



INCIDENT MANAGEMENT

SOP #19000-012

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SCOPE AND PURPOSE

The purpose of this Standard is to identify and communicate Suncor St. Clair Ethanol minimum requirements and associated procedures/processes/work practices which are to be utilized and implemented following the initial response to, and identification of, an incident with loss (IWL) or an incident no loss (INL). This standard outlines steps and documents available to support the classification, investigation and identification of causes and any potential learning(s).

This standard establishes the minimum requirements to ensure incidents are consistently reported, classified, investigated, communicated and corrective actions (as needed) are applied. This document does not include initial response activities following an event.

This standard applies to all SCEP employees, contractors, sub-contractors, consultants and agents of SCEP and any deviation to this standard requires approval through the SCEP Management of Change Process.

Contractors and sub-contractors are required to comply with the requirements set out in this standard, as well as implement their own Incident Management Standard.

1.0 Roles and Responsibilities

The following are positions with assigned responsibilities for work involving the identification, reporting, investigation and implementation of corrective actions related to incidents:

Environment, Health and Safety Team Lead -

- Support the development, implementation and maintenance of the Standard in compliance with Suncor and regulatory requirements
- Support Incident Ownership and workflow, as well as investigation and corrective actions
- Support the consistent application of the Alcohol and Drug process
- Oversee coordination of training employees
- Assist with the maintenance of records and documents pertaining to this standard
- Coordinate summaries and reviews of incidents and associated corrective actions, as appropriate
- Ensure that non-conformances with the Standard and/or the law, are subject to appropriate corrective action
- Support monitoring of effective implementation of Standard through regular reviews

Discipline Managers (Operations, Maintenance, Technical, etc.) -

- Accountable to ensure that hazards, incidents with loss (IWL) and incident no loss (INL) are consistently reported and entered into Enablon
- Support and/or actively participate Incident Ownership, workflow, risk assessment, investigation and corrective action development and implementation as required
- Support the consistent application of the Suncor Alcohol and Drug process
- Coordinate the training of employees

Shift Supervisor/Lead Hands are responsible to -

- Accountable as incident initiators to ensure that hazards, incidents with loss (IWL) and incident no loss (INL) are consistently reported and enter into Enablon within 24 hours of an event, wherever practicable
- Consistently apply the Suncor Alcohol and Drug process
- Support and/or actively participate Incident Ownership, workflow, risk assessment, investigation and corrective action development and implementation as required

Permit Receiver/Worker is responsible to -

- Consistently identify and report all hazards, incidents with loss (IWL) and incident no loss (INL)
- Support and participate in follow-up activities, including; data collection, investigation, corrective action development and implementation

2.0 Incident Management Process

4 key steps must be outlined and executed to support effective incident management -

- 1) Actions following immediate response activities - respond to incident (referenced -outside of the scope of this document)
- 2) Classify Incident – Incident Initiator entry into Enablon
- 3) Plan/investigate/identify causes and recommend actions
- 4) Learn from incidents

2.1.1 Actions Following Immediate Response Activities

Steps to support immediate response to incidents at the St. Clair Ethanol plant are outside of the scope of this document. Immediate response activities must be taken to eliminate or ameliorate potential adverse impacts associated with the event and/or the associated response.

Immediate response activities are outlined in standard operating procedures and work practices, including but not limited to; 20000-005 Emergency Response Procedure, 20000-003 Spill Prevention and Contingency Plan, existing Emergency Pre-plans etc.

2.1.2 Regulatory Notifications

Forthwith Municipal Notifications are made through the Chemical Valley Emergency Coordination Organization (CVECO) within 10 minutes of event – following the requirements and contact information outlined in Section 2.7 of 20000-005 Emergency Response Practice.

Forthwith notification to the Ontario Ministry of the Environment and Climate Change (MOECC) and Environment Canada are made in accordance with 20000-002 Spills Assessment and Reporting Procedure.

Forthwith notification to the Ontario Ministry of Labour (MOL) is the responsibility of the Shift Supervisor/On-scene commander and must be made in accordance with critical injury information outlined on “Incident Reporting Form – Mandatory Enablon Attachment” and the Emergency Response Placemats for a critical injury. (EH&S and HR are to be engaged for other workplace non-critical injuries. EH&S will support reporting as required to MOL via Form 6, Form 7 and Form 8 within 3 days of the injury via EHS/HR)

2.1.3 Community Notifications

Community Notifications are to be made in accordance with the CAER Industry Info Line Process outlined in Section 2.8 of 20000-005 Emergency Response Practice.

