



Oil Sands Division

Contractor HSE&SR Manual

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1. PURPOSE

It is Nexen's vision to be recognized as a leader in sustainability, maximizing value for their shareholders and other key stakeholders by integrating health, safety, and environmental considerations into our decision-making. It is essential that all Nexen Oil Sands contractors conduct their activities in a way that safeguards this vision.

We believe that our contractors have a proactive role in achieving our Health, Safety, and Environment (HSE&SR) goals and objectives and we expect them to strive for 100% Safe Performance in all associated operations and activities.

This Manual defines the minimum HSE&SR management system requirements for Nexen Oil Sands contractors performing work on our behalf.

2. SCOPE

This Manual applies to all Oil Sands contractors and subcontractors performing work at a facility, operation or work site managed by Nexen Oil Sands.

3. REFERENCES

3.1. External References

The following External References have been used to develop this division standard and to supply necessary background information. References used refer to the edition listed and assume any update of that edition.

- Alberta Occupational Health & Safety Code & Explanation July 2009

3.2. Internal References

The following Internal References give specific information about the various methods of hazard control related to the **Contractor HSE&SR Manual**.

- Health, Safety Environment and Social Responsibility Policy – A136
- This document has been developed in accordance with the Nexen Inc HSE&SR Management System [Element # 7 Recording Keeping & Procedure Management](#)

4. DEFINITIONS

- 4.1. **Alcohol** means the intoxicating agent in beverage alcohol, ethyl alcohol or other low molecular weight alcohol including methyl or isopropyl alcohol.
- 4.2. **Alcohol Testing** means the collection of specimen, screening analysis and confirmation testing for alcohol concentration in blood (breathalyzer), urine or saliva.
- 4.3. **Authorized** means to be designated or assigned to perform a specific type of duty or duties, to use specified equipment or vehicles and/or to be present in a given location at a specified time.
- 4.4. **CSTS** means the construction safety training system, a safety basics training program administered by the Alberta Construction Safety Association and which provides a generic WHMIS Module.
- 4.5. **Contractor** means a person, partnership, corporation or other legal entity which has entered into a contract document.
- 4.6. **Contractor Vehicles** means any motor vehicle owned, leased or otherwise under the control of a contractor.
- 4.7. **Corrective Measures** means those activities to be performed or steps to be taken which are designed to prevent or minimize the potential or severity of future occurrences of an incident.
- 4.8. **Drug** means illicit drugs as well as medications, substances, chemicals or agents which have been obtained illegally, the use or possession of which is unlawful or requires a personal prescription from a licensed treating physician.
- 4.9. **ERP** and “**Emergency Response Plan**” means an integrated set of policies and procedures that facilitate the preparation for, response to and recovery from emergency incidents.
- 4.10. **FLRA** means field level hazard & risk assessment.
- 4.11. **First Aid Injury** means any one time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care by a physician. Such treatment and observation are considered first aid even when provided by a physician or other registered medical professional.
- 4.12. **Flame Retardant** means the quality possessed by materials which have been treated or coated with a substance that retards ignition and flame spread under moderate fire exposure and denotes a lower quality of retardation than fire resistant.
- 4.13. **HSE&SR** means health, safety and environment.
- 4.14. **Harassment** means engaging in a course of comment or conduct that is known or should reasonably be known to be unwelcome.
- 4.15. **Hot Work** means work involving flames, sparks, or temperatures high enough to ignite flammable materials.

- 4.16. IDLH Atmosphere** means an Immediately Dangerous to Health and Life Atmosphere, as defined in Alberta OH&S regulations.
- 4.17. Incident** means any event, action or inappropriate behaviour resulting in actual or potential harm, damage or loss to the environment, Nexen Oil Sands premises, contractors, workers, visitors or any other person or their respective property. For clarity, the term “incident” includes possession of alcohol, a drug or drug paraphernalia in contravention of the **Site Rules** (including without limitation those portions of the Site Rules entitled **Alcohol and Drug Work Standard, Camp Rules and Behaviour & Discipline Policy**).
- 4.18. Inspection** means an observation of work processes and an examination of plant/equipment to determine if any hazards are present and recognize things being done right.
- 4.19. JHA** means job hazard analysis, a system to identify hazards associated within a scope of work.
- 4.20. JSA** means job safety analysis, a task-specific assessment of hazards and controls.
- 4.21. LEL** means lower explosive limit.
- 4.22. Lost Workday Case** means an injury that prevents a worker from working on the next regularly scheduled workday.
- 4.23. Management of Change or MOC** means a process to manage engineering changes relative to process, equipment or other controlled assets.
- 4.24. Medical Aid** means an injury, other than a first aid injury, which requires treatment by a physician or other medical professional and includes:
- impairment to bodily functions,
 - damage of a non-superficial nature to a physical structure (fracture),
 - involved complications, and/or
 - requires immediate medical follow-up treatment.

