thought to information that is required, how best to structure the interview, who will be involved and the background of the witnesses.

- Location/setting – ensure witnesses are interviewed in a private setting with no distractions. It may be beneficial to interview witnesses at the incident site to allow the environmental context to aid recall. Use diagrams to assist the witness to recall the details of the incident.
- Record of interview – the record of the witness’s statement should accurately and completely reflect all information obtained. Keep a set of notes as detailed as possible, using CS Energy templates, e.g. the Record of Interview form (S2241 - [B/D/16/28439](#)). The witness record should be verified by the witness after the interview by having them read the document.
- Witness Statement – if the worker is offsite or not available to be interviewed, the witness may want to write a documented description of events using the S2034 Witness Statement Form as a guide to gather detailed information on the incident.
- Explanation of the interview process – to avoid intimidation and enhance cooperation, introduce yourself and explain the aim of the interview prior to asking questions. Develop an early rapport with witnesses reassuring the witness.
- Open questions and active listening – ask open questions where possible and be attentive to ensure your body language reflects your interest. Avoid interrupting the witness. Create a calm and trustworthy setting.
- Communication – use everyday language. Try to avoid technical terms, jargon and acronyms to avoid misunderstanding or confusion.
- Understanding and empathy – remain conscious of the witness’ emotional state e.g. defensive, anxious, stressed, confused, angry or distressed. If the witness would feel more comfortable with a friend or representative present, try to arrange this,
- Ending the interview – always end the interview on a positive note and thank the witness for their time and cooperation. Ensure they have your contact details to pass on any information they may recall after the interview has finished.
- Follow up – after an interview, many witnesses spend time thinking about the event again, the information they related during an interview and quite frequently will recall additional details they did not remember during the interview. It may be worth following up after the initial interview.

## 5.10 Repeat Incidents

For incidents defined as repeat incidents (refer to definition) the following is to occur:

- The classification is to be agreed by EGM Operations and Head of Health, Safety & Environment;
- Initially Repeat Incidents are to be monitored by the H&S team to establish the merit of the measure as a value add indicator; and
- The Incident Challenge is to have an increased focus on higher order controls.

## 5.11 Significant Incident Challenge and Executive Approval

The site/ functional GM and respective EGM are accountable to organise and facilitate an Incident Challenge for all category 3 and 4 incident investigations, prior to presentation at Central Health, Safety and Environment (CHSE) committee meetings.

The purpose of Significant Incident Challenge is to ensure appropriate organisation learnings by:

- Reviewing the investigation to ensure it supports the recommendations for corrective actions and excludes any issues not relevant to the investigation;
- Determining if identified deficiencies are isolated to a specific site or are part of a CS Energy wide trend;

- Ensuring the proposed recommendations are feasible, realistic and sufficient to remedy the deficiency;
- Ensure that the recommendations are managed to So Far As Is Reasonably Practicable (SFAIRP);
- Determining agreed incident actions are appropriately resourced; and
- Determining if there are any items that require follow-up, such as corrective actions that management may have taken that will conflict with formal recommendations.

Members of the Significant Incident Challenge Team should consist of the following people, this may vary depending on the type and location of the incident:

- Executive team member(s);
- Site General Manager(s);
- Head of Health, Safety and Environment;
- Site H&S/ Environment Business Partner and Corporate Specialists;
- Investigation Leader; and
- EA and/ or Site EAs.

Significant incident investigations shall be subsequently presented at the next scheduled CHSE committee meeting for Executive / CEO challenge and approval.

Attendance, participation and challenge of the investigation information presented during a Significant Incident Challenge or CHSE committee meeting is equivalent to investigation report sign off by the accountable Executive when present. Details are to be included in Insight.

Following Significant Incident Challenge or CHSE committee meeting, the investigation leader or CS Energy representative (if the investigator is external) is responsible for:

- Taking notes of changes and ensuring the changes are reflected in the investigation report;
- Ensuring the draft investigation report is updated in a timely manner;
- Confirming report finalisation with responsible Managers; and
- Distributing findings as appropriate.

#### 5.11.1 Updating incident records

Following an incident investigation, the Investigation Lead (or delegate) shall update the incident records in Insight. The incident reviewer shall review the investigation to ensure it supports the recommendations for corrective actions and review the actions to ensure they address the cause (s) of the incident and are prioritised appropriately. The incident reviewer is also responsible for checking all data entered for the incident and ensure all fields are completed and all relevant attachments for the incident investigation are included.

#### 5.12 Develop corrective action plan

The Investigation Team is responsible for proposing corrective actions<sup>7</sup> and making recommendations (optional/ to be considered) that will prevent recurrence, reduce risk and improve safety/ environment and operations.

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<sup>7</sup> Actions are to be SMART actions:

- *Specific* – target a specific area for improvement;
- *Measurable* – quantify or at least suggest an indicator of progress;
- *Assignable* – specify who will do it;
- *Realistic* – state what results can realistically be achieved, given available resources; and
- *Time-related* – specify when the result(s) can be achieved.



When developing recommendations and corrective actions, the investigation team shall review and address each contributing factor and:

- Organise conclusions sequentially preferably in chronological order or in logical steps (e.g. equipment, procedures, people, organisation);
- Recommend improvements to limit the consequences of the contributing factor, so that the residual risk is reduced so far as is reasonably practicable;
- Base conclusions on the facts and results from subsequent analysis of the facts, considering the hierarchy of controls;
- Ensure that actions assigned are as low and meet the requirements of (SFAIRP)
- Before the establishment of long-term actions after an incident, make interim recommendations for immediate corrective actions (these are short term measures that will mitigate current risks); and
- When determining corrective actions and recommendations, consider the effectiveness of the control and any new hazards it may introduce (considering probability, severity and impact).

Corrective actions shall address the causes to SFAIRP and be prioritised appropriately (there may be more than one corrective action for each cause).

