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Sakhalin Energy Investment Company Ltd.

Incident Reporting and Follow-Up Standard

Стандарт по предоставлению отчетности о происшествиях и последующих мероприятиях

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Revision Details

Rev	Location of Change	Brief Description of Change
01	N/A	First issue for use.
02	Appendix 1	Detailed explanation of work related and not work related incidents is added (items 4-8). Formal introduction of the role of the HSE Assurance Team in incident action follow-up and closure (items 20, 27 & 39-44)
03	Throughout the document	Introduction of process safety events (PSE) as separate type of incidents with own criteria for classification, reporting and investigation and reference to SEIC Process Safety Event Procedure. Inclusion of Social/community risks into assessment criteria for actual and potential incidents. Requirements for incident owners and IRP members raised one level up for low risk incidents. Tightened requirements for repeat incidents occurred at location with the similar circumstances. Detailed description of roles & responsibilities for Investigation Team Leaders and requirements for their seniority level. Introduction of "5 Whys" form for low risk incident investigations. Description of corporate LFI process with roles & responsibilities of involved parties. Introduction of Templates for LFI awareness and action alerts. TOR for High Risk Incident Investigations updated to meet the latest Shareholders requirements. Additional requirements for incident investigation and review process in relation to incident owners and investigation team leaders.
04	Throughout the document	Complete reformatting of document in line with new corporate format. Inclusion of specific event types at HPF that require reporting to RTN. Roles and responsibilities of key parties have been added. Reference to the 'Shareholders Notification' procedure now included. Additional information and guidance has been added to each key step of the investigation and reporting processes. Guidance on when to use the Tripod beta methodology has been amended. More information on the LFI process has been included. A requirement to provide additional information on environmental follow-up from incidents and challenge at IRP's has been included. The new definition of High Potential incident is also included. Appendix included highlighting potential RAM classifications of LSR violations. Appendix has been added to provide guidance on use of the 5 WHYs methodology. 5 WHYS reporting form has been updated to include information specific to reliability incidents and also includes examples of underlying causes (risk factors).

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1 Introduction

1.1 Purpose

This Standard sets minimum requirements for reporting, classifying, investigating and follow-up for all HSE incidents, including near misses.

All HSE incidents relating to Sakhalin Energy's activities shall be reported to measure the effectiveness of management controls. Incidents shall be analysed and reviewed, learning disseminated, actions taken and followed up to prevent recurrence.

Incident reporting and follow-up includes:

- 1. Notification;
- 2. Investigation;
- 3. Analysis;
- 4. Recommendations;
- 5. Implementation of actions arising from the investigation;
- 6. Dissemination of learning.

1.2 Scope

The scope of this Standard is the reporting, classification, investigation and follow-up of all HSE and Social incidents, including near misses and potential incidents (specific information on process safety events is reflected in the Process Safety Events (PSE)/ Wells Process Safety Incident (WPSI) Management Procedure 1000-S-90-04-P-0202-00-E. Follow-up includes notification, analysis, recommendations, implementation of actions arising from the investigation, dissemination of learning.

All HSE incidents and near misses occurring in activities executed for Sakhalin Energy shall be reported and recorded in the Fountain Incident Management (FIM) database. Fountain is the official tracking system used for HSE incident reporting.

This document applies to all Sakhalin Energy Assets, Facilities, Operations, Projects and Activities, including activities undertaken by any Contractor on behalf of the Company.

Incidents at Hazardous Production Facilities requiring reporting to Rosteknadzor (RTN)

There are certain event types, at company production Assets (Hazardous Production Facilities), which require reporting in the format of a 'Technical Investigation Act (report)'. Incident events that require immediate reporting to RTN can be seen below:

- 1. Failure or damage of the devices used at a hazardous industrial facility leading to the unscheduled shutdown of the facility.
- 2. Deviation from the established process procedure during the production operation causing the safety trip and leading to the unscheduled shutdown of the facility.
- 3. Fire at the production facility causing damage to structures, devices, communication lines, telemetry, and power supply.
- 4. Hazardous and toxic liquid leak through flanged or threaded joints, or sealing elements over 10 kg in one hour (e.g. continuous leak with an intensity ≥ 10 kg/h).
- 5. Gaseous substance leak causing a trip leading to the unscheduled shutdown of the facility.
- 6. Mechanical damage of the power lines leading to the shutdown of the facility.
- 7. Structural damage of the production facility leading to the facility shutdown and repairs.
- 8. Damage (bend, deformation) of lifting equipment metal structures (or their elements) during production operations, leading to the necessary unscheduled shutdown of the lifting equipment to carry out the metal structure repairs is regarded as a production facility incident connected with lifting equipment usage.



The 'Technical Investigation Act (report)' shall be the primary report produced for submission to RTN. The investigation shall be conducted by a dedicated Commission.

The Commission shall be established by an order issued by the Production Director. In certain cases, taking into account the incident scale and it consequences, the Commission shall be established by an order issued by the Chief Executive Officer.

For further information on this process, see the <u>'Procedure for Investigation and Registration of Incidents at</u> <u>Hazardous Production Facilities</u>' or contact the Industrial Safety Subdivision within C-HSE Department.

Shareholder notification in the event of an emergency situation

In the event of an emergency situation, it is important that Sakhalin Energy Shareholders are notified and informed of events that lead to serious injury, environmental damage or Asset damage. There are a number of specific emergency classifications for various events that are required to be reported, in a particular format, to Shareholders.

It is important that company Asset and Functional managers are familiar with these requirements. These requirements can be found within the 'Shareholders Notification procedure an Emergency at (Sakhalin Energy Investment Company Ltd.) Facilities' (1000-S-90-01-P-1307-00-E).

This Company Standard applies to:

- All SEIC managed sites and SEIC personnel.
- All SEIC contractor (or subcontractor) managed sites and personnel, where SEIC has "prevailing influence" and it has therefore been decided that contractors (or subcontractors) must report man hours/exposure and incidents (Mode "1" or "2" contractors or subcontractors).

This Company Standard does not apply to:

- All SEIC contractor (or subcontractor) managed sites and personnel, where SEIC has no "prevailing influence" and it has therefore been decided that contractor (or subcontractor) is not obliged to report man hours/exposure and incidents (Mode "3" contractors or subcontractors).
- Reliability-related incidents: Incidents that result in a reduction of asset or service availability due to controllable losses, or that result in higher than expected production costs, or that involve product quality that have no off-site impact. This includes equipment failures, process upsets, fouling, higher than budgeted repair costs, reduction in process yields or product recovery. Additionally this will include the degradation or failure of plant or equipment resulting solely from normal wear and tear.
- If the incident is reliability-related (non-HSE), then the requirements of the 'Mitigate Threats to Availability Process' (MTA) procedure <u>1000-S-90-01-P-1283-00-E</u> will apply.



1.3 Definitions and Terminology

Incident	An <u>unplanned</u> event or chain of events that has resulted in an injury, illness, or damage to assets, the environment or company reputation and/or social/community impacts (including violation of human rights).
Near Miss (NM)	An incident <u>without actual consequences</u> that under <u>circumstances</u> (or by chance) could have caused an injury, illness, or damage to assets, the environment or company reputation and/or social/community impacts (i.e. hazard was released but did not cause harm).
Potential Incident / Unsafe acts (PI)	An <u>unsafe practice/act or hazardous situation</u> that could result in an incident if the situation escalated (i.e. a hazard was not released because of management system controls).
	<u>Note:</u> PI's with potential consequences of 3 or less on the RAM shall be recorded in an appropriate local system (e.g. Observation and Intervention card).
High Potential Incident (HiPo)	Is an incident for which the potential consequences are assessed with a RAM severity of 4 or 5.
Significant Incident (SI)	Is an Incident that has actual Consequences to people, environment, assets or reputation and/or social/community impacts with a Severity rating of 4 or 5 as per <u>"Risk Assessment Matrix"</u> (RAM).
Process Safety Events (PSE)	Are those which are associated with the management of hazards that give rise to major accidents involving the release of potentially dangerous materials, release of energy (such as fire or explosion) or both.
Wells Process Safety Incidents (WPSI)	Are defined as incidents or unsafe conditions that may result in, or have the potential to escalate to, loss of well control or impairment of wellbore integrity, and include any actual or potential unplanned or uncontrolled release of well effluents from Assets or facilities operated by Wells.
Work Related incident	An Incident or exposure in the work environment, which is or should be subject to management controls that has caused or contributed to the resulting condition or significantly aggravated a pre-existing injury/illness.
Non Work Related incident	Where company controls are not or should not be expected to be in place.
Occupational Injury	Any injury such as a cut, fracture, sprain, amputation etc, which results from a work-related activity of from an exposure involving a single incident in the work environment.
Occupational Illness	Any abnormal condition or disorder of an employee, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. This includes both acute and chronic injuries, illnesses and diseases. They may be caused by inhalation, absorption, ingestion of or direct contact with the hazard, as well as exposure to physical and psychological hazards.
Fatality (FAT)	Death.