- 4.25. MSDS** means Material Safety Data Sheet as provided by the manufacturer of chemicals and other controlled products.
- 4.26. Nexen** means Nexen Inc. and its successors and permitted assigns.
- 4.27. OH&S** means Occupational Health & Safety.
- 4.28. PPE** means personal protective equipment.
- 4.29. Prime Contractor** means an owner, contractor, employer or other person as defined by the Alberta Occupational Health and Safety Act.
- 4.30. Regulatory Official** means a representative of a government agency who has authority to access a Nexen Oil Sands site for the purposes of investigation or inspection, including without limitation representatives of Alberta Labour, OH&S, Alberta Environment, ERCB, ASRD, DFO, and other services.
- 4.31. Restricted Workday Case** means any work related injury or illness that prevents a Worker from performing one or more routine functions of their job.
- 4.32. Site Rules** means collectively, the various policies, procedures, standards, work practices and other relevant rules and regulations adopted by Nexen Oil Sands to promote the safety, health and security of persons who are on the site and the preservation of the site environment. The site rules are comprised of various sections, including:
- Site Rules Overview,
 - Definitions,
 - Alcohol and Drug Work Standard,
 - General Site Wide Shared Services Policy,
 - Access Policy,
 - Contractor Mobilization and Demobilization Policy,
 - Behaviour and Discipline Policy,
 - Camp Rules,
 - Transportation and Parking Policy, and
 - Forms.

- 4.33. TDG** means transportation of dangerous goods.
- 4.34. Task** means a segment of work, which requires a set of specific and distinct actions for its completion.
- 4.35. Variance** means the process that facilitates requests for revisions or deviations from an HSE&SR standard procedure or rule on a singular basis for a specified period of time.
- 4.36. WCB** means the Worker's Compensation Board.
- 4.37. WHMIS** means the Workplace Hazardous Materials Information System.
- 4.38. Worker** means any person working on a Nexen Oil Sands site and under the control of Nexen Oil Sands Management, whether as a contractor, or as an employee or consultant to Nexen.

5. RESPONSIBILITIES

5.1. Contractor Management

The contractor's management personnel have responsibility for planning, leading, organizing and controlling field activities within a designated area and are accountable to the designated Nexen Oil Sands representative.

Contractor management is responsible to:

- Develop scope-specific HSE&SR plans based on this **Contractor HSE&SR Manual** to address area and scope specific needs.
- Take ownership, support implementation and actively participate in the HSE&SR program within area of responsibility.
- Communicate HSE&SR objectives to their own employees and subcontractors within their area of responsibility.
- Ensure area employees know and understand their HSE&SR responsibilities and are held accountable for compliance.
- Maintain three levels of safe work planning: scope specific hazard assessment, pre-job critical task planning (JHA) and task specific hazard reviews (JSA).
- Emphasize to their team that HSE&SR issues must be given equal priority to cost, schedule and quality.
- Support Owner and Contractor HSE&SR personnel.
- Visibly demonstrate commitment to the 100% safe performance culture by conducting informal inspections of work areas and taking action on observed non-compliance.

- Verify area compliance to the scope-specific HSE&SR program.
- Positively recognize individuals or groups of individuals for outstanding HSE&SR performance.
- Implement a system to ensure that identified corrective actions are followed-up to completion.
- Verify sub-contractor compliance to the established HSE&SR program and take corrective action on non-compliance.
- Lead by positive example.
- Advise the Nexen Oil Sands designated representative of serious incidents as soon as practicable after event. Refer to the **Oil Sands Event Reporting and Investigation Standard**.
- Participate on a rotational basis in area planned inspections and HSE&SR communication meetings.
- Monitor and commend/correct individual HSE&SR performance of members of line supervision.
- Conduct regular line supervisors' HSE&SR meetings (once every two weeks).
- Identify and facilitate training requirements for upcoming work.
- Ensure company/area specific orientations are conducted.
- Confirm employees are sufficiently experienced and in proper mental/physical condition to perform assigned work safely.
- Know and understand requirements of the environmental control plan.
- Verify that sub-contractor has a system in place to ensure identified corrective actions are followed-up to completion.
- Conduct ongoing reviews of hazard exposures for current and upcoming work.
- Review and take action on office safety issues.