The HSE team and respective functional groups (OPS, PS, ICT), in conjunction with the Site Manager, are responsible for performing the governance function on the effectiveness of incident actions as required.

The Site Manager is responsible for allocating resources required to implement corrective actions arising from incident investigations. Action owners are to agree to the timeframes for actions to be completed. An assessment of priority may be required with direct Supervisor and Site Leadership Team. Action dates are not to be pushed out unless approved by the Site Manager/ Site Functional coordinator or action accountable manager.

### 5.13 Communicating investigation lessons learnt

The Head of Health, Safety and Environment/ Process Safety/ICT shall facilitate the issue of appropriate communication to share lessons learnt following an HSE incident, ICT, Operations or Process Safety Event investigation. Lessons learnt may be communicated via 'green banner' emails, site noticeboards, Toolbox Talks and Safety Shares.

If an incident has been investigated under Legal Professional Privilege, CS Energy shall not release any information related to an incident or investigation to an external party without authorisation by Legal Counsel.

### 5.14 Incident close out and completion

An incident can be completed in Insight by the Investigation Leader or Site Functional Coordinator when the following has occurred;

- Significant incident challenge completed (if required);
- Feedback and comments have been included in the incident investigation report;
- Investigation finalised;
- Investigation details included in Insight; and
- Actions are raised in Insight from investigation recommendations.



- Site Leadership Team shall track actions through to completion in Insight. When all actions are completed and verified, the incident is automatically closed in Insight.



## 5.15 Communicating safety initiatives/projects

CS Energy recognises the skills, knowledge and experience individuals and teams have and how they can contribute to making changes to reduce hazards and improve systems and processes. When individual/ team actions or projects contribute to a safety improvement, the key learnings and highlights can be shared across the business in the form of a 'blue banner'. Communicating safety improvements at CS Energy support achieving our goal of developing a constructive culture and encouraging behaviours that reflect CS Energy's values. Projects or actions can be linked to a minor capital expenditure, a simple operational expenditure or administrative in nature.

## 5.16 Operations Management Team

For Operational incidents, the Operations Management Team is responsible for:

- Reviewing incident and investigation progress;
- Analysing data and trends; and
- Confirming corrective action close out.

## 5.17 Verify incident management process

The Head of Health, Safety and Environment (or delegate) is responsible for carrying out an integrity check to verify the incident management process has been followed and all attachments are in order. Details of this verification process are contained within the annual H&S assurance plan. As a minimum the H&S assurance plan is to include action verification audits for category 3 and 4 incidents.

Where issues are identified, they will be raised with the responsible manager who is accountable for taking the appropriate actions to ensure compliance with the process.

## 6 DEFINITIONS

Term	Definition
Direct cost	Cost of repairs or replacement, clean-up, material disposal, environmental remediation and emergency response. Direct cost does not include indirect costs, such as business opportunity, business interruption and feedstock / production losses, loss of profits due to equipment outages, costs of obtaining or operating temporary facilities, or costs of obtaining replacement products to meet customer demand. Direct cost does not include the cost of the failed component leading to LOPC, if the component is not further damaged by the fire or explosion.
Environmental Incident	Any adverse effect or potential adverse effect on a quality or physical characteristic of the environment. It includes environmental nuisance caused by aerosols, fumes, light, noise, odour, smoke or an unhealthy offensive or unsightly condition because of contamination or a breach in license conditions.
Explosion	A release of energy resulting from a LOPC that causes a pressure discontinuity or blast wave (e.g. detonations, deflagrations, and rapid release or high pressure caused by rupture of equipment or piping).
Fault or function compromised (corresponding to Safety Critical Equipment or Process Safety Protecting device)	Refers to Safety Critical Equipment or Process Safety Protecting device: <ul style="list-style-type: none"> <li>• Failing to operate on demand</li> <li>• Found outside expected operating condition / range (e.g. found faulty on inspection or test)</li> </ul>
Fire	Any combustion resulting from an LOPC, regardless of the presence of flame. This includes smouldering, charring, smoking, singeing, scorching, carbonizing, or the evidence that any of these have occurred.

Term	Definition
Hazard	A hazard is anything (condition or situation) that has the potential to do harm and / or cause damage. Hazards may be present in processing equipment (e.g. flammable or toxic chemicals in a pipe or a vessel, stored electrical or mechanical energy) or in the occupational environment (e.g. fuel in a road vehicle, the potential and kinetic energy involved in helicopter travel or bullying in the workplace).
Incident	An unplanned event which causes injury, damage to plant or the environment, loss of production, theft, fraud, breach of the Code of Conduct or public interest.
Near Miss Incident	Any unplanned incident that occurs at the workplace or while undertaking CS Energy work, which, although not resulting in: a workplace injury, illness or damage to environment or plant, or loss of generation – had the potential to do so.
Incident Investigation	A systematic process of gathering and analysing information about an incident for the purpose of identifying causes and making recommendations to prevent recurrence.
Legal Professional Privilege	Legal Professional Privilege is a privilege attainable by a party if the party can establish that the dominant purpose for obtaining the advice or undertaking the investigation was in preparation for legal proceedings, whether existing or contemplated.
Loss of energy control	An unplanned or uncontrolled loss of energy from an asset (e.g. fire, explosion, kinetic and arc flash).
Loss of primary containment (LOPC)	An unplanned or uncontrolled release of any material from primary containment, including non-toxic and non-flammable materials (e.g. steam, hot condensate, nitrogen, compressed CO <sub>2</sub> or compressed air). LOPC is a type of event. An unplanned or uncontrolled release is a LOPC irrespective of whether the material is released into the environment, or into secondary containment, or into other primary containment not intended to contain the material released under normal operating conditions.
Non-spurious activation <i>(corresponding to Process Safety Protecting device)</i>	Non-spurious activation of a Process Safety Protecting Device refers to: <ul style="list-style-type: none"> <li>• Operator intervention upon a safety-critical process alarm; or</li> <li>• Instrumented trip system activation; or</li> <li>• Relief valve lifting</li> </ul>
Officially declared	A declaration by a registered community official (e.g. fire, police, civil defence, emergency management) or delegate (e.g. Company official) authorised to order community action (e.g. shelter-in-place, evacuation).
Notifiable Environmental Incident	Environmental incidents that cause or threaten environmental harm and/or are reportable to the Environmental regulatory authority. This may be a breach of the site license condition(s) or related approvals or in accordance with Section 320 of the Environmental Protection Act (see serious or material environmental harm definitions) and set a duty to notify under the appropriate guidelines, licenses and legislation.
Primary Containment	A tank, vessel, pipe, truck, rail car, or other equipment designed to keep a material within it, typically for purposes of storage, separation, processing or transfer of gases or liquids. Note that primary containment for a specific material may comprise a vessel or pipe that is inside another vessel that is also designed as primary containment for a different material; for example, a heating tube is a primary containment for fuel gas or fuel oil, even though the tube may be inside a firebox which is in turn within an oil-water separator.
Process	Facilities used in the electric power generation operations. This includes process equipment (e.g. vessels, piping, valves, boilers, generators, pumps, compressors, exchangers) and includes ancillary support areas (e.g. boiler houses and waste water treatment plants), and distribution cable under control of CS Energy.
Process Safety Protecting Device	Process emergency shutdown or trip functions including SIL rated and OEM protecting systems.