2.1.4 Internal Notifications

Following initial response activities responsible personnel are to ensure initial notifications activities are undertaken based on the **actual** consequences of the incident - not potential (what could, or might have,

happened). Table 1 outlines the minimum notifications – as well as the order of escalation. Please note that the Director of Ethanol Operations is responsible to determine the need for legal, corporate insurance and/or communications support for all events for which immediate verbal notification is required (A), with the exception of those events for which the command center is stood up and the Incident Commander assumes this responsibility.

Legal support must be initiated if –

- There is a reasonable expectation of regulatory investigation, enforcement, or litigation (including fines, penalties, or other legal action);
- The event may pose a threat to Suncor’s license to operate; or
- The event has the potential to damage Suncor’s reputation; or
- There is uncertainty as to whether any of the above criteria apply

Table 1 – Initiating Notifications

Actual Consequence Ranking (utilizing consequence receptor table on SUN-00191 Suncor Risk Matrix)	Order of Escalation Notifications – left to right (i.e. Shift Supervisor/Lead Hand notifies Leadership Team Member, Leadership Team Member notifies director)				
	Shift Supervisor/Lead Hand	Leadership Team Member/Manager	Director of Ethanol Operations	VP Operations and Logistics	SVP Refining and Logistics
C6	A and B	A	A	A	A
C5	A and B	A	A	A	A
C4	A and B	A	A	A	
C3	A and B				
C2	A and B				
C1	A and C				
Legend					
A	Immediate Verbal Notification				
B	Verbal and Enablon Notification within one business day				
C	Entry into Enablon in 2 business days				

2.1.5 RMT Activation

Events which trigger the activation of the response management team are outlined in Section 3 of 20000-005 Emergency Response Practice. Activation of the RMT is the responsibility of the Incident Commander.

2.1.6 Alcohol and Drug Assessment

Immediately following every incident, the shift supervisor is responsible to assess if post incident testing is applicable.

The shift supervisor must ask the questions and record the information outlined on the “Incident Reporting Form – Mandatory Enablon Attachment”

- 1) Was a drug and alcohol test requested (see considerations below)? Yes/No**
- 2) Was the incident serious – see triggering events below (if yes go to next question –if no, no further information required): Yes/No**

Serious/Triggering: This incident resulted in or could have resulted in:

- A fatality
 - A serious personal injury to a worker (medical treatment or worse), a member of the public or any other individual
 - An incident with the potential for serious personal injury to a worker (medical treatment or worse), a member of the public or any other individual
 - An environmental incident or potential environmental incident with significant consequences
 - A significant loss or damage to property or equipment
 - A significant or a potential significant loss of Company revenues or the payment of damages
 - Any other serious work incident or an incident without loss considered to have had potential for more serious consequences.
- 3) Was the incident serious but there is a credible explanation.** If no – contact your leader and initiate the testing process and complete “Alcohol and Drug Test Leader’s Documentation Form – Post Incident” Form. If – yes, still complete “Alcohol and Drug Test Leader’s Documentation Form – Post Incident” Form.

2.2.0 Classification of Incident - Incident Initiator Entry into Enablon

Following Response Activities the Shift Supervisor or delegate (acting as the incident initiator) is responsible to ensure the incident type is selected (see definitions below), all data fields are completed using data gathered (or to be gathered) during the response process, relevant sections of the “Incident Reporting Form – Mandatory Enablon Attachment” are completed and attached, and all **actual and worst credible potential consequences** selected as appropriate utilizing the consequence receptors table on **SUN-00191 Suncor Risk Matrix**. (SUN—00217 Injury and Illness Classification Guideline may be utilized to support review of injury and illness actual and potential consequences)

- **Incident with loss (IWL)** is any incident resulting in an injury to a person or damage to or loss of equipment, material, quality, product, process, the environment, business, and finances. An example would be a pipe wrench falling from a walkway and hitting a person on the head or breaking a valve. **Note: if IWL includes any release of material from its primary containment (even water) or any injury occurs, consult SUN-00059 Process Safety – Classification of Loss of Primary Containment Incidents and SUN—00217 Injury and Illness Classification Guideline**

Note: The material release component and/or injury component of “Incident Reporting Form – Mandatory Enablon Attachment” must be completed and attached when the short form is entered into Enablon.