5.2. Contractor HSE&SR Personnel

Contractor HSE&SR personnel have overall responsibility for their own HSE&SR program coordination within their specific area. Contractor personnel are accountable to their own management as well as Nexen Oil Sands HSE&SR representatives.

Contractor HSE&SR personnel are responsible to:

- Coordinate area/scope-specific HSE&SR plans.

- Identify actions required to implement safety training, environmental, security, emergency response and occupation health services plans.
- Advise contractor management on HSE&SR issues.
- Administer contractor HSE&SR record keeping systems.
- Monitor compliance to regulatory and Nexen Oil Sands HSE&SR requirements and initiate corrective action through line supervisor or management system refinement.
- Prepare and issue monthly HSE&SR performance report.
- Interface with contractor management, line supervision, and subcontractors on safety issues.
- Establish systems to ensure all actions identified during planned inspections, incident investigations and safety communications are tracked to completion.
- Participate in Contractor and subcontractor compliance monitoring processes.
- Maintain positive relationships with Nexen Oil Sands area management, contractors and workers.
- Coordinate HSE&SR efforts and advise contractor management on safety issues.
- Provide knowledgeable expertise with respect to applicable OH&S legislation.
- Conduct area compliance inspections; provide feedback to area supervision.
- Interface with other owner and contractor HSE&SR personnel regarding HSE&SR issues.

5.3. Contractor Employees/Workers

Each Worker is responsible for safely carrying out work.

The Worker is responsible to:

- Integrate HSE&SR considerations into all activities; exercise necessary steps to protect the health and safety of self and others.
- Know and comply with HSE&SR rules, regulations and procedures.
- Report all incidents and hazards to immediate supervisor in a timely manner.
- Stop all unsafe work and take corrective action (i.e. obligation to refuse).
- Maintain and use personal protective and safety equipment.
- Communicate frequently with supervisor on HSE&SR issues.
- Suggest ways and means to reduce risk.

- Review scope specific hazard assessments/pre-job critical task planning (JHA) information and participate in task specific hazard reviews (JSA) prior to starting work.
- Actively participate in:
 - Morning tailgate meetings
 - HSE&SR meetings
 - Inspections (when invited)
 - Incident investigations (when required)
 - Nexen Oil Sands/company initiated training sessions

6. EXPECTATIONS

6.1. Administration

Unless otherwise designated in writing, Nexen Oil Sands will be the Prime Contractor for all scopes of work, as defined by Alberta Occupational Health and Safety Act (OH&S Act). All other parties will assume the roles of contractor or subcontractor. Each party is expected to understand and fulfill their scope-specific HSE&SR responsibilities.

6.1.1. Contractor HSE&SR Manual

This manual has been prepared to outline Nexen Oil Sands's minimum expectations of contractors with regard to HSE&SR management while performing work on Nexen managed facilities, operations or work sites.

This manual has been prepared to:

- support the objective of a 100% safe culture;
- establish lines of responsibility and accountability for HSE&SR management;
- ensure communication of best practices and learnings between Nexen Oil Sands and our contractors.

This is a dynamic document that will continue to evolve.

This **Contractor HSE&SR Manual** will be issued to all contractors. Any updates and the latest version of this manual will be maintained on a specified Nexen Contractor website. It is the responsibility of the contractor to ensure they maintain their manual to reflect the latest requirements.

6.1.2. Contractor HSE&SR Record Keeping

Contractors are expected to maintain their own safety records. Nexen Oil Sands will require access to contractor records for the purposes of verification and evaluation (e.g., right to audit).

Contractors will be expected to regularly submit the following records to the designated Nexen Oil Sands representative:

- Planned inspections (complete with follow-up on substandard items identified);
- Incident investigations (completed investigation including follow-up on identified remedial actions);
- Communication – weekly general meeting (complete with follow-up on concerns raised);
- Training matrix (detailing the contractor's training plan);
- Contractor performance report (see Attachment 9.1);
- Copies of any reports issued as a result of visits or inspections conducted by Regulatory Officials;
- Certification documentation as required (e.g. cranes);
- Copies of Material Safety Data Sheets (MSDS) for the controlled products to be used by the contractor.