Lost Workday Case (LWC) (Lost Workday Illness)	Any work-related injury or illness, other than a fatal injury, which results in a person being unfit for work on any day after the day of occurrence of the occupational injury. 'Any day' includes rest days, weekend days, leave days, public holidays or days after ceasing employment. (further details see – Shell PMR for definitions)
Restricted Workday Case	Any work-related injury other than a fatality or lost work day case which results in a person being unfit for full performance of the regular job on any day after the occupational injury.
(RWC)	(further details see – Shell PMR for definitions)
Medical Treatment Case	Cases that are not severe enough to be reported as fatalities or lost work day cases or restricted work day cases but are more severe than requiring simple first aid treatment.
(MTC)	(further details see – Shell PMR for definitions)
First Aid Case	Cases that are not sufficiently serious to be reported as medical treatment or more serious cases but nevertheless require minor first aid treatment.
(FAC)	(further details see – Shell PMR for definitions)
No Treatment Case	Where an illness or injury does not require First Aid treatment.
(No Treatment Illness)	(further details see – Shell PMR for definitions)

FIM HPF	Fountain Incident Management Hazardous Production Facility
HSESAP	Health, Safety, Environment, Social Action Plan
IRP	Incident Review Panel
LFI	
— •••	Learning form Incidents
LOPC	Loss of Primary Containment
LSR	Life Saving Rules
MAH	Major Accident Hazards
MTA	Mitigate Threats to Availability
PMR	Performance Monitoring and Reporting
PSE	Process Safety Events
RAM	Risk Assessment Matrix
ТСМ	Technical Committee Meeting
WPSI	Wells Process Safety Incidents

For further definitions specific to Process safety/Wells process safety, please refer to the document: Process Safety Events/Wells Process Safety Incidents Management procedure <u>1000-S-90-04-P-0202-00-E</u>.

For further definition specific to Industrial safety, please refer to the Procedure for investigation and registration of incidents at hazardous production facility <u>1000-S-90-04-P-0206-00-E</u>.

1.4 User Notes

The requirements of this Standard inclusive of Appendices are mandatory, and are derived from RF legal, Shareholder and Lender requirements.

Any change to this Standard requires CED endorsement.

Any deviation from the requirements of this standard is subject to approval by the Technical Authority for HSE (TA1) in accordance with the HSE Standards and Competency Deviations Management Procedure 1000-S-90-04-P-0336-00-E.



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2 Risks and Controls

There are a number of risks associated with a failure to report and investigate incidents in a timely manner; these particularly relate to:

- Reputational risk of non-compliance with Russian Federation Law.
- Reputational risk of non-conformance with the Lenders HSE SAP obligations.
- Reputational risk of not providing timely information to SEIC Shareholders.
- Risk of repeat incidents due to the Company failing to learn through ineffective poor quality investigations and lack of shared learning.

Compliance with the requirements of this Standard will provide the necessary information and guidelines to ensure all risks are reduced to as low as reasonably practicable (ALARP).



3 Roles and Responsibilities

This section identifies the roles and responsibilities of 'key' parties to the incident reporting and follow-up process:

3.1 Action Parties

- 1. Complete all remedial actions within the designated time frame.
- 2. Submit supporting information to the Incident Owner for approval prior to close-out.

3.2 Asset Manager / Site Controller / Department Manager

1. Notify, communicate and provide the necessary incident-related information to relevant RF Authorities within specified timeframes.

3.3 CED Member

- 1. Act as Investigation Team Lead for Significant incidents and High Potential incidents (Red area of RAM-only).
- 2. Approve time extensions for Significant Incident and High Potential incidents (Red area of RAMonly) investigations.

3.4 Chief Executive Officer (CEO)

- 1. Appoint a CED Sponsor for incident investigations involving Fatalities.
- 2. Inform Shareholder Representatives if any Fatal incident is suspected of being work related.

3.5 Contract Holder

- 1. Ensure incidents occurring with their Contractor and Subcontractor are reported within 24 hours of happening.
- 2. Following LSR violation, arrange and participate in meeting between Contractor management and relevant Director (in order to discuss consequence management and improvement actions).
- 3. Present information on incidents at IRP's as necessary.

3.6 External Affairs Manager

1. Provide information and guidance to the CHSE General Manager for social-related incidents.

3.7 First Reporter

(Notifier of incident)

- 1. Make the local site area safe (if possible).
- 2. Report the incident to his/her Line Manager immediately to get support with the notification process and proper follow up on the incident.
- 3. Provide the Responsible Supervisor with information relevant to the incident.

3.8 Fountain Focal Point

- 1. Enter an initial incident report into the FIM system.
- 2. QA/QC the incident data input to FIM for completeness.
- 3. Update FIM with incident data following review at the IRP.
- 4. Enter the final investigation report into FIM following review at IRP.
- 5. Enter Action items into the FIM system.
- 6. Enter supporting information for action close-out into FIM following approval by the Incident Owner.
- 7. Close out incident Actions in the FIM system following approval from the Incident Owner.



3.9 Head of Corporate Health Section

- 1. Provide guidance to the Incident Owner on the classification of injurious incidents.
- 2. Provide support to the CHSE General Manager in approving the final classification of occupational illnesses and injuries.
- 3. Ensure the investigation of occupational illness is completed in compliance with RF requirements.

3.10 Head of Corporate Industrial Safety Division

1. Approve deviations in the use of Tripod Beta methodology for investigating incidents.

3.11 HSE General Manager

- 1. In conjunction with Incident Owner, approve the disclosure of High and Medium Risk Incident reports externally to Lenders and Shareholders (on request) in accordance with the Methodology for Classifying and Remediating Incidents and Breaches document.
- 2. Approve the final classification of the following incident types:
 - All recordable incidents with people (i.e. Medical Treatment Case upwards).
 - All incidents with actual impact as 4 or 5.
 - High Potential incidents on the RAM as RED.
- 3. Review the status of all recordable injuries resulting in medical treatment or worse, spills without secondary containment prior to information being entered into FIM for Notification purposes.
- 4. For Significant incidents and High Potential incidents (Red area of RAM-only):
 - Inform the CEO and CED of the incident and send an incident notification form to Shareholders.
 - Arrange and conduct a Significant Incident Review Panel.
 - Provide a follow-up report on the status of Actions to the TCM.

3.12 HSE Assurance Manager

- 1. Notify the SEIC Loan Compliance Team in case of Significant incidents and HiPo incidents.
- 2. Restore the compliance with SEIC Standards via independent verification.

3.13 HSE Communications Specialist

- 1. Upon request, evaluate the incident information and create a draft LFI Alert. This Alert information is then forwarded to the relevant discipline/function (having expertise in the subject matter) for approval.
- 2. Amend the draft LFI Alert to incorporate approval comments and dispatch to LFI Focal Points (e.g. HSE Lead) for onward communication to the line.

3.14 Incident Owner

(Key responsibility for investigating and managing the incident through to closure)

- 1. Make a preliminary assessment of actual severity and potential risk using the "Risk Assessment Matrix" (RAM).
- 2. Ensure an initial incident report has been entered into the Fountain Database.
- 3. Ensure a suitable Investigation Team Leader has been assigned to plan the investigation.
- 4. Review and agree, with the Investigation Team Leader, incident investigation findings.
- 5. Review and agree, with the Investigation Team Leader, all Remedial Actions identified.
- 6. Ensure the incident is presented at the relevant Incident Review Panel.



- 7. Contribute to identifying the final classification of the incident.
- 8. Ensure the final investigation report is entered into the Fountain Database within 28 days.
- 9. Formally request time extension approval for Remedial Actions (if necessary) from relevant parties.
- 10. Review and approve the evidence provided during Remedial Action close-out in Fountain.
- 11. Communicate with FIM Focal Point to ensure incident data is properly recorded in Fountain and closed-out within 28 days.
- 12. In the event of an injurious incident reportable to the RF Authorities, provide supporting documentation (e.g. induction records, records of interviews etc.) to the relevant parties in a timely manner.
- 13. In conjunction with CHSE General Manager, approve the disclosure of High and Medium Risk Incident reports externally to Lenders and Shareholders (on request) in accordance with the Methodology for Classifying and Remediating Incidents and Breaches <u>0000-S-90-04-O-0009-00</u> <u>Appendix 9.</u>

3.15 Investigation Team Leader

(responsible for identifying underlying causes and recommending corrective actions)

- 1. Gather a competent team to conduct the investigation.
- 2. Utilise the correct methodology to investigate and lead the incident investigation.
- 3. Identify immediate and underlying causes.
- 4. Develop an investigation report to include all requirements of the terms of reference.
- 5. Approve findings and investigation results.
- 6. Ensure the remedial actions identified address the immediate and underlying (root) causes identified during the investigation.
- 7. Ensure the investigation is completed within the appropriate RF and Company timescales.
- 8. Approve and agree the incident findings and remedial actions with the Incident Owner.

3.16 IRP Chairman

- 1. Challenge and test the investigation team, ensuring all immediate and underlying causes are identified and the investigation closed-out in a timely manner.
- 2. Ensure remedial actions address the causes identified and relevant action parties are identified.
- 3. Determine if incidents at the review panel require sharing with other assets and functions, in order to prevent a re-occurrence.

3.17 Responsible Supervisor

- 1. Ensure the local site area is made safe and initiate emergency response in line with local requirements in cooperation with Emergency Coordination Team (if required).
- 2. Inform Site/Activity Owner about the incident.
- 3. Participate in incident investigations at the request of the Incident Owner.