Term	Definition
Repeat Incident	<ul style="list-style-type: none"> <li>• A Category 3 or above incident or near miss (where there has been a release of energy); <b>AND</b></li> <li>• An incident with the same hazard type as a previous incident; <b>AND</b></li> <li>• An incident with a similar incident mechanism (i.e. thing that caused the event).</li> </ul> In assessing a repeat incident, the previous 3 years of incident data is to be taken into account.
Risk Control System (RCS)	A functional grouping of safeguards, such as primary containment, process equipment, engineered systems, operational procedures, management system elements, or worker capabilities designed to prevent or mitigate incident consequences.
Safe Operating Limits	Safe Operating Limits are the outer bound of plant conditions, or the set of limits and conditions, within which the operation of asset, plant, process and/or equipment must be maintained in order to comply with, e.g., regulatory requirements, safety design criteria, performance standards and Company safety management expectations.
Safety Critical Equipment	A subset of Safety Critical Elements pertaining to physical equipment / systems (hardware and software), including vessels, instrumentation, valves, pumps, control systems, etc.  Examples for Safety Critical Equipment are emergency shutdown valves, fire and gas detectors, emergency power to maintain power to all safety systems required to function in the event of an emergency, certified electrical equipment for hazardous area, emergency lighting, chemical tank, pressure vessel etc.
Secondary Containment	An impermeable physical barrier specifically designed to prevent release of materials into the environment that have already breached primary containment (i.e. an LOPC). Secondary containment systems include, but are not limited to: tank dykes, curbing around process equipment, drainage collection systems into segregated oily drain system, the outer wall of a double walled tank, etc.
Serious Environmental Harm ( <i>section 17 of the EP Act</i> )	Is environmental harm (other than environmental nuisance): a) that is irreversible, of a high impact or widespread; or a) caused to an area of high conservation value or special significance, such as the Great Barrier Reef World Heritage Area; or b) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount (\$50,000); or c) that results in costs of more than the threshold amount (\$50,000) being incurred in taking appropriate action to: <ol style="list-style-type: none"> <li>1. prevent or minimise harm; and</li> <li>2. rehabilitate or restore the environment to its condition before harm.</li> </ol>
Material Environmental Harm ( <i>section 16 of the EP Act</i> )	Is environmental harm (other than environmental nuisance): a) that is not trivial or negligible in nature, extent or context; or b) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount (\$5,000), but less than the maximum amount (\$50,000); or c) that results in costs of more than the threshold amount (\$5,000) but less than the maximum amount (\$50,000) being incurred in taking appropriate action to: <ol style="list-style-type: none"> <li>1. prevent or minimise the harm; and</li> <li>2. rehabilitate or restore environment to its condition before the harm.</li> </ol>
Material release threshold quantity	The weight of gas, liquid, or solid material released from an LOPC which, if exceeded, results in the event being recordable as Tier 1 or Tier 2 PSE. The threshold quantities are described more fully in API RP 754 and follow the UNDG classification system.

Term	Definition
Employee cooperation in internal investigations	The common law obligation of fidelity to one's employer requires employees to cooperate and participate in good faith in any lawful and reasonable internal investigation undertaken by their employer. This obligation binds the employee to disclose to its employer any facts relating to their employment, provided that the internal investigation is genuine and necessary to properly inform the employer of the true nature or extent of the employee's conduct, and the questions asked by the employer are put in a reasonable and fair manner.
Significant Environmental Incident (SEI)	An incident that has a significant impact on the environment or results in enforcement action by a regulator (i.e. Penalty Infringement Notices, administrative notices and orders made under the legislation, proceedings for court orders, prosecution and suspension or cancellation of permit, licence or authority).
Site Functional Coordinators	<p>The Site Functional Coordinators are identified persons who are responsible for each incident type on that site e.g. H&amp;S – Site Health and Safety Business Partner. The responsibilities of this role include:</p> <ul style="list-style-type: none"> <li>• Reviewing the detail assigned to the incident</li> <li>• Confirming the incident category as per the category definition</li> <li>• Appoint an Investigation Leader to follow up the incident and conduct an investigation</li> </ul>
SFAIRP	Legislated requirement when considering actions to manage risk to “So Far As Is Reasonably Practicable”