The following records will be maintained on the Contractor file, and readily available for review:

- Pre-use equipment checklists;
- All Training records
- Course outlines;
- Copies of attendance lists for training provided to Workers;
- Signed copy of the contractor/area-specific orientation checklist;
- Communication – daily pre-job meetings (complete with follow-up on concerns raised);
- Project hazard assessment and JHAs;
- Job Safety Analysis (JSAs);
- Task-specific work procedures;
- Transmittal records for HSE&SR documentation submitted to Nexen representatives; and

- Workers' Compensation records.

6.2. Variances

Occasionally, a temporary deviation from an HSE&SR standard, procedure, practice, or rule may be required in an unanticipated situation or circumstance. The variance process must be followed to address and manage the risks associated with the required deviation. The following is an overview of the Nexen Oil Sands variance process; further details can be obtained from the Nexen Oil Sands **Request for HSE&SR Variance Standard (OSD-OSD-HS-STD-0005)**

6.2.1 Variance Criteria

Variances to HSE&SR standards, procedures, practices or rules can be requested only after a competent worker and supervisor have clearly justified that there is a need to deviate from a standard, procedure, practice or rule.

Variances must meet the following requirements:

- The variance results in an equally effective measure of protection to the health / safety of people, the protection of the environment, the social protection of the public and/or operational integrity of the Oil Sands facility or project.
- Continued operation under the variance will not adversely affect the health/safety of workers or the public, the environment or operational/project integrity

Variances to applicable laws or regulations are not permitted, unless authorized by the regulatory authority and approved by the Nexen Regional HSE&SR Manager, the applicable Business Unit VP, a Nexen Oil Sands legal representative and as required a qualified professional engineer or designated technical authority.

6.2.2 Variance Request

The variance request will be in writing using the Variance Request Form (see Attachment 9.2). The request must contain the following information:

- The standard, procedure, practice or rule to which the variance applies;
- Description of the variance requested;
- Rational for the variance by describing the reason why the standard, procedure, practice or rule cannot or should not be applied;

- Description of the alternate risk mitigation measures (PPE, procedures, equipment, etc.) that will be used during the term of the variance.

A risk assessment of the variance shall be conducted by authorized and trained personnel using an approved risk ranking matrix before the variance is submitted for approval. In some instances, the management of change (MOC) process will apply to the variance approval

6.2.3 Variance approval

Variances will be approved by the senior Nexen Oil Sands management representative, or designate, and the HSE&SR Manager, or designate, responsible for the scope of work being performed.

The approving bodies will only approve the Variance Request once the risk assessment has been completed and safeguards can be implemented to mitigate the risk to an acceptable level when performing the task.

6.2.4 Variance Extension or Renewal

Variances shall not exceed the time required to complete the tasks identified or the time indicated on the variance unless an extension is obtained.

A variance may be extended beyond the original time frame but will be subject to the same requirements and restrictions as the original variance request.

6.3. Alcohol and Drug Work Standards

The inappropriate use of alcohol or the use of drugs, including the misuse of prescription drugs or over-the-counter medication and other substances, can have serious adverse effects on the health, safety and performance of persons on Nexen Oil Sands work sites. For this reason, the following Alcohol and Drug Work Standards have been established.

6.3.1 General Standards

Subject to the provisions of the **Oil Sands Alcohol and Drug Work Standard**, persons shall not be under the influence of, distribute, possess, consume, solicit or otherwise use alcohol, drugs, or drug paraphernalia on any Nexen Oil Sands premises or in any vehicle or other equipment at any time.

With respect to the use of alcohol, the only exceptions shall be those provided for in the portion of the **Site Rules** entitled **Camp Rules** (specifically in subsection 4.1(e)).

With respect to the use of prescription drugs or over-the-counter medication, they should only be used as directed by a competent professional, or according to the manufacturer's recommended dosage. All individuals must be aware of any potentially

unsafe side effects or impairment arising from the use of any prescription Drugs or over-the-counter medication and must also notify your supervisor of those effects before reporting to or being present on Nexen Oil Sands premises. If an individual is unsure about the side effects or possible impairment arising from the use of a prescription drug or over-the-counter medication, they shall consult with a physician, nurse or pharmacist before entering the Oil Sands premises.

6.3.2 Contractor Policy/Work Standards

All Contractors are encouraged to implement a policy or program that has standards at least as stringent as those set out in the **Oil Sands Alcohol and Drug Work Standard**.

The **Oil Sands Alcohol and Drug Work Standard** is intended to outline the minimum requirements for incidents involving alcohol and drugs, which shall apply to all contractors.