- **Incident no loss (INL)**, is any incident that did not, but under different circumstances, could have, resulted in injury to a person or damage to or loss of equipment, material, quality, product, process, the environment, business, and finances. An example would be a pipe wrench falling from a walkway and landing on the ground below.
- A **hazard** is a danger, risk, or something that has the potential to cause harm when there is no action or source of energy. An example of a hazard is a pipe wrench lying on a walking path.

Note that classification and consequence development activities are to be entered into Enablon per the “**Enablon – Initiator” training** provided by SCEP – with timing of input requirements outlined in **Table 1 – Initiating Notifications (B,C)**

Following the selection of the incident type (IWL, INL, Hazard) and other required field, the incident details must be entered into the free text box. Incident details are to include a minimum of who/what/when/where/why/how.

An “Incident Reporting Form – Mandatory Enablon Attachment” must be attached to each event to address A&D questions at a minimum, and must cover material release and injury data where relevant.

All actual and worst credible potential consequences selected as appropriate with consideration for all of the consequence receptors table on **SUN-00191 Suncor Risk Matrix**. Every actual consequence must have a corresponding potential consequence that is equal to or greater than the actual. (See Enablon Initiator training for examples of worst-credible).

Worst Credible Consequence: a credible consequence that would cause the most harm. The risk is assessed based on the worst outcome that could reasonably happen.

Please note that the “Dropped Objects Consequence Calculator” and the “Quantity of Release Calculation Tool” are available to assist with actual and potential consequence outcomes related to dropped objects and material release(s) and are located at [stclair\(\\file128\)\Operations\Employee Resource Centre\Forms\Incident Report Form and Instructions](#)

When identifying worst credible potential consequences, it is important to frame the inherent risk, identify the controls in place which actively manage the potential consequence.

Inherent risk: risk if no controls (i.e. engineering controls, monitors, procedures, preventative maintenance) or moderating factors are in place.

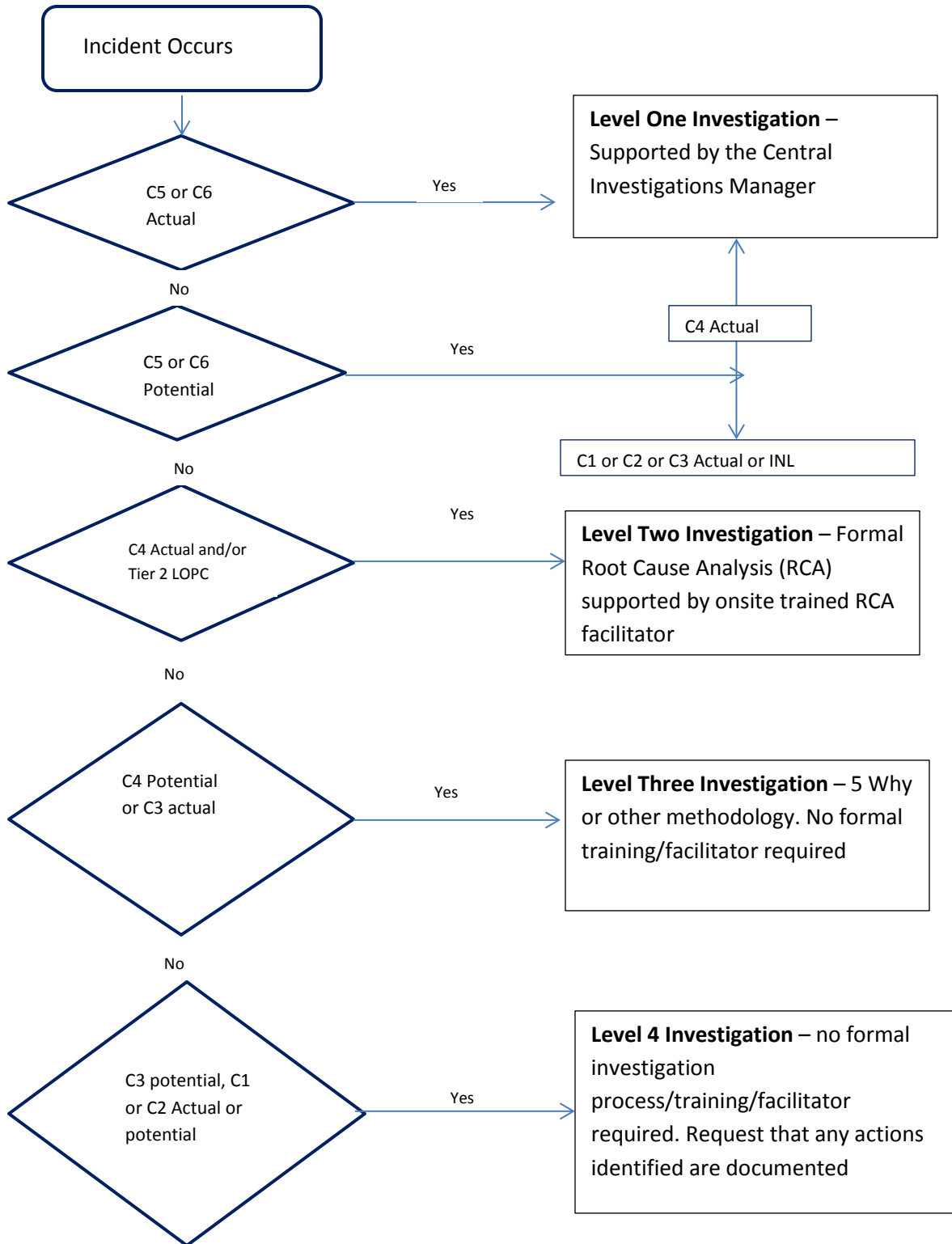
Following the completion of the remaining data fields an event owner must be selected.