## 7 REFERENCES

Reference No	Reference Title	Author
TRIM Folder	Central HSE Committee Agenda	CS Energy
<a href="#">B/D/15/1991</a>	Hierarchy of Control Poster PDF.	Pertrain
<a href="#">B/D/11/43851</a>	Procedure - CS-IM-02 - Crisis Management	CS Energy
<a href="#">B/D/12/14048</a>	Procedure - CS-IM-03 - Emergency Response Plan	CS Energy
<a href="#">B/D/14/33498</a>	Procedure - CS-IM-04 - Incident Investigation Standard - Guide	CS Energy
<a href="#">B/D/16/20702</a>	Procedure - CS-PSM-00 - Process Safety and Operational Integrity	CS Energy
<a href="#">B/D/21/12762</a>	Procedure - CS-PSM-01 - Process Safety Performance Monitoring	CS Energy
<a href="#">B/D/16/22919</a>	Procedure - CS-OHS-73 - Injury and Illness Classification	CS Energy
<a href="#">B/D/12/45337</a>	Procedure - CS-AM-017 - Root Cause Analysis (RCA) Process Guide	CS Energy
<a href="#">B/D/11/31092</a>	Procedure - CS-ENV-04 - Environmental Incident Management	CS Energy
<a href="#">B/D/22/6353</a>	Cyber Instruction –CYBER003 – Incident Response	CS Energy
<a href="#">B/D/16/24052</a>	Incident Investigation Process - VISIO	CS Energy
<a href="#">B/D/10/12649</a>	Template - Safety Alert ( <i>Word Template</i> )	CS Energy
<a href="#">T: DRIVE LINK</a>	Template - Safety Alert ( <i>Email Template</i> )	
<a href="#">B/D/15/22167</a>	ICAM Investigation Steps Process Flow – Poster - PDF	CS Energy
<a href="#">B/D/11/36189</a>	Form - S0024 - Incident Report	CS Energy
<a href="#">B/D/11/36240</a>	Form - S1819 (1) - Incident Summary Notification (Initial) (Red Banner)	CS Energy
<a href="#">B/D/12/43791</a>	Form - S1819 (3) - Incident Investigation Outcomes (Final) (Green Banner)	CS Energy
<a href="#">B/D/20/13687</a>	Form - S1819 (4) - Learning from Positives (Blue Banner)	CS Energy
<a href="#">B/D/11/36202</a>	Form - S1937 - Significant Incident Report Template	CS Energy
<a href="#">B/D/12/43915</a>	Form - S2034 - Incident Witness Statement	CS Energy
<a href="#">B/D/16/28439</a>	Form - S2241 - Incident Management - Record of Interview	CS Energy
<a href="#">B/D/14/7414</a>	Form - S2160 - Incident Investigation - ICAM Report Assessment Process Audit	CS Energy
<a href="#">B/D/11/36208</a>	Form - S1814 - Injury / Illness Report	CS Energy
<a href="#">B/D/15/438</a>	Form - S2189 (1) – RCA Report Template	CS Energy
<a href="#">B/D/15/439</a>	Form - S2189 (2) – Cause Tree Template	CS Energy
<a href="#">B/D/15/1453</a>	Form - S2190 - Root Cause Analysis RCA Process Audit Template	CS Energy
<a href="#">B/D/20/9260</a>	Form - S2301 - WHS Notifiable Incident Checklist	CS Energy

## 8 RECORDS MANAGEMENT

In order to maintain continual improvement, suitability, safety and effectiveness of the organisation, registered documents will be reviewed on a two-yearly basis or at intervals specified by legislative or regulatory requirements. Review of controlled documents should occur where it has been identified that there are changes in technology, legislation, standards, regulation or where experience identifies the need for alteration to the content. Registered documents should also be reviewed following an incident, change management process, modification or where directed as part of a risk assessment process. A 'review' can simply mean that it has been identified, confirmed and appropriately recorded that no changes are required and that the existing process remains the same.

Government Owned Corporations must ensure that records are retained according to accountability, legal, administrative, financial, commercial and operational requirements and expectations. In compliance with records retention and disposal, all documentation created in relation to business must be retained in line with minimum retention periods as detailed in legal retention and disposal schedules.