Contractors who do not have an alcohol and Drug policy or program will be required to meet the standards set out in the **Oil Sands Alcohol and Drug Work Standard**.

6.4. Communication, Awareness and Promotion

Communication is one of the most important aspects of an effective HSE&SR program. To be effective, communication must flow through the organization in both directions, from Nexen Oil Sands representatives to contractor management through the line supervision to the workers and back again.

An important component of effective communication is trust. All personnel must believe that their comments and observations will be taken seriously or they will not openly communicate. To maintain credibility, line supervision must take action on legitimate concerns raised by workers as well as provide direct feedback on issues that do not require any action.

6.4.1 Meetings Requirements

Daily Tailgate Meetings

A daily tailgate meeting will be conducted by each contractor crew. These meetings will take place each morning prior to the start of any work activity. The time will be used to pre-plan for safety, identify any new or previously unidentified work hazards, and ensure overall risk has been reduced to an acceptable level.

Outline

Frequency:	Daily, prior to the start of work, or each time a Task changes.
Content:	Review the work to be performed during the day including any hazards associated with the work.
Chair:	Crew foreman
Participants:	Crew members
Documentation:	Meeting minutes will be maintained and include: date, attendees, subjects discussed, follow-up on previously identified issues.

Immediately following the daily tailgate meeting, individual work groups will conduct their Job Safety Analysis (JSAs). See Section 6.5.4 of this **Contractor HSE&SR Manual** for details.

Shift HSE&SR Meetings

Each contractor will conduct a safety meeting at a minimum of once per shift based on a 10 and 4 schedule (once every two weeks). These meetings will address a relevant topic and provide crew members an opportunity to raise concerns, or put forth suggestions on ways and means to improve safety and environmental compliance on the worksite.

Outline

Frequency:	Per shift (every two weeks)
Content:	Pre-determined topic and discussion regarding worksite safety.
Chair:	Superintendent, crew foreman, HSE&SR representative
Participants:	Crew members
Documentation:	Meeting minutes will be maintained and include: date, attendees, subjects discussed, follow-up on previously identified issues.

Discipline superintendents will review minutes and initiate action on outstanding concerns. A file copy will be forwarded to the designated Nexen Oil Sands representative for the purpose of record keeping and compliance monitoring.

Shift Supervisors HSE&SR Meeting

On a per shift basis, contractor management will conduct a safety meeting with the line supervisors within their area of responsibility. This provides line supervisors an opportunity to raise concerns or put forth suggestions on ways and means to improve safety and environmental compliance on the worksite. This will also provide line supervisors an opportunity to review unresolved issues and concerns from their daily and weekly crew meetings.

Outline

Frequency:	Per shift
Content:	Pre-determined topic and discussion regarding worksite safety and environmental issues.
Chair:	Contractor management
Participants:	Line supervisors and subcontractor supervisors within the Contractor manager's area of responsibility, HSE&SR representative.
Documentation:	Meeting minutes will be maintained and include: date, attendees, subjects discussed, follow-up on previously identified issues.

6.4.2 One-On-One Personal Contacts

All members of line supervision, from contractor management to foremen, are required to conduct regular one-on-one personal contacts with workers within their area of responsibility. These contacts allow the line supervisor the opportunity to communicate to their workers their safety commitment, as well as get workers' opinions on site HSE&SR issues.

Supervisors are encouraged to ask workers open-ended questions about their perspective on worksite safety. To be effective, the dialogue must be two-way.

6.4.3 Incident/Information Sharing

To maximize opportunities for learning, contractor developed "HSE&SR Alerts" shall be prepared to communicate hazards, opportunities for improvement or learnings associated with serious incidents. HSE&SR Alerts shall be posted on worksite and electronic bulletin boards.

Incident descriptions will describe the incident circumstances, causes and corrective actions associated with the incident. Incident descriptions must not name personnel involved. Whenever possible, photographs should be used to illustrate learning.

6.4.4. Communications with Regulatory Agencies

Contractors and/or their employees shall not correspond directly with outside agencies concerning HSE&SR issues, either through oral or written communication, without prior approval of the designated Nexen Oil Sands representative. Nexen Oil Sands representatives shall be the contact with federal, provincial and local regulatory agencies regarding permit conditions, mitigation measures, agency site visits and access to the facility, operation or worksite's compliance records. The designated Nexen Oil Sands representative must approve access to HSE&SR files by agencies; the designate Nexen Oil Sands representative will also make any required submission of reports to federal, provincial and/or local agencies.