4 References

Labour Code of the Russian Federation No. 197-FZ of December 30, 2001 (as revised on 03 July 2016)	Article 227 Accidents to be Investigated and Subject to Accounting. Article 228 Employer's Obligations in Case of an Accident. Article 229 Procedure for Forming an Accident Investigation Commission. Article 230 Accident Investigation Results Documentation Procedure. Article 231 Consideration of Controversies Concerning Accident, Investigation, Documentation and Accounting.
Decree of the Ministry of Labor of RF of October 24, 2002 № 73	On the investigation of Accidents at work
Order of Ministry of Health and Social Development RF of February 24, 2005 № 160	On Determining the Severity of Health Injuries as a Result of Industrial Accidents issued by the of Health and Social Development.
Managing HSE Risk Standard	<u>0000-S-90-04-O-0006-E Appendix 1</u>
Risk Assessment Matrix	0000-S-90-04-O-0006-00-E Appendix 5
Procedure for investigation and registration of incidents at hazardous production facility	<u>1000-S-90-04-P-0206-00-E</u>
Process Safety Events/Wells Process Safety Incidents Management Procedure	<u>1000-S-90-04-P-0202-00-E</u>
Fatigue Risk Management Guideline	<u>1000-S-90-04-P-0281-00-E</u>
Security Incidents Manual	<u>1000-S-90-01-P-0499-00-E</u>
Manual for Oil and Oil Product Spill Notification and Reporting	<u>1000-S-90-04-M-0015-00-E</u>
Methodology for Classifying and Remediating Incidents and Breaches	<u>0000-S-90-04-O-0009-00-E Appendix 9</u>
Mitigate Threats to Availability Process (MTA) procedure.	<u>1000-S-90-01-P-1283-00-E</u>
Shell Performance Monitoring & Reporting specification.	Shell PMR 2018
Shareholders Notification procedure an Emergency at «Sakhalin Energy Investment Company Ltd.» Facilities.	<u>1000-S-90-01-P-1307-00-E</u>



5 Reporting and Investigation of Incidents Following Sakhalin Energy Requirements

Process Workflow and Description

The following section outlines the key Company requirements and actions required following the occurrence of an incident:



5.1 INCIDENT RESPONSE

No.	Activity	Responsible Party	Time after Incident
1	Provide the Responsible Supervisor with basic information and facts regarding the incident.	First Reporter	Immediately
2	Make the Site safe and initiate emergency response in line with local requirements in cooperation with Emergency Coordination Team (if required). Obtain prompt and appropriate medical care for personnel (if required).	First Reporter & Responsible Supervisor	Immediately

5.1.1 Further information & Guidance – Incident Response

Preserve evidence that may be useful in the investigation, or as required by regulations. Take photographs (if safe to do so) of the scene if possible and note the position of people and equipment relative to the incident. Collect and secure tools and equipment damaged / involved / contributing to the incident for investigation purposes.



5.2 NOTIFICATION

No.	Activity	Responsible Party	Time after Incident
1	Inform Site/Activity Owner about the incident.	Responsible Supervisor	Immediately
2	 Make a preliminary assessment of actual severity and potential risk using the "Risk Assessment Matrix" (RAM). All incidents should be treated as work related until determined otherwise. The final classification of all recordable incidents with people (ie. Medical Treatment Case upwards) and High 	Incident Owner	Within 24 hrs
	 Potential incidents in the Red area of the RAM is verified by the CHSE General Manager. For injurious incidents, the Head of Corporate Health Section shall be consulted on the incident classification. 	Manager	
	For classification of LSR incidents use the User Guide for LSR RAM assessment.		
	Contractor organizations are required to report HSE-related incidents in line with Company requirements.	Contract Holder	Within 24 hrs
	<u>RF notification</u> For information on notifying timeframes to the RF Authorities, see Section 'Statutory Reporting of incidents in the RF'.		Within 24 hrs
	Lenders notification The Company shall report any breaches of HSESAP requirements as soon as is reasonably practicable (no later than 3 days after the incident has occurred).		3 days
3	Enter an initial incident report into the Fountain Database.	Incident Owner	Within 24 hrs
	 <u>ENTERED INTO FIM</u> Incidents with consequences Near Misses Potential incidents (including unsafe acts and conditions) 	Local Fountain Focal Point	
	with significant risk (potential consequence rated 4 or 5 on risk assessment matrix) or high learning value shall be entered into Fountain.		
	The following incident classifications shall be entered into FIM only with specific approval from the Asset Manager and CHSE General Manager (or their delegates):		
	• All injuries resulting in medical treatment or worse, spills without secondary containment.		



	Actual impact as 4 or 5.Potential of an incident on the RAM as RED.		
	ADVISED NOT TO BE ENTERED INTO FIM		
	• Potential incidents (with a potential classification of 3 or less on the RAM) shall be recorded in the appropriate local system such as an Observation and Intervention card and/or reported to a supervisor / HSE officer for learning.		
4	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY	CHSE General Manager	24 hrs
	Provide incident notification to required Shareholders and Sakhalin Energy Management.	EA Manager (for social incidents) (contributor)	
5	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY	HSE Assurance Manager	5 days
	In case of Significant (RAM 4, 5) and High Potential Incidents notify Loan Compliance Team via e-mail: (SEIC Loan Compliance SE-FD-CO) who are responsible then to notify the Intercreditor Agent and the Phase 2 Senior Lenders.		
6	REQUIRED FOR SIGNIFICANT INCIDENTS	CEO	
	In case of a suspected work related fatality, arrange an initial meeting / teleconference with Shareholder Representatives.		

5.2.1 Further information & Guidance – Notification

Include in the initial notification report the exact description of what happened, when it happened, the consequences, who was involved (positions not names) and what immediate actions were taken following the incident.

For RF reportable incidents, inform the RF Authorities following the guidance in Section 6.0.

The initial notification and further management of Process Safety events **shall be** done through the FIM system. For further information on the classification and reporting of PSE incidents, refer to SEIC Process Safety Events/Wells Process Safety incidents management procedure <u>1000-S-90-04-P-0202-00-E.</u>

For Security related incidents use: <u>'Security Incidents Reporting Manual' 1000-S-90-01-P-0499-00-E.</u>



5.2.1.1 Incident Owner

The Incident Owner makes the initial classification of the incident using the Risk Assessment Matrix (RAM). For incidents involving harm to people, there are two questions to consider:

- 1. Did the Incident or exposure cause injury or illness and is therefore classified as a medical case?
- 2. Is the case work related?
 - Did the Incident or exposure occur in the work environment?
 - Did the work environment cause or contribute to the injury or illness?

Injuries and illnesses resulting from events or exposures occurring in the work environment are presumed to be work related. A case is considered work-related if an event or exposure in the work environment either caused or contributed to the condition.

For more specific information on RF reportable incidents subject to investigation – refer to <u>Article 227</u> of the RF Labour Code No.197-FZ.

In the event that an incident occurs and the relevant Incident Owner is absent from work – it is the responsibility of the Incident Owner's line manager to appoint a 'deputy' Incident Owner to progress the investigation.

Notes:

- 1. For incidents associated with the transportation of goods, the Incident Owner shall be the Site Controller or Contract Holder and should be investigated by Site personnel, with the involvement of a representative from the supplier (e.g. Logistics or Materials Management Department).
- 2. If goods are transported to a location and, upon inspection, there is a situation where the goods are incomplete, unmarked, damaged or dangerously stored etc. then the group responsible for the preparation, travel or shipment of these goods shall be the Incident Owner. This does not apply if an incident occurs whilst the goods receiver moves them in their 'damaged' or 'incomplete' state. In such cases, the Incident Owner is the 'local' Site Controller.

5.2.1.2 Classification of Incidents

Final classification of injurious incidents (Medical Treatment Case and above) shall be determined by the CHSE General Manager based on medical advice. Classification of injury types shall be based on a Sakhalin Energy medical review of the injury and any potential impact on the injured party's normal working activities. If an injured party is signed off work by a "sick leave" document, provided by a non-company medical professional, this shall not determine Company's injury classification. The actual medical treatment provided does not determine the classification if the treatment was disproportionate to the injury or illness as determined by the Head of Corporate Health Section.

Classification of incidents is aligned with international industry practice and shall use the Shell Performance Monitoring and Reporting (PMR) Specification unless otherwise specified in this document. Classification of social/community incidents is aligned with HSESAP (as specified in Methodology for Classifying and Remediating Incidents and Breaches Specification).

- 1. All incidents occurring during working time or on company and (sub) contractor property shall be investigated and treated as work related unless determined otherwise.
- 2. All third party motor vehicle injuries are counted as work related only where the investigation reveals that failures of Company or contractor management controls, that should have been in place, directly contributed to the incident causation.