## 9 ATTACHMENTS

### 9.1 Attachment 1 – Incident Category Matrix

Category	Health and Safety <sup>8</sup>	Environment	Operations	Process Safety	Security	ICT
Non work related	Non work related injury or illness.	N/A	N/A	N/A	N/A	N/A
<b>C1 Low</b>	First aid injury (FAI) - (actual or potential). No Treatment Given	Small contaminant release localised on-site area affected. Non-conformance with land disturbance procedure, on-site previously disturbed area. Routine short-term clean-up/remediation.	Unit trip or LOA or Equipment damage Event assessed as <b>MINOR</b> using CSE Risk Matrix – Operations B/D/13/17881.  Permit to work any minor administration errors e.g. leaving lock on at end of shift.	TIER 3.5 Error or gap in Process Safety Management System Event Early warnings that critical systems are not in control. These largely include Risk Control System failures that do not lead to a higher tier event: Tier 3.5 - Error or gap in Process Safety Management System requirements, examples include: Management of Change application error or failure Override or bypass of Safety Critical Equipment without approval and / or adequate controls in place. Prohibited items taken into a hazardous area Failure related to Operational Procedures (e.g. Plant, shift handover, routine checks, etc) Failure to meet competence requirements for working on Safety Critical Equipment	Minor security incident (theft of company property) Trespass resulting in low or very minor damage to property (graffiti) Building doors found not locked Maintenance issue with gate, fence, security cameras etc Unidentified vehicle parked or travelling adjacent to the site after hours	Loss of ICT critical system/service for 1-4 hours
<b>C2 Moderate</b>	Medical Treatment Injury (MTI) - (actual or potential). Positive AOD result.	Moderate contaminant release or unauthorised land disturbance, localised on-site. Non-compliance with a cultural heritage agreement or applicable legislation that does not impact on-site areas of cultural heritage. Routine short-term clean-up/remediation. Low level compliance failure that does not result in Regulator enforcement actions e.g. failure to correctly complete a waste tracking certificate.	Unit trip or LOA or Equipment damage Event assessed as <b>LOW</b> using CSE Risk Matrix – Operations B/D/13/17881.  Permit to work - any non-conformance e.g. incorrect isolations or no lock on to a permit assessed as a Potential to cause CAT 2 HS injury.	TIER 3.1-3.4 Minor Process Safety Event Asset failure resulting in actual event consequences as per any CAT 2 threshold OR Asset loss of energy control with potential event consequence as per any CAT 2 threshold OR Challenges to risk control systems that progressed along the path to harm but are stopped short. Typical examples are failed protection activations, exceeding operating limits and functional failure of safety critical equipment: Tier 3.1 - Safe operating limit excursions; Tier 3.2 - Safety Critical Equipment or Process Safety Protecting device fault or function compromised; Tier 3.3 - Non-spurious activation of a Process Safety Protecting device; Tier 3.4 - Loss of primary containment (LOPC) less than the threshold quantities for a Tier 2 incident in Attachment 6 Learning from Incidents Procedure – Material Release Threshold Quantities for Different Materials.	Fraud or theft or suspected fraud or theft where the value, money, equipment, materials or property involved does not exceed \$10,000 Trespass resulting in minor property damage or vandalism. non-violent demonstration/protest outside but near company property Activities observed offsite that identifies the potential for a security breach	Unauthorised access to CS Energy IT systems Loss of ICT critical system/service for 4-8 hours Malware successfully installed/running/deployed on a single computer
<b>C3 Significant</b>	Lost Time Injury (LTI) - (actual or potential) Serious injury or illness, defined by WHSQ, where the reasonable maximum consequence is not a fatality (actual or potential).	Large contaminant release or unauthorised unlawful land disturbance, localised on or off-site. Non-compliance with cultural heritage agreement or applicable legislation that potentially impacts on-site areas of cultural heritage.  Short-term clean-up/remediation. Likely enforcement action from Regulator.	Unit trip or LOA or Equipment damage Event assessed as <b>MEDIUM</b> using CSE Risk Matrix – Operations B/D/13/17881.  Permit to work - any non-conformance e.g. incorrect isolations or no lock on to a permit assessed as a Potential to cause CAT 3 HS injury.	TIER 2 Significant Process Safety Event Asset failure resulting in actual event consequences as per any CAT 3 threshold OR Asset loss of energy control with potential event consequence as per any CAT 3 threshold OR Loss of Primary Containment (LOPC) release of hazardous material greater than Tier 2 threshold quantities, refer Attachment 6.	Trespass with clear criminal intent e.g. theft Violent/non-violent demonstration/protest outside or near company property Breach of site security systems which allows unauthorized entry onto site or into computer systems resulting in escalated damage A bomb threat or threat of violence by any means. Fraud or theft or suspected fraud where the value, money, equipment, materials or property involved exceeds \$10,000	Malware successfully installed/running/deployed on multiple computers Successful hack or unauthorized access CS Energy's secure ICT network on site that results in MAJOR risk to personnel, plant, systems. Loss of ICT critical system/service for 8-24 hours.

<sup>8</sup> The maximum reasonable consequence (Potential) is to be considered when categorising incidents. It is the largest realistic or credible consequence from an event. The quality of controls in place (if any) are to be considered as well as the credible failure (energy release) of these at the time of the event.



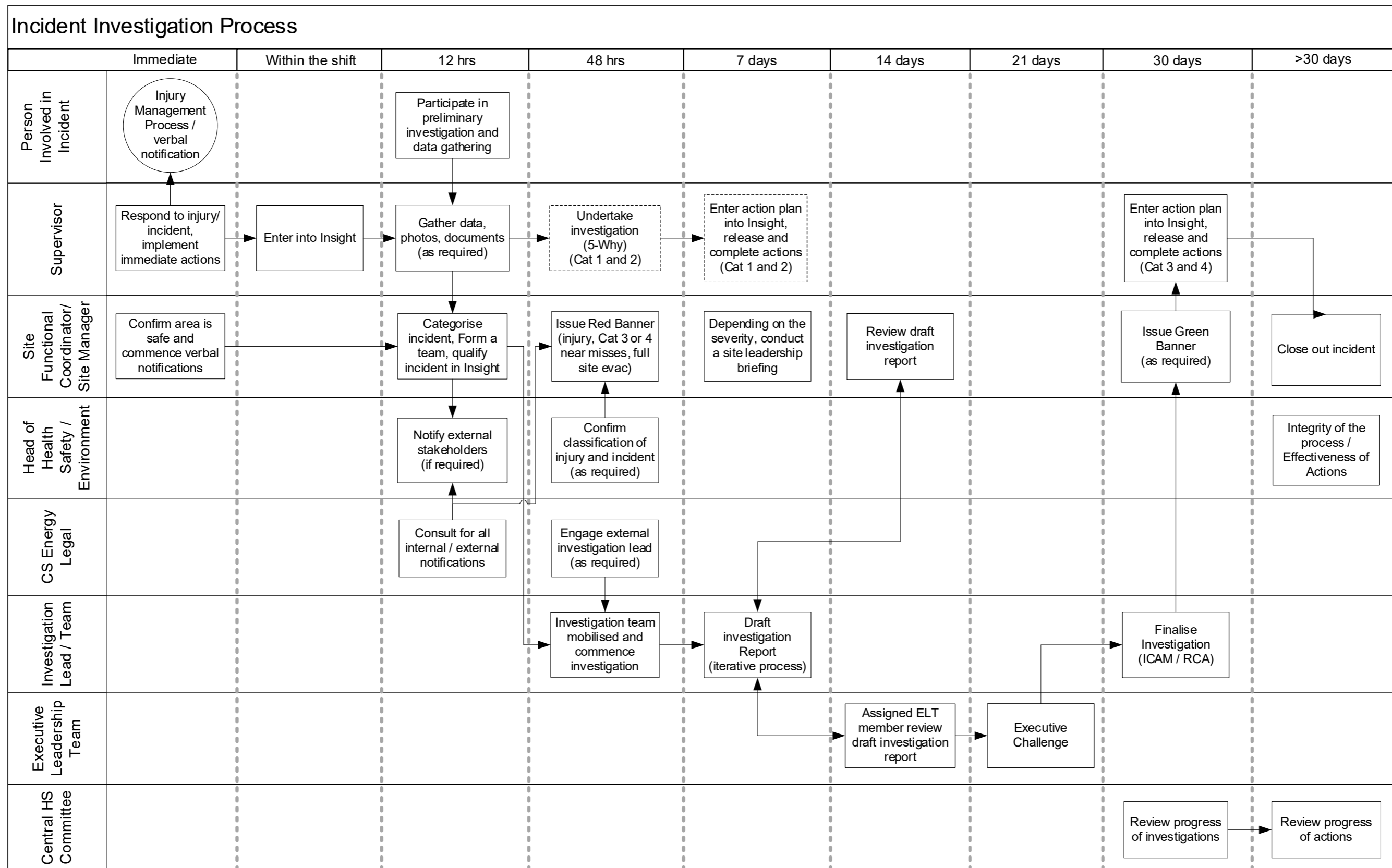
Procedure No: CS-IM-01  
 TRIM Ref No: B/D/11/45318  
 Reviewed: 06/23  
 Amended: 06/23  
 Review Due: 05/25