6.4.5. Communications with the Media

Any and all communication with the press or news media related to a Nexen Oil Sands facility, operation or worksite shall be conducted by and through the Nexen's designated representatives. Contractors and/or their employees shall direct all requests by the press or news media to these designated representatives.

6.4.6 Recognition and Awareness

The objective of an HSE&SR recognition and awareness program is to strengthen and reinforce Worker awareness and positive behaviours.

Contractors are encouraged to develop and participate in awareness activities that provide for involvement by all levels of the organization. Workers will be encouraged to provide input into ways and means to improve HSE&SR performance.

6.5 Hazard Assessment

The hazard control process is the most critical component of a safety program. Each Contractor is required to conduct a hazard assessment to identify, assess, and control risks that may present exposures to people, property or the environment.

The optimum control measure in the elimination of workplace hazards is through design and engineering. When this is not possible or it is not feasible, administrative methods should be employed. The use of PPE is considered as a last resort after the consideration of engineering and administrative controls.

6.5.1. Hazard Assessment

The objective of the hazard assessment process is to introduce hazard controls early in the project by identifying risks associated with upcoming work.

The hazard assessment:

- Is performed at a high level within the contractor's organization;
- Identifies and analyses hazards associated with a specific work;
- Provides a preliminary safe work plan to mitigate hazards associated with the work;
- Identifies which work will require a specific Job Hazard Analysis (JHA); and
- Will remain readily accessible for review by Nexen or contractor personnel.

This hazard assessment consists of three steps:

- Identifying the scope of work;
- Identifying exposures (hazard and risk) to people, property or the environment; and
- Identifying the actions required to reduce/eliminate risk.

As the job progresses, the hazard assessment will be revisited:

- As part scheduled look ahead meetings, or
- If a new work process is introduced.

This review will allow supervisors adequate time to acquire any required tools or equipment, make changes to the work plan or prepare JHA.

Hazard assessments are reviewed with crews performing the work and serve as the basis for their pre-job meetings.

6.5.2. Job Hazard Analysis (JHA)

During the hazard assessment process certain tasks will be identified that present additional risk. These tasks will require additional review, assessment and a specific safe work procedure.

Responsibility for the development of the JHA rests with the contractor responsible for the job. Jobs that could require a JHA may include, but are not limited to:

- High risk jobs;
- New jobs or tasks that present unspecified or unknown hazards;
- Jobs or tasks involving new equipment, machinery, or procedures;
- Major job categories that will be repeated frequently;

- Jobs or tasks that historically experienced a repeated significant rate of incidents, injuries, exposures, or near misses;
- Work at heights;
- Work in excavations;
- Jobs involving environmental remediation of hazardous waste, or different types of materials that fall under the same regulatory requirements; and
- Jobs or tasks that, in the professional judgment of the responsible Nexen Oil Sands representative, require a formal JHA.

The following hazard categories should always be considered for inclusion in the JHA:

- Chemical exposures
- Oxygen deficiency/enrichment
- Exposures to ionizing and non-ionizing radiation
- Electrical hazards
- Physical hazards (e.g. confined space, fall hazard)
- Fire and explosion
- Temperature extremes
- Excessive noise
- Biological hazards
- Psychological hazards (e.g. stress, fatigue)

Once the JHA is completed, a copy will be forwarded to the Nexen Oil Sands representative.

6.5.3. Daily Tailgate Meeting

The next step in the hazard control process is the tailgate meeting which will be held the day the work is conducted. Led by the foreman, the discussion will include:

- Identification of tasks being performed;
- Identification of the 'day-of-the-job' hazards associated with work tasks;
- Procedures for risk assessment; and
- Procedures for controlling hazards to an acceptable level of risk.

Tailgate meetings must be documented to identify the tasks, issues reviewed and participants.

6.5.4. Job Safety Analysis (JSA)

The contractor will implement a Job Safety Analysis process. JSA is performed at the beginning of each shift, or at the beginning of a new task or work assignment during the shift. A new JSA is also performed whenever there is a change of conditions or location. If the entire crew is doing the same tasks, one JSA card is completed for the crew. However, if the supervisor divides the crew into smaller groups doing different tasks, a JSA card is to be completed for each group.

The JSA process is flexible and may be performed in a number of ways. However, JSA must always be performed at the work location so that a real-time assessment of worksite conditions can be made. Although JSA may be performed entirely by the supervisor, the process is most effective when the supervisor and the workers actively participate together in the process.