The Event Owner is selected based on the potential risk consequence of the event and the resulting investigation level. **Note the appropriate Incident Owner must be manually entered into Enablon – the system defaults to the initiators supervisor.** Please see chart below.

Investigation Level	Owner
Level 4	Shift Supervisor/Operations Coordinator/Warehouse Coordinator
Level 3	Member of site leadership team (Based on discipline)/Operations Coordinator
Level 2	Director – Ethanol Operations
Level 1	VP – Operations and Logistics

Following the entry of an appropriate Incident Owner, the initiator will hit the submit button – forwarding the event to the Incident Owner for further review and workflow.

Please see the incident investigation level decision tree below. Note: all investigation levels are auto calculated by Enablon using the highest actual and potential consequence identified, with the **exception of Tier 2 LOPC – which must be manually overridden;**



2.2.1 Incident Owner Review, Classification and Workflow of Incident

An Incident Owner will receive an email from the Enablon system immediately following incident entry and **within 3 business days** of receiving notice, will review the event per requirements outlined in **Enablon – Incident Owner** training and as detailed below;

An Incident Owner is responsible to confirm internal and regulatory notifications have been completed, refine initial data, seek out additional information and analyze to determine actual and potential consequence levels, level of investigation and final ownership.

Review and update of an event report will occur utilizing the support of Subject Matter Experts (SME’s) where applicable, and any/all of the following documentation;

- consequence receptors table on SUN-00191 Suncor Risk Matrix,
- SUN—00217 Injury and Illness Classification Guideline (to support review of injury and illness actual and potential consequences supporting **SIFp** classification),
- SUN-00059 Process Safety – Classification of Loss of Primary Containment Incidents (to support **LOPC** classifications),
- Available SCEP tools – (For example, the “Dropped Objects Consequence Calculator” and the “Quantity of Release Calculation Tool” to confirm and/or update actual and potential consequence entries.)

The Incident Owner shall consult the business area Senior Legal Advisor to determine the need for Legal Privilege where:

- There is a reasonable expectation of regulatory investigation, enforcement, or litigation (including fines, penalties, or other legal action);
- The event may pose a threat to Suncor’s license to operate; or
- The event has the potential to damage Suncor’s reputation; or
- The Incident Owner is unsure whether any of the above criteria apply.