5.2.1.3 Non-work-related incidents

The following **exceptions** shall be treated as **non-work related**:

- Activity of Mode 3 contractors, buyers or similar, where exposure hours are not reportable. This
 includes as non-work related: incidents involving marine transport contractors working on time or
 voyage chartered marine cargo vessels and contractors performing maritime related work for a
 standard fee that is widely available, such as a towage service provided by a Port Authority.
 However marine contracted platform support vessels are Reporting Contractors.
- An incident during a contractor's travel to point of mobilization.
- Incidents occurring during a person's commute to and from work in their private vehicle.
- The employee is present in the work environment as a member of the general public.
- The symptoms of the illness that surface at work are solely due to non-work-related event or exposure.
- The injury or illness results solely from voluntary participation in a wellness program, medical, fitness or recreational activity.
- The injury or illness results from eating, drinking or preparing food or drink for personal consumption (unless caused by contamination by the working environment).
- The injury or illness results from participation in a personal task outside assigned working hours (unless the injury was caused by a hazard or event on company or (sub) contractor premises).
- The injury or illness results from personal hygiene related activities, self-medication for non-workrelated condition or are intentionally self-inflicted.
- The illness is a common cold or flu.

All violations of the Life Saving Rules (LSR) shall be entered as incidents into Fountain.

5.2.1.4 Lenders Classification of Incidents

For specific information on the risk classification of incidents or breaches of HSESAP related to people, social, assets, environment or Company reputation, see <u>Methodology for Classifying and Remediating</u> <u>Incidents & Breaches.</u>



5.3 INVESTIGATION & ANALYSIS

5	Ensure an Investigation Team Leader is appointed as		
r r e	specified in the matrix below: Table 1: Requirements for composition of investigation team. The Investigation Team Leader is responsible for selecting Team Members with the adequate levels of competence and expertise (e.g. TA if required), to conduct a thorough investigation.	Incident Owner Investigation Team Leader (supports)	Within 48 hrs
r c [c 4	 The following shall be investigated using the Tripod Beta methodology for incident analysis to determine the underlying causes: Significant incidents and High Potential incidents. Incidents with Actual consequences RAM 3. Lost Workday Cases. Deviations from this requirement to be approved by the Head of Corporate Industrial Safety Division. Asset/Functional Managers and the CHSE General Manager can request use of Tripod Beta for incident analysis upon request.	Head of Corporate Industrial Safety Division	

3 Table 1: Investigation Requirements

ACTUAL SEVERITY (RAM)	PROCESS SAFETY/ WELLS - ACTUAL	POTENTIAL RISK (RAM)	INCIDENT OWNER	INVESTIGATION TEAM LEADER	INVESTIGATION METHODOOGY	INVESTIGATION TIMEFRAME
SIGNIFICANT INCIDENT (4 - 5)	Tier 1 LOPC for Environment RAM 3+	HIGH POTENTIAL (RED area of RAM) (see NOTE 1)	Director CED Representative	Independent CED Representative	Tripod Beta & TOPSET	Final Report 28 days
2-3	Tier 2 Events	YELLOW Risk RAM 3+	Asset Manager; Functional Manager	Independent Site/Activity Owner Functional Lead	Tripod Beta & TOPSET	Final Report 28 days
0-1	Tier 3 Events	DARK BLUE Risk LIGHT BLUE Risk	OIM; Site Lead; Functional Lead	Independent Site/Functional Representative	5 WHYs	Final Report 28 days

Main requirements for incident investigation:

- For incidents resulting in a Fatality, the CEO appoints a CED Sponsor to lead the investigation.
- In case of multiple injuries (more than 1 injured person) External authorities (Labour Inspection, Rostechnadzor, etc.) shall be involved in investigation process.
- If there is a repeat incident, of a RAM 3+ actual consequences, at a location with the similar circumstances the level of investigation shall be raised one level in accordance with Table 1.



<u>NOTE 1:</u>

High Potential incidents with potential consequences in the Red area of the RAM (i.e. D4, E4, C5, D5, E5 (excludes E3)) are to be led by an individual CED-1.

High Potential incidents with potential consequences in the Blue/Yellow area of the RAM (i.e. A4, B4, C4, A5, B5) are to be led by an individual CED-2.

<u>NOTE 2:</u>

For RAM 3+ actual incidents, the investigation team leader shall be at the same seniority level as the Incident Owner or one below. The Team Leader should not be the direct supervisor of the person(s) directly involved with the event.

For occupational illnesses/injurious incidents that require reporting to the RF Authorities, the composition of the Investigation Team must comply with <u>Article 229</u> of the Labour Code No.197-FZ.

All 'actual' Medium and High Potential incidents require an investigation report. For Medium risk incidents the report details shall be commensurate with the risk and complexity of the incident.	Investigation Team Leader (executor)	28 days
Low risk incident investigations shall be submitted via <u>5 Whys</u> investigation form or similar method.	Incident Owner (contributor)	
Incident reports may be disclosed externally to Lenders and Shareholders (on request) in accordance with the Methodology for Classifying and Remediating Incidents and Breaches, therefore they shall be approved by the Incident Owner and the CHSE General Manager (or designate).	CHSE General Manager (contributor)	
For occupational illnesses/injurious incidents that require reporting to the RF Authorities; the following timeframes are applicable.		3 days (minor injuries) 15 days (major injuries)
IMPORTANT NOTE: For incidents involving environmental spills to land or sea, the investigation reports (including the 5 WHYs Form) shall indicate the method(s) used to clean and restore the immediate area and any other areas impacted. It shall also indicate the disposal process for the materials involved in the clean-up.	Investigation Team Leader (executor)	28 days
REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY		
Analyse significant and high potential incidents using Tripod Beta methodology. Prepare a draft investigation report, draft Significant Incident Review (SIR) Briefing Note and supporting Learning from Incidents Alert. These documents should be written in English and Russian. Note:	CED Member CHSE General Manager (supports)	28 days
	 investigation report. For Medium risk incidents the report details shall be commensurate with the risk and complexity of the incident. Low risk incident investigations shall be submitted via <u>5 Whys</u> investigation form or similar method. Incident reports may be disclosed externally to Lenders and Shareholders (on request) in accordance with the Methodology for Classifying and Remediating Incidents and Breaches, therefore they shall be approved by the Incident Owner and the CHSE General Manager (or designate). For occupational illnesses/injurious incidents that require reporting to the RF Authorities; the following timeframes are applicable. <u>IMPORTANT NOTE:</u> For incidents involving environmental spills to land or sea, the investigation reports (including the 5 WHYs Form) shall indicate the method(s) used to clean and restore the immediate area and any other areas impacted. It shall also indicate the disposal process for the materials involved in the clean-up. <u>REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY</u> Analyse significant and high potential incidents using Tripod Beta methodology. Prepare a draft investigation report, draft Significant Incident Review (SIR) Briefing Note and supporting Learning from Incidents Alert. These documents should be written in English and Russian. 	investigation report. For Medium risk incidents the report details shall be commensurate with the risk and complexity of the incident.Team Leader (executor)Low risk incident investigations shall be submitted via 5 Whys investigation form or similar method.Incident Owner (contributor)Incident reports may be disclosed externally to Lenders and Shareholders (on request) in accordance with the Methodology for Classifying and Remediating Incidents and Breaches, therefore they shall be approved by the Incident Owner and the CHSE General Manager (or designate).CHSE General Manager (contributor)For occupational illnesses/injurious incidents that require reporting to the RF Authorities; the following timeframes are applicable.Investigation Team Leader (contributor)IMPORTANT NOTE: For incidents involving environmental spills to land or sea, the investigation reports (including the 5 WHYs Form) shall indicate the method(s) used to clean and restore the immediate area and any other areas impacted. It shall also indicate the disposal process for the materials involved in the clean-up.Investigation Team Leader (executor)REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLYCED Member CHSE General Manager (supports)Prepare a draft investigation report, draft Significant Incident Review (SIR) Briefing Note and supporting Learning from Incidents Alert. These documents should be written in English and Russian.CED Member CHSE General Manager (supports)



7	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY		
	 Review and approve the materials from previous step in a meeting involving the: CEO CHSE General Manager EA Manager (for social incidents) Shareholder Representatives 	CHSE General Manager (supports)	

5.3.1 Further information & Guidance – Investigation and Analysis

Investigation is the systematic evaluation of the facts and determination of causes of an incident for the purpose of eliminating or reducing the risk of recurrence. The objective is to capture causes leading to the incident. The type and depth of investigation should be based on actual severity or potential of the incident. Gathering evidence and collecting facts as soon as practical following the occurrence of an incident will help improve the accuracy of information gathered.

Assets, functions and projects should consider if fatigue was a contributing factor to an incident. In particular, those incidents that occur during night shift, towards the end of an individual's rotation or when personnel have been working beyond 'normal' allowable duty work schedules. The <u>'Fatigue Risk</u> <u>Management Guideline'</u> provides information for investigators and a 'Table for recording employee Work/Rest patterns'. This can be used to help determine if work planning and scheduling may have been a causal factor to the incident.

5.3.1.1 Investigation Team

The mix of authority and experience of persons appointed to an investigation team shall be commensurate with the actual consequences and risk of the event, in line with the 'Risk Assessment Matrix' (RAM).

Events (Tier 3+ Actual) classified as Process Safety or Wells Safety shall have specialist representation within the Investigation Team in the form of a suitably experienced Technical Authority or Specialist.

For incidents involving Contractor organizations where the Contractor has to report the event to RF authorities, it is strongly recommended to include the SEIC Contract Holder (or SEIC HSE representative) into the Contractor's own investigation committee.