For example, the supervisor could ask some crew members to identify the potential hazards of the assigned tasks and call upon other members to identify the preventive or protective measures required to work safely. Alternatively, a supervisor may assign leadership of the JSA process to a crew member, on a rotating basis.

The JSA process is nothing more than an outline for a thorough discussion with the crew about the risks and protective measures related to the work about to be performed. Although the JSA process is a valuable tool in eliminating incidents, the effectiveness will ultimately be determined by the level of commitment and support given to the process by the supervisor. It is the supervisor's responsibility to ensure that JSA process is always thorough and effective, and that through his/her leadership the process never becomes boring or routine.

6.5.5. Worker Involvement in Hazard Assessment Process

Whenever possible, contractors should include workers while performing hazard assessment activities, including the elimination and control of the identified hazards.

6.5.6. Safe Work Permits

The safe work permit (SWP) is a vital "administrative control" between permit issuers and permit receivers in creating a safe sustainable work envelope within Nexen Oil Sands facilities with energized or operating systems or processes.

They ensure workers are informed of the conditions, preparations, precautions and limitations of a defined task which must be clearly understood before work commences.

All conditions, preparations, precautions, equipment, or specific procedures that must be followed for each SWP job are developed through the Hazard Assessment process that, when combined with appropriate “zero energy state” preparations by Nexen Oil Sands personnel, enable the worker(s) to safely complete the work at hand.

Safe work permits are used for all contractor work within *process areas*

Within greenfield construction sites, permits will be used by exception. Routine but potentially hazardous activities will be managed through the JHA/JSA procedures.

6.5.7. Emergency Control of Hazards

If an emergency action is required to control or eliminate a hazard that is dangerous to the safety or health of workers:

- Only those workers competent in correcting the condition, and the minimum number necessary to correct the condition may be exposed to the hazard, and
- Every reasonable effort must be made to control the hazard while the condition is being corrected.

6.6 Training and Competency

Contractors are responsible to provide their workers with the necessary training to safely and efficiently perform their assigned duties/tasks. To meet this requirement, each contractor shall develop a training plan that is in line with the workers duties/tasks. All identified training requirements must be completed prior to commencement of workers duties/task.

All training must be tracked (spreadsheet or data base) and documented. At a minimum this shall include the following:

- Name of worker
- Training course
- Date of course;
- Expiry date
- Competency verification if required, i.e. AWP, forklift, skid steer, etc.
- Electronic copies of all worker training certificates and competency documents must be readily available upon request from a Nexen Inc employee or designated person on behalf of Nexen Inc

Note: All Training Providers must be from a recognized organization, training vendor (s) certification and/or course material must be readily available upon request from a Nexen Inc employee or designated person on behalf of Nexen Inc.

Contractor supervision is responsible to ensure workers are competent to perform assigned tasks and are expected to assess the competency of each worker they supervise. Particular attention must be given to the new worker, who represents an unknown risk with respect to job site hazards.

6.6.1 Construction Safety Training System (CSTS)

As a prerequisite all contractor field personnel shall complete the Construction Safety Training System (CSTS) before reporting to a Nexen Oil Sands work-site. CSTS does not replace site or skill specific training requirements or the need to verify worker competency.

6.6.2 New Worker Orientation

All contractor workers will be required to attend a general Nexen Oil Sands facility or project orientation before being allowed to work on the site.

6.6.3 Contractor-Specific Orientation

In addition to the general orientation session, workers must receive an area/site-specific orientation conducted by their respective contractor. This orientation is intended to familiarize workers with the contractor's HSE&SR program, contractor-specific requirements and any specific requirements associated with the contractors' scope of work or work area.

A record of attendance will be maintained by the contractor.

6.6.4 Visitors Orientation

Prior to accessing a Nexen Oil Sands, non-working visitors must receive a visitor's orientation for the facility or project. While they are on the site, they must be escorted at all times and the responsibility for the visitor's safety rests with the Host.

Visitors must comply with all Nexen Oil Sands HSE&SR rules and regulations.