Category	Health and Safety <sup>8</sup>	Environment	Operations	Process Safety	Security	ICT
<b>C4 High</b>	<p>Fatality or multiple fatalities - (actual or potential).            Serious injury or illness, defined by WHSQ, where the reasonable maximum consequence is a fatality - (actual or potential).</p>	<p>Large to very large contaminant release or unlawful land disturbance, localised off-site (in breach of environmental licence)            Long-term or complex long-term clean-up/remediation, potentially irreversible.            Major fine and/or prosecution imposed or likely to be imposed.            Loss of community trust or active opposition to business activities.            Loss (unauthorised) of areas of cultural heritage and archaeological significance.</p>	<p>Unit trip or LOA or Equipment damage Event assessed as <b>MAJOR or greater</b> using CSE Risk Matrix – Operations B/D/13/17881.             Permit to work - any non-conformance e.g. incorrect isolations or no lock on to a permit assessed as a Potential to cause CAT 4 HS injury.</p>	<p>TIER 1 Major Process Safety Event:            Asset failure resulting in actual event consequences as per any CAT 4 threshold            OR            Asset loss of energy control with potential event consequence as per any CAT 4 threshold            OR            Loss of Primary Containment (LOPC) release of hazardous material greater than Tier 1 threshold quantities, refer Attachment 6.</p>	<p>An actual attack on facilities or assault on staff.            Violent demonstration on company property.</p>	<p>Unauthorised Access that cannot be contained or results in damage to data not recoverable within 24 hours.            Loss of ICT critical system/service greater than 24 hours.            Unauthorised Access that results in a loss of sensitive information that cannot be contained; such as a leak of confidential CS Energy data the internet.</p>