Review of incident investigation level and applicability of over-ride for Tier 2 LOPC or for any circumstances supporting additional review. Please see the “Incident Investigation Level Decision Tree” in section 2.20

If	Then
De-escalation of Level 1 to Level 2, or Escalation of Level 2 to Level 1	Business Area Vice President/General Manager/Director and Vice President of EH&S must give approval
De-escalation of Level 2 to Level 3, or Escalation of Level 3 to Level 2	Business Area Director and Business Area EH&S Director must give approval
De-escalation of a Level 3 to Level 4, or Escalation of a Level 4	Incident Owner’s decision – must give explanation

Following initial review and data collection activities, **the Incident Owner must accept or reassign ownership and steward the completion of any impact forms (per Enablon –Add an Impact) including additional data gathering and coordinate investigation activities.**

The Incident Owner shall initiate the Corporate Adjudication process when agreement cannot be reached on Incident Ownership or classification. The decision of Corporate Adjudication process will be final.

The Incident Owner shall proceed with the investigation based on original classification while reviews and adjudications are in progress to ensure a timely investigation is started.

The Incident Owner shall update the incident record and adjust the level of investigation to align with the Standard if there is change to the classification.

2.3 Plan/Investigate/Identify Causes and Recommend Actions

The Incident Owner shall ensure individuals assigned to Lead Investigator and Causal Analysis Facilitator roles for Level 2, and 3 investigations are formally trained or experienced for the level of investigation.

The Incident Owner is responsible to determine if any investigation requires legal privilege and engage the Business Unit Senior Legal Advisor

Investigation Team members shall include Subject Matter Experts (SMEs) and individuals who are responsible for and familiar with the assets, projects, and activities related to the incident.

Level One Investigation

Level One Investigations will be initiated by the Incident Owner (VP of Operations of Logistics) with resources, support and process provided and stewarded by the Central Investigations Manager in compliance with the “**Corporate Level 1 Investigation Process**”. Entry will include, but is not limited to, the following -

- Steering Team
- Incident Investigation Project Manager
- Investigation charter
- Executive Sponsor

Level Two Investigation

A Level Two Investigation includes a Formal Root Cause Analysis (RCA) supported by trained RCA facilitator. The Incident Owner is responsible to identify RCA facilitator, with support from the site leadership team (to confirm availability/workload etc.).

Once assigned, the RCA facilitator is responsible to identify the investigation team, (in consultation with the Incident Owner) conduct detailed data gathering activities, schedule investigation meetings and generate a draft investigation report with findings (utilizing the TapRoot method where appropriate) for review and submission to the Incident Owner.

The Incident Owner will review the draft investigation report with the site leadership team and/or affected subject matter experts (SME’s) and receive approval prior to submission to the RCA facilitator for finalizing.

Once finalized, the Incident Owner is responsible to enter cause code data and corrective actions into Enablon including (but not limited to);

- Lead Investigator
- Documented Investigation Plan
- Names and titles of investigation team members
- Root Cause Analysis (RCA)
- Corrective actions to address root causes identified
- Identification of OEMS element deficiencies and Operational Discipline behaviors related to the causes

Level Three Investigation

A level three investigation may be conducted utilizing a “5 Why” or other acceptable investigation methodology. 5- Why analysis training is available at the site and is to be reviewed/provided ahead of leading a 5-why investigation. The “5 Why Corrective Action Form” available at \\file128\stclair\Operations\Employee Resource Centre\Forms\Incident Report Form and Instructions may be utilized to record the investigation details and findings. The Incident Owner is responsible to conduct the investigation or assign an investigator as appropriate. The incident investigator is then responsible to select an investigation team, plan the investigation and assign and capture tasks in relation to investigation plan. The Incident Owner is responsible to review and approve incident causes, and once approved, enter into the Enablon system. Entry is to include investigation findings, basic cause and action or corrective action (only if required by investigation findings).

Level 4 Investigation

No formal investigation process/training/facilitator is required to support a level 4 event, though 5-why analysis or other acceptable methodology may be utilized at the Incident Owners’ discretion. It is requested that, even if no formal investigation methodology is utilized, any actions taken are recorded by the Incident Owner into Enablon for tracking and improvement purposes prior to closure.

2.3.1 Risk Rank

Following the completion of investigation, the event must be risk ranked. The first step in this process is to adequately define the risk statement (worst credible consequence), followed by determining the inherent risk (risk with no controls in place).

The next step is to identify the controls already in place to manage the risk ((ex. guard rails (engineered), permits (administrative), respiratory protection (PPE), etc.)).

Finally determine the residual risk and enter this risk rank with the associated rationale into Enablon.

Any corrective actions would be considered future risk treatment and should not be considered when risk ranking event.