All Significant Incident Investigations shall be led by a direct report of the CEO. The investigation team shall also contain senior management from the contractor company (where applicable)

Significant and High Risk Incident investigation teams shall use, where available, the relevant HSE Case(s) bow-tie(s) as the key reference document(s) in the investigation process to identify failed controls.

The Investigation Team Leader shall organize regular coordination meetings with the Investigation Team Members to provide oversight of the investigation process:

- Update on current status of investigation;
- Maintain clear understanding of the required deliverables and key milestones e.g. start, interim report and final report;
- Validate all findings;
- Review final results of the incident investigation.



5.3.1.2 Investigation Report

Detailed investigation reports shall be submitted in English and Russian for all incidents with actual consequences rating severity 3, 4 or 5 and High Potential (Red area of RAM-only) incidents. Low risk incident investigations may be submitted via 5 WHYs incident investigation form or similar method.

Every investigation shall include identification of immediate and underlying (root) causes of incident and address SMART actions to root causes for prevention of similar incidents in future.

The investigation report should include:

- 1. Date and time of the event
- 2. Date the investigation began
- 3. List of investigation team members and investigation team lead
- 4. Description of the event (who, what, where, when, how, and why)
- 5. Findings (facts) determined during the investigation
- 6. Consequences of the event
- 7. Causes of the event (including list of failed barriers)
- 8. Recommendations for corrective action to help prevent recurrence
- 9. Ensure action items address all immediate causes and main underlying causes.

For incidents involving environmental spills to land or sea, the investigation report shall indicate the method(s) used to clean and restore the immediate area and any other areas impacted. It shall also indicate the disposal process for the materials involved in the clean-up.

Final results of all Significant and High Potential (Red area of RAM-only) incident investigations shall be prepared within 28 days and reviewed at the HSE MC. The report will then be uploaded into FIM within the same 28 days period.

Reports may be disclosed externally to Lenders and Shareholders (on request) in accordance with the Methodology for Classifying and Remediating Incidents and Breaches, therefore they shall be approved by the Incident Owner and the CHSE General Manager (or designate) and/or EA Manager or designate (for social incidents).

For specific reporting requirements:

- Russian Federation Authorities see Section 6.0.
- Lenders specific requirements see Appendix 9: <u>Methodology for Classifying and Remediating</u> Incidents & Breaches.



5.4 REPORTING & REVIEW

No.		Activity				Time after Incident
1	Incidents are to be presented at an Incident Review Panel (IRP).				Incident Owner (executer)	Up to 28 days
Tab	le 2: Requir	ements for an In	cident Review pa	anel (IRP)		
ACTUAL SEVERITY (RAM)		PROCESS SAFETY/ WELLS - ACTUAL	POTENTIAL RISK (RAM)	INCIDENT OWNER	IRP CHAIRMAN	IRP TYPE
SIGNIFICANT INCIDENT 4 - 5		Tier 1 LOPC for Environment RAM 3+	HIGH POTENTIAL (RED area of RAM) <i>(see NOTE 1)</i>	Director CED Representative	CEO	HSE Management Committee
		Tior 2	VELLOW/ Risk	Asset Manager:	Director	

2 - 3	Tier 2 Events	YELLOW Risk RAM 3+	Asset Manager; Functional Manager	Director; Asset Manager	Local IRP
0-1	Tier 3 Events	DARK BLUE LIGHT BLUE Area of RAM	OIM; Site Lead; Functional Lead	Asset Manager; Functional Manager	Local IRP

The IRP shall:

- Challenge and test investigation team to ensure all immediate and underlying causes are identified;
- Challenge the quality of information specifically related to environmental impacts and follow up activities.
- Determine appropriate lateral learning method to ensure that all key personnel are adequately informed to prevent a recurrence;
- Ensure actions address the causes identified and confirm actions / action parties.
- Monitors the timely close-out of investigations.

3	Include any comments/amendments into the Investigation report and verify the final classification of the incident.	Incident Owner	28 days
	Enter final investigation report into the Fountain Database following approval of Incident Owner.	Fountain Focal Point (supports)	
4	Complete all remedial actions from the incident.	Action Parties	12 months
	Provide a quarterly update on their status to the Lenders.	HSESAP Engineer	3 monthly



5	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY		
	Arrange, prepare and conduct a Significant Incident Review (SIR) meeting with the:	CHSE General Manager	3 months
	 CEO EA Manager (for social incidents) Shareholder Representatives 		
	<u>NOTE 1:</u> For High Potential Incidents in the Blue/Yellow area of the RAM, it is advisable to have an independent CED-2 person as either IRP Chair or participating panel member.		
	<u>NOTE 2:</u> The need to hold a SIR meeting for a High Potential incident is at the discretion of the CHSE General Manager.		
	For Significant Incidents, a follow up report is to be produced highlighting progress made against corrective actions identified in the investigation.	Incident Owner	12 months

5.4.1 Further information & Guidance – Incident Review

The purpose of the Incident Review Panel is to review incidents and near misses to achieve the following objectives:

- 1. To ensure incidents are reported and followed up in accordance with the SEIC Incident Reporting and Follow Up standard.
- 2. To ensure the correct Action party has been identified to close out report actions.
- 3. To determine if an incident, or a trend in incidents, requires senior management attention.
- 4. To review the RAM rating and incident description; requesting Incident Owners and Fountain Focal Points to make any necessary changes.
- 5. To determine if the quality of incident data supporting the investigation is adequate.
- 6. To ensure timely close out of the investigation within the required timeframe(s).
- 7. To ensure the Company meets the Lenders reporting requirements.
- 8. To identify incident learning's applicable for wider dissemination (e.g. LFI Safety Alert).

NOTE:

The IRP Chairman can select which incidents are identified for review. As a minimum, the following shall be reviewed in all cases:

- 1. Injurious incidents (First Aid onwards to Fatalities).
- 2. Tier 1, Tier 2, Tier 3 process safety events.
- 3. All incidents with RAM 3 Actual consequences.
- 4. All Significant Incidents and High Potential incidents.



5.5 LEARNING FROM INCIDENTS

No.	Activity	Responsible Party	Time after Incident
1	If there is significant learning for the organization, disseminate learning across Assets / Functions and where required, to Shareholders:	HSE Communication Specialist	As per required dates
	Results of incident investigation shall be assessed by incident owner and HSE and SP (for social incidents) representatives to determine company-wide learning for prevention of reoccurrences. There are three types of alert that may be issued:	Incident Owner (contributor) LFI Action Parties (for Action Alerts)	
	 'Newsflash Alert' – to be distributed shortly after an incident has occurred. 		
	 'Awareness Alert' - to be distributed after an incident has been to IRP. 		
	 'Action Alert' - to be distributed after an incident has been to IRP. 		
2	An Incident alert, or relevant information to prepare an Alert, should be sent to the HSE Communication Specialist for further evaluation and distribution.	HSE Communication Specialist	As per agreed dates
	Company-wide learning can be determined at the relevant IRP.		

5.5.1 Further information & Guidance – Learning From Incidents

To prevent recurrence, an important action after an incident occurs is to share learning's within the Company and with other companies (if relevant). In addition to transferring information, the ultimate aim of the LFI process is to modify an individual's behaviour. To maximize learning from the LFI process, it is strongly recommended that communication of the learning; "can this happen at our location?" is undertaken via a face to face facilitated group discussion with the supervisor. The focus should be on "what can I do differently to prevent a similar incident here?"

As a result of discussions held at IRP's, or from initiation within the C-HSE Dept, an incident Alert (or relevant information to prepare an Alert) may be sent to the HSE Communication Specialist for further evaluation and onward central distribution to other Assets, Functions or external organizations that might benefit from having this information.

Certain incidents can be classified as 'High Value Learning' when the learning to be shared can be applied across various assets and functions; rather than being restricted to one specific work location OR RAM 3+ (inc. Lost Workday Case incidents) OR HiPo incidents. More detailed information on the three types of Alert is as follows:



Newsflash Alert

- Provides early notification and raises awareness of an incident within a specific target audience (i.e., leadership, construction site, and plant operators).
- Describes the incident but not the causes or why it happened, as investigation is planned or incomplete.
- Poses questions for toolbox/HSE meetings relating to existing controls that have prevented similar incidents in the past. This can also be communicated in the form of a Safety Standown presentation.

Awareness Alert

- An awareness alert is aimed at a targeted distribution, SEIC and contractors, to raise awareness of learning's from incidents, reoccurring incident, or hazard. This type of LFI alert can include a reflective learning engagement session and or any other learning tools.
- Raises awareness of an incident within a specific target audience (i.e., leadership, construction site, and plant operators).
- Describes the incident and the causes (if known).
- May be issued prior to an investigation being complete or if the cause of the incident is not known.
- May be issued more than once for a single incident. For example, an initial Awareness Alert may be issued before an investigation is complete and another after the investigation is complete.
- Makes non-mandatory recommendations to prevent the incident or a similar incident occurring. The recommendations will normally raise awareness or re-emphasize the importance of existing HSE MS procedures and/or controls (barriers or recovery measures).