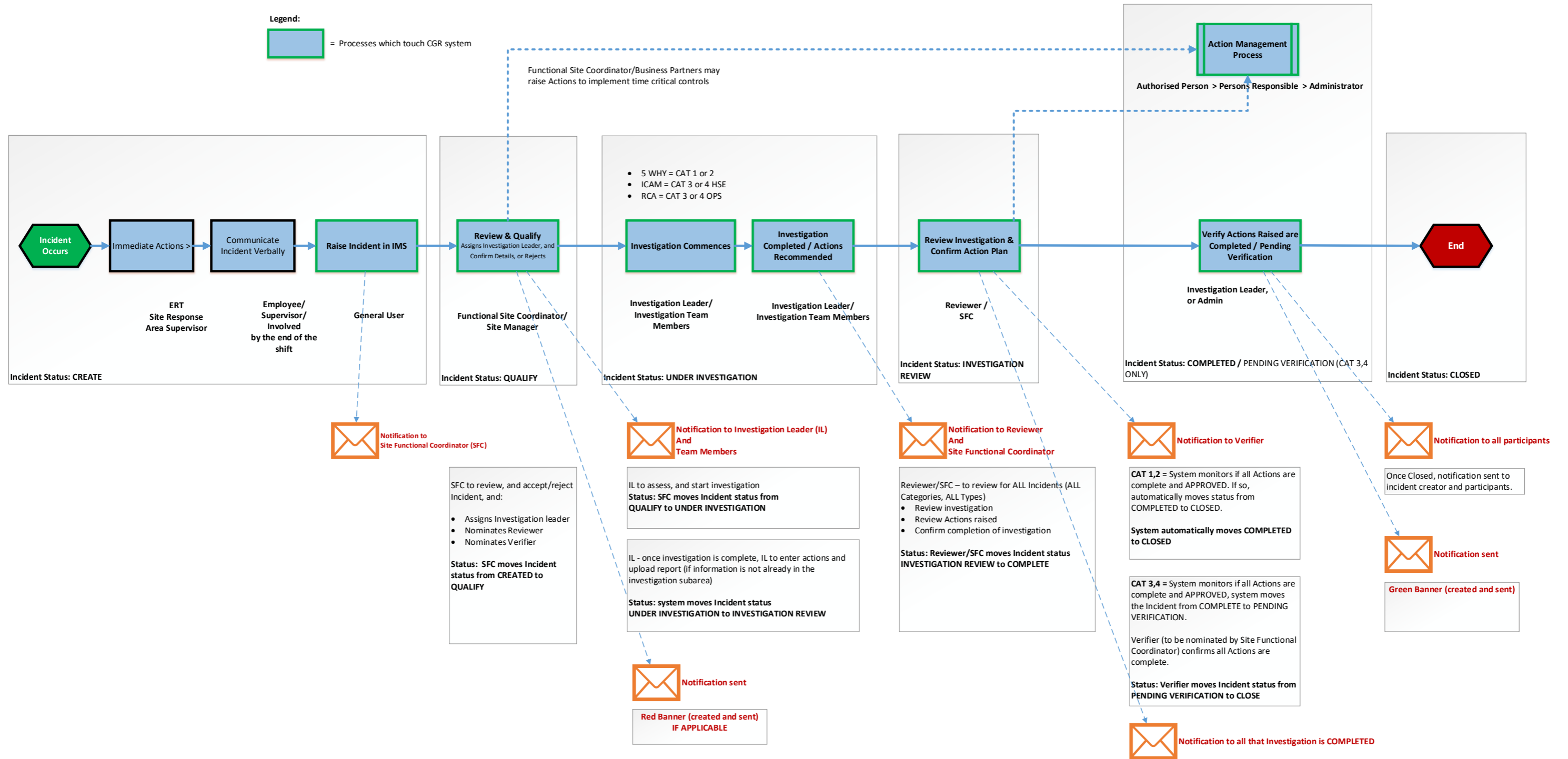


9.2 Attachment 2 – Incident Management Process Flow






9.3 Attachment 3 – Insight IMD Process Flow




## 9.4 Attachment 4 – CSE Guide to HSE Investigations

# Quick Guide to HSE Investigations



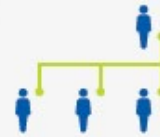
### 1. Initial Report



Siteleaders  
15 minutes  
Stand up  
On point  
Fast-paced  
Notification  
Role Clarity  
Next step

*When and who do we need to communicate to?*

### 2. Form a team / PEEPO




P | E | E | P | O

- Investigation team mobilised
- Witness statements
- Evidence collection
- H&S Reps
- Data gathering
- Create TRIM folder location

### 3. Timeline

What occurred and when



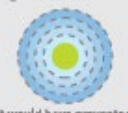
Pre-event      Post-event

### 4. ICAM analysis / chart

Organisational	Task/ Environmental Conditions	Actions	Controls	Outcomes
[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]

### 5. Actions for recommendation

**Key root causes**



What would have prevented the event – technical vs behavioural


Ways to focus action

- Criticality
- Vulnerability
- Prevalence


**Key actions**

- Two or three things that if done would stop this from occurring again.


### 6. Report back to management



Investigation Leader




Leadership Team




→

70% Report complete  
30 minutes  
Questions  
Agreement  
Next steps


### 7. Executive challenge session



Investigation Leader




Investigation Team




60 minutes  
Problems/facts  
Solutions

### 8. Finalise Report





90%–95%



Clearly articulate what went wrong and how we are going to fix it.

### 9. Communicate findings

Learning to prevent reoccurrence:

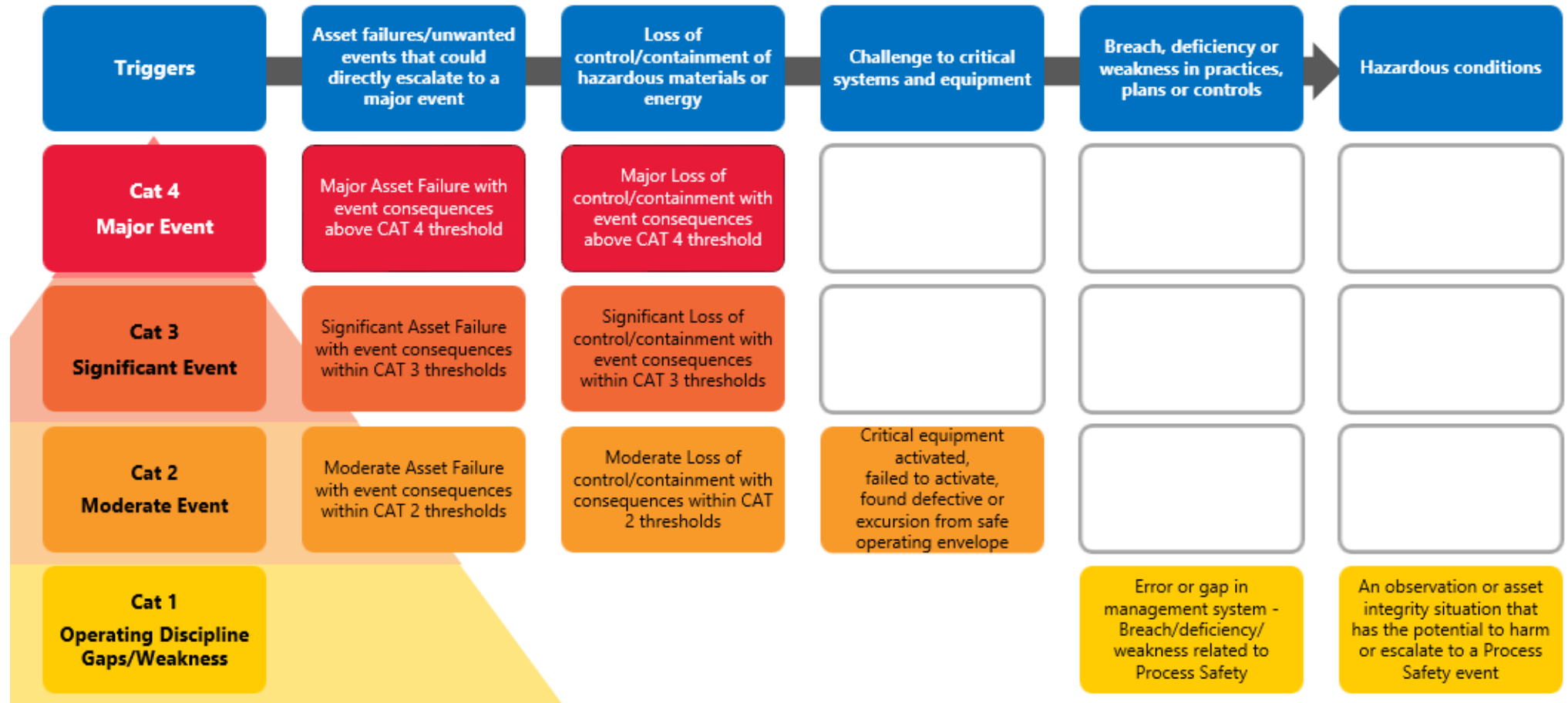
- Special meetings
- All staff?
- H&S Reps and stakeholders
- Town hall?
- H&S / Central HSE Committees.