2.4 Learn from Incidents

For SIFp and Tier 2 LOPC event, attempts will be made to issue the lessons learned document within 45 days of the incident report whenever practicable, utilizing the “**Incident and Investigation Findings Summary Template**” available at \\file128\stclair\Operations\Employee Resource Centre\Forms\Incident Report Form and Instructions\Lessons Learned.

Draft lessons learned will be approved by the Incident Owner in consultation with the leadership team prior to submission to DownstreamEH&S@suncor.com

Incident Owners shall develop an Incident Alert at any point during the incident investigation where a risk or hazard is discovered that may require immediate attention within the business area or potentially in other business areas in Suncor.

Coordinate review and approval with the leadership team for Incident Alerts and Incident Investigation Finding Summaries generated for distribution within the relevant business area -

- Coordinate the distribution of Incident Alerts and Incident Investigation findings Summaries within the BU/FN and monitor and report on the status of review and follow up action plans
- Maintain Incident Alerts and Incident Investigation Finding Summaries in the Suncor Safety Communications database

Completed Incident and Investigation Summary Findings Template is to be emailed by the Incident Owner to DownstreamEH&S@suncor.com for entry into the company repository and distribution throughout Suncor.

A St. Clair Ethanol Dashboard will also be maintained within the Enablon system by the EH&S Team Lead to ensure ready access to the following information -

1. New Incidents - created in the last 7 days
2. Significant Incidents - Level 1 & 2 Investigations, Actual C3+, SIFp
3. ERNC
4. LOPC
5. Open Actions by Event
6. Open Events >30 days
7. Injuries YTD

3.0 Review/Revision

A review of this document will occur following a regulatory change or at a minimum of every 5 years utilizing the “**EH&S SOP Review and Sign-Off Sheet**” \\file128\stclair\Operations\Employee Resource Centre\Procedures\SOP's & OGS's. The Document Control Administrator will notify the Environment Health and Safety Team Lead - who will steward the review and will engage the Operation Coordinator to support the review from an operations and maintenance perspective.

Other events which trigger review (MOC, Incident Findings) include processes which will initiate review.

4.0 Records

The event record in Enablon is the controlled record repository. All relevant documentation must be attached to the event report.

5.0 Definitions

Critically Injured - injury of a serious nature that:

- Places life in jeopardy
- Produces unconsciousness
- Results in substantial loss of blood,
- Involves the fracture of a leg or arm (including ankle or wrist) but not a finger or toe,
- Involves the amputation of a leg, arm, hand or foot but not a finger or toe,
- Consists of burns to a major portion of the body (i.e. 1/3 of the face)
- Causes the loss of sight in an eye

Event: Something unplanned or unexpected, or an unwanted outcome of a business activity

Incident with loss (IWL) is any incident resulting in an injury to a person or damage to or loss of equipment, material, quality, product, process, the environment, business, and finances. An example would be a pipe wrench falling from a walkway and hitting a person on the head or breaking a valve.

Incident no loss (INL), also previously known as Near Miss, is any incident that did not, but under different circumstances, could have, resulted in injury to a person or damage to or loss of equipment, material, quality, product, process, the environment, business, and finances. An example would be a pipe wrench falling from a walkway and landing on the ground below.

Inherent risk: risk if no controls (i.e. engineering controls, monitors, procedures, preventative maintenance) or moderating factors are in place.

A **hazard** is a danger, risk, or something that has the potential to cause harm when there is no action or source of energy. An example of a hazard is a pipe wrench lying on a walking path.

Worst Credible Consequence: a credible consequence that would cause the most harm. The risk is assessed based on the worst outcome that could reasonably happen.

6.0 References

- SUN-00059 Process Safety – Classification of Loss of Primary Containment Incidents
- SUN-00217 Injury and Illness Classification Guideline
- SUN-00119 Loss of Primary Containment (LOPC) Quantity of Release Estimation Tool
- SUN-00191 Suncor Risk Matrix
- Dropped Objects Consequence Calculator” and the “Quantity of Release Calculation Tool
- Enablon – Initiator
- Enablon – Incident Owner
- Enablon – Add an Impact
- Incident Management Interactive Process Map
- 5 Why Corrective Action Form
- Corporate Level 1 Investigation Process

END OF PROCEDURE

REVISIONS			
No.	Date (mm/dd/yyyy)	Author	Description
0	05/31/2017	L. Nauta	Created