Action Alert

- An alert is aimed at a defined audience to ensure that specific mandatory actions are implemented by a particular group (e.g. Electrical TA's) to prevent reoccurrence.
- Actions identified in 'Action Alerts' are tracked for closure by Asset management guided by Asset LFI focal points (if there is no formal LFI focal point, the responsibility for action close-out lies with the Site Owner).

LFI Alerts should contain the following information:

- Incident description, to include relevant equipment and processes involved
- Consequences of the Incident
- Immediate and Underlying (root) causes
- Recommended actions (learning's) OR discussion questions to prevent a re-occurrence.

Upon receipt of information from Assets or Functions (usually following IRP discussions), the HSE Communication Specialist will develop a draft Alert. Prior to distribution of the Alert, the HSE Communication Specialist reviews the material with relevant disciplines and gains approval from External Affairs Department and Legal Directorate where required.

Recipients of LFI information and LFI contacts are encouraged to provide additional comments if value is added to the communication. Persons with experience or knowledge of similar Incidents are encouraged to contact sites/organization that experienced the Incident if they have additional considerations & comments.

The HSE Communication Specialist will periodically evaluate available sources of information (Shell LFI system, internet, Oil and Gas industry publications) for relevant information which can be used for alerting processes. Lessons learned shall be disseminated on a monthly basis through alerts, or monthly HSE Bulletins, via the HSE Communication Specialist. The CHSE General Manager shall decide if the information should be disseminated externally e.g. Shareholders or industry associations.



5.6 CORRECTIVE ACTIONS

No.	Activity	Responsible Party	Time after Incident
1	Incident owner is responsible for the quality of corrective actions identified and their closure in FIM. The Incident Owner shall establish adequate control over actions closure quality and timelines.	Incident Owner	Various
	Action deadlines can be extended only with formal agreement of the relevant Director / Asset Manager / Line Manager.		
2	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY	CHSE General Manager	12 months
	Submit a follow-up report to the TCM, which describes the status of actions and the results of (self-) assurance on gap closure. Enter report into FIM.		
3	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY Complete all actions within the identified timeframe(s).	Action Parties	Various
4	REQUIRED FOR SIGNIFICANT & HIGH POTENTIAL INCIDENTS (RED AREA OF RAM)-ONLY Enter a close-out report explaining how corrective actions have been implemented into the Fountain Database.	Incident Owner Fountain Focal Point (supports)	12 months

5.6.1 Further information & Guidance – Corrective Actions

Defining Corrective Actions (also referred to as Remedial or Recommended or Preventative actions) is crucial if future incidents involving the weaknesses identified from an investigation are not corrected. Actions shall be targeted at eliminating the direct and underlying causes of incidents, including near-misses. These corrective actions must be managed to ensure they are effectively prioritised, planned, and implemented. The amount of time allocated for closure of each incident action item shall be commensurate with the risk. For Significant and High Potential (Red area of RAM-only) incidents, the timeframe for action close-out shall be approved by the relevant CED member.

Each Corrective Action should be clearly appropriate to the failure or deficiency and should be discussed and agreed with the Action Party. These Actions should be SMART and, where appropriate, prioritised:

- **S**pecific: Relate to a clearly identified action to be taken which is understood and agreed with the Action party.
- Measurable: The results of taking action can be measured in some way and close-out can be verified.
- Appropriate: Specifically addresses a failure identified in the report.
- **R**ealistic: Able to obtain the level of change reflected in the recommended action (knowing the realistic resources and time available).
- Time based: Stating the time period in which the action must be completed.



IMPORTANT NOTE:

Do not allocate Actions to personnel without first consulting either the proposed Action Party or their line manager. The proposed Action Party can often provide improvements to the Action and a more realistic timeframe for completion of the activity.

5.7 KEY PERFORMANCE INDICATORS (KPI)

Regular reporting of incident-related KPI's is necessary to communicate the performance of timely incident investigation and follow up. The key areas are:

- Registration in FIM of incidents and investigation reports.
- Quality of the incident investigation and analysis.
- Timeliness of effective follow-up actions closeout from incident investigations.
- Actions that have a number of approved extensions.
- Information for the Business Assurance Letter.

5.8 ANALYSING TRENDS

The main objective of analysing 'trends' is to identify commonality amongst the immediate and underlying causes of incidents identified during the investigation phase. Once this information has been identified, improvement initiatives can be developed aimed at minimising re-occurrence and/or reducing the severity of potential consequences.

It is, therefore, important that the underlying causes of incidents is accurately identified and recorded in the FIM database for future analysis of incident trends.



6 Statutory Reporting of Incidents in the Russian Federation

6.1 PURPOSE

To provide a detailed description of incident reporting and follow-up activities and ensure control over compliance with the statutory requirements as well as provision of information to stakeholders. According to the law, further investigation and reporting may be required, which will be carried out simultaneously with fulfillment of steps of the Sakhalin Energy *Incident Reporting and Follow-up* procedure.

Responsibilities

Asset Manager / Site Controller / Department Manager

1. Notify, communicate and provide the necessary incident information to relevant RF Authorities within specified timeframes.

6.2 RF LEGAL REQUIREMENTS FOR INJURIOUS INCIDENTS WITH SAKHALIN ENERGY PERSONNEL

The following incidents occurring with Sakhalin Energy Investment Company employees shall be investigated in compliance with Article 227 of the RF Labour Code; with completion of the necessary 'Form(s)' in accordance with Decree No.73 (24 Oct 2002) on Approval of the Forms required for investigation and registration of occupational accidents and provisions on the details of investigating occupational accidents in individual industries and organisations.

The following shall be subject to investigation as accidents in the workplace (Article 227 Accidents subject to Investigation and recording):

- 1. Fatalities in the workplace.
- 2. Injuries resulting in bodily harm.
- 3. Injuries which has caused the need for transferring the victim to another job role.

Information on the classification of the severity level of injuries and the time frame for Injurious Incident Investigations is determined by the Authorities based on the severity of the injuries sustained (according to classifications by a medical professional) according to the Order of the Ministry of Public Health and Social Development of the Russian Federation <u>On Determination of Severity of Injury to Health as a result of Industrial Accidents</u>" - No.160 dated 24th February, 2005.

3 calendar days (insignificant injuries)

15 calendar days (significant injuries)



6.3 FORMS REQUIRED FOR REPORTING OF INJURIES

Form	Title	Hyperlink
Decree No. 73, Form 1	Notice of a Group Accident, Serious Accident and Fatal Accident	<u>Link</u>
Decree No. 73, Form 2	Act N-1 on an Occupational Accident	<u>Link</u>
Decree No. 73, Form 4	Act on Investigation of a Group Accident, Serious Accident and Fatal Accident	<u>Link</u>
Decree No. 73, Form 6	Record of Interviewing a Person Injured during an Incident	<u>Link</u>
Decree No. 73, Form 7	Record of Incident Location Inspection	<u>Link</u>
Decree No. 73, Form 8	Report on the Consequences of an Occupational Accident and Measures Undertaken	<u>Link</u>
Decree No.73, Form 9	LOG BOOK Incident registration at work.	<u>Link</u>
Order No. 275, Form No. 315/u	Medical Certificate of the Nature of Injuries to Health Received as a Result of an Occupational Accident and their Severity Level	<u>Link</u>
Order No. 275, Form No. 316/u	Certificate of the Final Diagnosis of a Person Injured as a Result of an Occupational Accident	<u>Link</u>

6.4 FORMS FOR REPORTING IN CASE OF EMERGENCIES AT HAZARDOUS PRODUCTION FACILITIES

Forms for reporting and registration of accidents and loss of explosive materials			
Form	Title	Hyperlink	
Order No. 480 Appendix 1	Operational Message about an Accident/Incident, Industrial Explosive Loss	<u>Link</u>	
Order No. 480 Appendix 2	Operational Message about an Death/Injury resulted from Accident/Incident, Industrial Explosive Loss	<u>Link</u>	
Order No. 480 Appendix 3	Report on Technical Investigation of the Causes of Accident/Incident	<u>Link</u>	
Order No. 480 Appendix 5	LOG BOOK of Accident/Incident Happened at Hazardous Production Facilities	<u>Link</u>	
Order No. 480 Appendix 6	LOG BOOK of Loss Happened at Hazardous Production Facilities	<u>Link</u>	
Order No. 480 Appendix 7	ACT on Technical Investigation of the Causes of Industrial Explosive Loss	<u>Link</u>	



Forms for reporting and registration of incidents at hazardous production facilities			
SEIC Procedure 1000-S-90-04-P-0206- 00 Attachment A	Operational Message about an Accident/Incident, Industrial Explosive Loss	<u>Link</u>	
SEIC Procedure 1000- S-90-04-P-0206-00 Attachment B	ACT on Technical Investigation of the Causes of Industrial Explosive Loss	<u>Link</u>	
SEIC Procedure 1000- S-90-04-0206-00 Attachment C	LOG BOOK of the incident Happened at Hazardous Production Facilities	<u>Link</u>	