### % Complete

	Draft	Interim	Final
Cat 3&4	70:	20:	10
	7 days	14 days	21 days



### 9.5 Attachment 5 – Process Safety - Event Categorisation Flowchart



## 9.6 Attachment 6 – Process Safety - Material release threshold quantities for different materials and pse tier criteria for pulverised fuel release

9.6.1 Table 1 - Non-Toxic Material Release Threshold Quantities for LOPC

LOPC is recordable as a PSE only when release is 'acute', i.e. exceeds a threshold quantity in any one hour period.	Tier 1 (Categories below refer to API/ANSI Standard RP 754)		Tier 2 (Categories below refer to API/ANSI Standard RP 754)	
	Outdoor Release	Indoor Release	Outdoor Release	Indoor Release
<b>Material Hazard Classification</b> <i>(with example materials)</i> Flammable Liquids with Boiling Point ≤ 35°C (95°F) and Flash Point < 23°C (73°F) – e.g. • <i>Liquefied petroleum gas (LPG)</i>	500kg (1,100lb)	250 kg (550lb)	50 kg (110lb)	25 kg (55lb)
Flammable Liquids with Boiling Point > 35°C (95°F) and Flash Point < 23°C (73°F) – e.g. • <i>Gasoline/petrol, toluene, xylene</i>	1,000kg (2,200lb) or 7bbl	500kg (1,100lb) or 3.5bbl	100kg (220 lb) or 1bbl	50 kg (110 lb) or 0.5bbl
Combustible liquids with Flash Point ≥ 23°C (73°F) and ≤ 60°C (140°F) – e.g. • <i>Diesel, most kerosenes</i>	2,000kg (4,400lb) or 14bbl	1,000kg (2,200lb) or 7bbl	100kg (220 lb) or 1bbl	50kg (110 lb) or 0.5bbl
Liquids with Flash Point > 60°C (140°F) released at a temperature above its flash point – e.g. • <i>Molten Sulphur,</i> • <i>Lubricating or insulating oil</i>	2,000kg (4,400lb) or 14bbl	1,000kg (2,200lb) or 7bbl	100kg (220 lb) or 1bbl	50 kg (110 lb) or 0.5bbl
Liquids with Flash Point > 60°C (140°F) released at a temperature below its flash point – e.g. • <i>Molten Sulphur,</i> • <i>Lubricating or insulating oil</i>	Not applicable	Not applicable	1,000kg (2,200lb) or 7bbl	500kg (1,100lb) or 5bbl

9.6.2 Table 2 - Toxic Material Release Threshold Quantities for LOPC

LOPC is recordable as a PSE only when release is 'acute', i.e. exceeds a threshold quantity in any one hour period.	Tier 1 (Categories below refer to API/ANSI Standard RP 754)		Tier 2 (Categories below refer to API/ANSI Standard RP 754)	
	Outdoor Release	Indoor Release	Outdoor Release	Indoor Release
<b>Material Hazard Classification</b> <i>(with example materials)</i> Other Packaging Group III materials – includes: • <i>Sulphur</i>	2,000kg (4,400lb) or 14bbl	1,000kg (2,200lb) or 7bbl	100kg (220lb) or 1bbl	50kg (110lb) or 0.5bbl
Strong Acids or Bases – includes: • <i>Sulphuric acid,</i> • <i>Sodium hydroxide (caustic),</i> • <i>Calcium hydroxide (lime)</i>	2,000kg (4,400lb) or 14bbl	1,000kg (2,200lb) or 7bbl	100kg (220 lb) or 1bbl	50kg (110 lb) or 0.5bbl

9.6.3 Table 3 - Other Material Release Threshold

LOPC is recordable as a PSE only when release is 'acute'.		Tier 1	Tier 2			Tier 3
Pulverised Fuel (PF)	LOPC Location	Indoor or Confined Area	Indoor or Confined Area	Indoor or Confined Area	Outdoor or Opened Area	Outdoor or Opened Area
	Is coal dust in suspension post LOPC?	Yes	Yes	No	Yes	No
	Visibility at vicinity post LOPC	< 3m	> 3m	Not Applicable	Not Applicable	Not Applicable



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 Amended: 06/23  
 Review Due: 05/25



9.6.4 Table 4 – Pulverised Fuel (PF) PSE Tier Criteria for LOPC

LOPC is recordable as a PSE only when release is 'acute', i.e. exceeds a threshold quantity in any one hour period.	Tier 1 <i>(Categories below refer to API/ANSI Standard RP 754)</i>		Tier 2 <i>(Categories below refer to API/ANSI Standard RP 754)</i>	
	Outdoor Release	Indoor Release	Outdoor Release	Indoor Release
<b>Material Hazard Classification</b> <i>(with example materials)</i> TIH Hazard Zone B materials, includes: <ul style="list-style-type: none"> <li>Chlorine (<math>Cl_2</math>)</li> </ul>	25 kg (55lb)	12.5 kg (27.5lb)	2.5 kg (5.5lb)	1.3 kg (2.8lb)
TIH Hazard Zone C materials, includes: <ul style="list-style-type: none"> <li>Sulphur dioxide (<math>SO_2</math>)</li> </ul>	100kg (220lb)	50kg (110lb)	10 kg (22lb)	5 kg (11lb)
TIH Hazard Zone D materials, includes: Ammonia ( $NH_3$ ) <ul style="list-style-type: none"> <li>Carbon monoxide (<math>CO</math>)</li> </ul>	200 kg (440lb)	100kg (220lb)	20 kg (44lb)	10 kg (22lb)