L	Lost Time Injuries; Cases requiring transfer to another job; Fatalities and Group accidents. Non-occupational fatalities (step 1 only)					
Step	What	When	Format			
	Notification sent to Regulatory Bodies					
1	 Send notification in due form to: a relevant subdivision of the Inspectorate of Labour; the Prosecutor's Office according to the incident location; a relevant executive authority of federal and/or local authority; the employer of the injured person; RTN; a representative of the insurer (confirmation of the fact that the injured person is a Sakhalin Energy employee insured in the Contingency Fund); relatives of the injured person (in the event of serious/fatal injuries). Request for a medical certificate on the nature of injuries to health received and their severity level from the medical treatment facility where the injured person was sent. 	Within 24 hours	Form (No. 1) Decree No. 73 Record Form No. 315/u Order No. 275			
	Commencement of Investigation					
2	Issue an order on establishing an Investigation Commission: - 1 SEIC Labour Protection Specialist: 1 SEIC Investigator: 1 SEIC Company Representative. • 1 injured person: Labour Inspector • 4 injured persons: Chief Labour Inspector • 14 injured persons: Federal Government • SEIC HR Business Services to check for sick list (Doctor's note) data – check if the injury has been correctly classified as work related or not work related i.e check for the cause of unfitness to work using relevant classification code.	Order for Investigation to be signed by the Employer (normally CEO)				
	Results of Investigation					
3	 The result of investigation shall be entered into: a) Form N-1; b) Act on investigation; c) Records of interviewing (one for each interview); 	3 days (minor injuries*) 15 days (heavy	a) Decree No. 73, Form 1 (N-1) b) Decree No. 73, Form 4			



4	 d) Record of incident location inspection. 2. The following is to be attached: Certificate of the final diagnosis of a person injured as a result of an occupational accident Scanned documents are attached in Fountain IMPACT; originals are sent to the Central HSE Department. Sending Investigation Results to Regulatory B Form N-1 shall be sent to: - the insurer; - the Central HSE Department; - the injured person or relatives of the injured person. Implementation of Corrective Actions Send Report on the consequences of an occupational accident and measures undertaken to the State Inspectorate of Labour, or to the relevant Territorial Body, 	3 days Upon return of the injured	c) Decree No. 73, Form 6 d) Decree No. 73, Form 7 e) Order No. 275 Form No. 316/u Decree No. 73, Form 2 (N-1) Decree No.73, Form 8
	upon completion of the period of temporary disability of the injured person (in the event of fatal accidents—within a month upon completion of investigation). Emergencies at hazardous production fac		
Step	What	When	Format
	Notification sent to Regulatory Bodies		
1	Notification shall be sent in the event of: a) any occupational incidents; b) pipeline incidents; c) spills. 1. Territorial subdivision of RTN 2. Relevant executive authorities 3. Regional Inspectorate of Labour 4. Regional Inspectorate of Labour 5. Regional Fine Fighting Service 7. Territorial Environmental Committee 8. Railroad Administration	Within 24 hours	a) Order No. 191 Appendix 1 b) Order No. 191 Annex to Appendix 1
	Commencement of Investigation		
2	By the order of the territorial subdivision of RTN Headed by RTN	Within 10 days	RTN shall finalize the order
	Results of Investigation		
3	 The result of investigation shall be entered into: a) Investigation Report; b) Incident Registration Form supported by information from Decree No. 40, Section 3. Pursuant to the Procedure of Notification of Injuries and Fatalities, scanning of all documents and entering into Fountain IMPACT; sending of originals to the Central HSE Department 	15 days (15-day period may be extended)	 a) Order No. 191 Appendix 2 b) Order No. 191 Appendix 3 Appendix 4
	Sending Investigation Results to Regulatory B	odies	·
4	Sending all investigation documents to:	Within 3 days upon	Decree No. 73, Form 2 (N-1)



	 Directorate of the Rostekhnadzor; Organisations that participated in investigation; Regional Trade Unions Association; Prosecutor's Office according to the incident location; RF Occupational Safety Technical Research Centre. 	completion	
	Implementation of Corrective Actions		
5	Issue an order to: - complete the procedure of measures; - describe disciplinary measures.	Upon return of the injured person to work	Decree No.73, Form 8
	Upon Completion of Corrective Actions		
6	Send a report on the progress of measures to all organisations participating in investigation	Within 10 days upon completion	

6.5 NOTIFICATION OF OIL SPILL

This section includes information on requirements for sending an obligatory notification of oil spills to regulatory bodies in compliance with Sakhalin Administration Decree No. 203 and Sakhalin Energy Manual for Oil and Oil Product Spill Notification and Reporting <u>1000-S-90-04-M-0015-00-E</u>. The issues of planning and deployment of oil spill response activities are presented in the relevant Oil Spill Prevention and Response Plans for Production Facilities. These notifications are provided under the guidance of a duty Emergency Coordinator and are directly performed by a duty representative of the HSE Department. The types and list of agencies to be notified are given in Table 2.

All spills to water must be reported to the Russian Authorities as per for Manual for Oil and Oil Product Spill Notification and Reporting <u>1000-S-90-04-M-0015-00-E</u>

Spills in excess of 50L offshore and 200L onshore to be reported to other external stakeholders as per Manual for Oil and Oil Product Spill Notification and Reporting <u>1000-S-90-04-M-0015-00-E</u>.

Oil Spill on Water	Oil Spill on Soil			
	Less than 0.2 t	More than 0.2 t		
Notify immediately (Form LRN-01 by fax within 3 hours of receipt of information on the spill):	Monthly notification: 1. Main Department of Russian EMERCOM for the Sakhalin	Immediate notification (Form LRN-01 by fax within 3 hours of receipt of information on spill):		
 Main Department of Russian EMERCOM for the Sakhalin Oblast; 	Oblast; 2. Ministry of Natural Resources and Environmental Protection	 Main Department of Russian EMERCOM for the Sakhalin Oblast; 		
2. Regional Departments for Civil Defence and Emergencies (Nogliki, Korsakov, etc.);	for the Sakhalin Oblast.	 Regional Departments for Civil Defence and Emergencies (Nogliki, Korsakov, etc.); 		
3. Offshore Rescue Coordination Sub-Centre of the RF Ministry of Transportation.		 3. Duty Dispatcher of Rosenergo 4. Central Dispatcher of FEC. 		
4. Inform RPN as per government regulation N1189				



dated 14.11.2014.	

6.6 FORMS FOR REPORTING OIL SPILLS

Form	Title	Hyperlink
Decree No. 203-PA Form N-1-LRN	Information on Oil Spills on land and in inland water bodies	<u>Link</u>
Decree No. 203-PA Form N-2-LRN	Information on Oil Spills in the Sea	<u>Link</u>



APPENDIX 1 USER GUIDE FOR LSR RAM ASSESSMENT

	Alcohol in the exhaled air	Location where caught	Type of Work	Actual	Potential
	Less than 0.16 mg/l	Anywhere	uences		
LSR # 1		Dormitory	Any	0	D1
	Equal to or	Atgate	Any	0	E1
ALCOHOL ABUSE Do not appear at work under the influence			Not HSE critical	0	D2
of ALCOHOL and DRUGS.			Driving, operating heavy plant machinery.	0	C4
	More than 0.16 mg/l	Atworksite	Working at height; Work with High Voltage; Confined Space work; Pressure testing	0	C4
			Supervisory work of safety critical activity	0	C4
		Possess	sion	0	D1
		Dormitory	Any	0	C2
		Atgate	Any	0	C2
LSR # 1			Not HSE critical	0	C2
DRUGS			Driving, operating heavy plant machinery.	0	C4
Do not appear at work under the influence of ALCOHOL and DRUGS.	Abuse	Atworksite	Working at height; Work with High Voltage; Confined Space work; Pressure testing	0	C4
			Supervisory work of safety critical activity	0	C4
LSR # 2 Do not SMOKE outside designated smoking areas. Do not carry or use unauthorized IGNITION SOURCES in active hazardous areas.				0	B5
LSR #3 Do not walk under a SUSPENDED LOAD.				0	C4
LSR #4 Work with a valid WORK PERMIT when required.				0	C4
LSR # 5 Verify ISOLATION before work begins.				0	C4
LSR # 6 Obtain authorization before entering a CONFINED SPACE.				0	C4
LSR # 7 Protect yourself against a FALL FROM HEIGHT.				0	C4
LSR # 8 Wear your SEATBELT.				0	C4
LSR # 9 Follow prescribed JOURNEY MANAGEMENT PLAN and have valid DEFENSIVE DRIVING CERTIFICATE.				0	C4
LSR # 10 While driving, do not use COMMUNICATION DEVICES and do not exceed the SPEED LIMIT.				0	C4



APPENDIX 2 GUIDANCE ON USE OF 5 WHY'S INCIDENT INVESTIGATION FORM

The '5 Whys' method is an iterative question-asking technique used to explore the cause and effect relationships underlying a particular incident. The primary goal of the technique is to determine the underlying (root) cause of an incident by repeating the question 'Why?' Each question forms the basis of the next question. For each of the reasons identified, ask 'Why?' over and over, until the answer is no longer meaningful (it is relatively unimportant how many times the 'Why?' question is asked).

Example:

During a snowstorm, a Kamaz truck carrying 12 workers breaks down 30km from Site. (the incident)

- 1. *Why?* The battery is dead. (first why)
- 2. *Why?* The alternator is not functioning. (second why)
- 3. *Why?* The alternator belt has broken. (third why)
- 4. *Why?* The alternator belt was well beyond its useful service life and not replaced. (fourth why)
- 5. Why? The vehicle was not maintained according to the recommended service schedule. (fifth why, an underlying (root) cause).

This method provides no hard and fast rules about what lines of questions to explore, or how long to continue the search for additional root causes. Thus, even when the method is closely followed, the outcome still depends upon the knowledge and persistence of the people involved.

The key is to avoid assumptions and logic traps and instead trace the chain of causality in direct increments from the effect through to an underlying (root) cause that still has some connection to the original incident. Note that, in this example, the fifth why suggests a broken process which is indicative of reaching the root-cause level. Unless it is discovered that an individual deliberately and maliciously violated or sabotaged workplace safety precautions, the underlying (root) cause lies within management processes.

There is sometimes a tendency to isolate a single underlying (root) cause, whereas each question could elicit many different underlying (root) causes. Not all incidents have a single underlying (root) cause. If one wishes to uncover multiple root causes, the method must be repeated asking a different sequence of questions each time.

Example:

Hammer is dropped 5 metres to the ground during maintenance work. (the incident)

People-related

- 1. *Why?* The Technician was rushing to complete the task. (first why)
- 2. Why? He felt under pressure to complete his work on time. (second why)
- 3. *Why*? He had a high number of tasks to do that day. (third why)
- 4. Why? There was not enough Technicians available to complete all tasks that day(fourth why)
- 5. *Why?* Poor maintenance and resource planning. (fifth why, an underlying (root) cause).

Organisation-related

- 1. Why? The Technician was working on unfit scaffolding. (first why)
- 2. Why? There were no 'kick boards' secured on the scaffold. (second why)
- 3. *Why?* The scaffold was not adequately inspected. (third why)
- 4. *Why?* The scaffold Inspector was not competent. (fourth why)
- 5. Why? There was no competence assurance system in place for HSE critical positions. (fifth why, an underlying (root) cause).



Good practices

- 1. Don't jump to conclusions don't assume the answer is obvious.
- 2. Be absolutely objective.
- 3. A cross-functional team should complete the analysis.
- 4. Will addressing/correcting the cause' prevent recurrence? If not, what is the next level of cause?
- 5. If you don't ask enough 'Whys', you may end up with a 'symptom' and not an underlying (root) cause.
- 6. Corrective action for a symptom is not effective in eliminating the cause.
- 7. The causal path should make sense when read in reverse using 'therefore'.
- 8. A key phrase to remember in any 5 Why exercise is 'people do not fail, processes do'.

Be mindful of the following

- 1. There is a tendency for investigators to stop at symptoms rather than going on to lower-level root causes.
- 2. Results are not repeatable different people using 5 Whys come up with different causes for the same problem.
- 3. There is also a tendency to isolate a single root cause, whereas each question could elicit many different root causes.



5 WHY'S FORM

INCIDENT DETAILS						
Short description of	of Incident:					
Date Occurred:			Time:	Reported by:		
Date Reported:			Time:	Supervisor:		
Location:			Time:	Incident Owner:		
Incident Type: HSE (register in Fountain) Incident with consequence Incident without consequence Potential incident (Unsafe Ac Process Safety Event (Ignition, LOPC, HSE Case B		ct/Condition)		cident		
FIM/MTA Incident ID:		Investigation due date:		Investigatio method:	n	
Investigation Team Leader:			Investigation Team Members:			
INCIDENT DESC	RIPTION (dea	ailed information,	hazard released, equip	oment, involved	d parties, er	nvironmental damage etc.)
INCIDENT CL	ASSIFICAT	ION (e.g.Ac	tual '2' and Poter	ntial 'B3')		
RAM Rating		eople	Asset	Enviror	nment	Reputation
Actual severity						
Potential risk						
IMMEDIATE COR	RECTIVE AC	TIONS / MITIG	ATION ACTIONS:			
No		Immediate a	ction	Date Responsible Party		
1.						
2.						
CONSEQUENC	ES (Actua	l Damage)				
5 WHYs ANAL	YSIS (use	one or more	5W causal paths	as releva	nt)	
(An action, omission)						
	.g. Equipme	nt failures (r	maintenance issues	s etc.)		
Why						Insert one or more of the Basic Risk Factors:
Why Why						
Why						-
Why						



Causa	l Path 2 e.g. Pe	eople (human error	r, competenc	e, fatigue, com	munications,	hazard re	cognition etc.)
Why						Insert or	e or more of the Risk
Why							Factors:
Why							
Why Why							
	l Path 3 e.g. O	rganisation (plann	l lina. resource	es, procedures	etc.)		
Why		3aa		<i>b</i> , <i>p</i>	0.007	Insert or	ne or more of the Risk
Why						indert of	Factors:
Why							
Why							
Why							
For Und	derlying (root) Cau	se analyses consider (using the follov	ving factors:			
	ard recognition inad		5 – Housekeepir 6 – Procedures r				ction inadequate
	ational awareness ir k of knowledge/skills			not followed activities inadequate			gs/specs inadequate nt inadequate
	nmunications/TBT in		8 – Design inade		12 – Wilful		
INCID	ENT SUMMAR	Y (applicable for	Reliability	related incide	ents)		
ACTIO							
ACTIC	ON REGISTER						
No.	[otion – matched to Uno	derlying (root) (Causes	Action	Party	Target date
	[otion – matched to Uno	derlying (root) (Causes	Action	Party	Target date
No.	[ption – matched to Uno	derlying (root) (Causes	Action	Party	Target date
No. 1	[otion – matched to Und	derlying (root) (Causes	Action	Party	Target date
No. 1 2	[otion – matched to Und	derlying (root) (Causes	Action	Party	Target date
No. 1 2 3	[ption – matched to Uno	derlying (root) (Causes	Action	Party	Target date
No. 1 2 3 4	[ption – matched to Uno	derlying (root) (Causes	Action	Party	Target date
No. 1 2 3 4 5 6	[derlying (root) (Causes		Party	Target date
No. 1 2 3 4 5 6	Descri		derlying (root) (Causes	Action	Party	Target date
No. 1 2 3 4 5 6	Descri		derlying (root) (Causes		Party	Target date
No. 1 2 3 4 5 6	Descri		derlying (root) (Causes	Action	Party	Target date
No. 1 2 3 4 5 6 LESS	Descri	D	derlying (root) (Causes		Party	Target date
No. 1 2 3 4 5 6 LESS INCID	Descrip	D	derlying (root) (Target date
No. 1 2 3 4 5 6 LESS INCID	Descrip ONS LEARNEI	D	derlying (root) (Causes	y the	Party	Target date



APPENDIX 3 INCIDENT INVESTIGATION REPORT

The following information provides guidance on the type of content that should comprise an investigation report:

Summary of investigation

A brief summary of the report, giving the background of the incident, a description of the incident, description of injuries, damage and loss, and outlining the causes established and the agreed actions.

Investigation Team

Names and positions of the Team Leader and Team members.

Place, Time and Date of incident

Incident consequences

Details of persons injured, and the injuries in a form understandable to non-medical readers. Description of the damage and loss suffered.

<u>Actual and Potential risk classifications</u> People, Environment, Asset, Reputation/Social

Events leading up to the incident

A short narrative and timeline that sets the scene of the incident:

- Description of the operation in progress;
- Preparations made for the work, including work procedures, instructions, permits and supervision;
- Personnel involved including work and shift patterns;
- Equipment involved;
- Environmental and weather conditions;
- Activities taking place at the scene of the incident;
- Activities of key persons prior to the day of the incident that could have affected their actions.

Description of the Incident

A statement of the facts immediately surrounding the incident, covering the period from the initiating events until the situation was under control. The statement should include photographs, drawings or maps to illustrate the narrative. A timeline of key events relevant to the incident can also provide useful information to those involved in the incident review process.

Investigation Findings

This section should demonstrate that the investigation was carried out in sufficient depth to support the conclusions that follow. Where relevant, it should include references to:

- Environmental conditions;
- Condition of equipment and facilities, including inspection and maintenance history, operating mode;
- Procedures relating to the operation;
- Information about the training and experience of persons involved;
- Work instructions and communications;
- Records and documentation;
- Information derived from the nature of the damage;



- Witness statements;
- Factors affecting alertness or judgement, e.g. fatigue, social pressures, medications;
- Working conditions;
- Results of special investigations and tests;
- Rescue and damage containment activities;
- Emergency response and recovery activities.

Immediate and Underlying Causes of the Incident

This section should include the results of the analysis of the findings, identifying the immediate and underlying causes and weaknesses in the management system. The results are normally presented as a Tripod tree.

When certain conclusions have not been fully established by the available evidence these should be highlighted as tentative conclusions.

Action items

This section should include corrective actions for immediate causes (Tripod breached defenses) and improvement actions addressing the underlying causes and management system weaknesses. Action items should be achievable and measurable, and should specify action parties and implementation times.

Appendices

Sequence of events. Tripod tree. Other data needed to supplement the report, including additional photographs and drawings etc.



APPENDIX 4 LEARNING FROM INCIDENTS ALERT TEMPLATE

AWARENESS ALERT					
	DENT TITLE				
What happened?	Photograph or Diagram				
Why it happened?					
Lessons Learned & recommenda	ations				
Sakhalin Energy	Prepared by: C-HSE department				