6.6.5 Supervisor HSE&SR Training

Contractors are required to provide supervisor training to their front line supervision and management. This training will outline the duties and responsibilities of the supervisor/manager in regard to HSE&SR and shall include the following topics at a minimum:

- This Contractor HSE&SR Manual – responsibilities and expectations
- “100% Safe Performance” philosophy
- General HSE&SR responsibilities

- Progressive discipline
- Workplace safety
- Safe work practices
- HSE&SR meetings
- Emergency Procedures
- Fire prevention & Protection
- Safety surveillance and behaviour observation
- Job safety analysis/field level risk assessment
- Incident reporting, recording & investigation
- Available medical/health services
- HSE&SR recognition
- Special safety/health requirements
- New worker orientation process
- Environmental control plan
- Controlled product plan

6.6.6 Skill Specific Training

Depending on the nature of the contractor's scope of work, the contractor's workers may be required to perform tasks that require additional training. The contractor is responsible for skill-specific training of its personnel based on requirements identified in their hazard analysis.

The following possible skill specific training requirements should be considered at a minimum:

- Transportation of dangerous goods
- Fire watch duties and responsibilities
- Confined Space Monitor
- Flag person training duties and responsibilities
- Safe Work Permit
- Isolation of hazardous energy, lock out/tag out
- Respiratory protective equipment care, use and storage, including fit testing)

- Emergency response
- Aerial work platform
- Fall Protection
- Gas detection
- Powder actuated tools
- Chemical safety
- Safe work observation
- Fork lift operation
- WHMIS

6.6.7 Worker Competency

All contractors must have a process in place to verify and document that all of their workers are competent to do the work they are assigned. See Section 6.6

6.7 Inspections and Audits

Inspections are an important part of any HSE&SR Management System. They assist in enforcing compliance to legislated requirements, improving worker morale, and increasing work efficiency. They involve observation of work practices and physical conditions to identify situations that could contribute to Incidents, and are a valuable tool for the pre-loss identification of loss exposures.

Inspection of construction activities will be undertaken to verify and document compliance with safety and environmental requirements identified in:

- This **Contractor HSE&SR Manual** (Expectations)
- Approvals and permits
- Commitments
- Applicable federal, provincial and local regulations
- Applicable Nexen Oil Sands Standards and Procedures
- **Nexen Oil Sands HSE&SR Practices Manual**

In this section, the following terms shall have the meanings ascribed to them below:

Inspection – a physical conditions evaluation of the work area to identify items of compliance/non-compliance to work procedures, general rules, and standards.

Audit – an evaluation to determine a contractor’s compliance to the established HSE&SR Management System. An audit may include an inspection as part of the overall evaluation.

6.7.1 Government Inspections and Investigations

This section provides direction for coordination of inspections by regulatory officials. These guidelines are designed to assist in responding to regulatory officials wishing to gain access to the site for the purposes of investigation or inspection. Detailed information can be found in the **Nexen Oil Sands Government Inspections and Investigations Standard**.

Overall responsibility for coordinating the general activities of regulatory officials conducting inspections and investigations, while on a Nexen Oil Sands site, lies with the senior Nexen Oil Sands management representative or their delegate.

A Nexen Oil Sands representative will participate in all regulatory inspections and investigations relative to a Nexen Oil Sands worksite.

Inspections and Investigations Guidelines

For routine visits, the regulatory official will often call ahead to advise of their intention to visit the worksite. In these situations, the contractor’s senior management and area personnel will be advised in advance of the inspection.

In the event of an unannounced visit by a regulatory official, the following actions will occur:

- The relevant Nexen Oil Sands senior manager and Nexen legal representatives will be notified immediately.
- The Nexen Oil Sands senior manager will notify Nexen HSE&SR management and contractor management.
- The regulatory official will be directed to the Nexen Oil Sands senior manager’s office.

Pre-Inspection Conference

Prior to the inspection, the regulatory official will be asked to meet with the Nexen Oil Sands senior manager regarding the nature of the visit. Participants in this discussion would include:

- The regulatory official
- Nexen area management/supervision
- Nexen HSE&SR manager or delegate
- The contractor site manager

Discussion will include:

- The purpose of inspection (i.e., routine, or in response to a complaint)
- The scope of inspection
- The potential hazards associated with the work area to be inspected and the PPE required

Inspections

Designates from Nexen Oil Sands and the contractor will accompany the regulatory official while on the worksite. During the inspection, the Nexen designate will record observations and conditions found during the inspection and take photographs of anything photographed by the regulatory official.

When a regulatory official is conducting business directly with a contractor, the Nexen designate will act as an observer.

Post-Inspection Conference

After the inspection, the Nexen designate will request that the inspector meet with Nexen Oil Sands senior management. Discussion issues will include:

- The findings or concerns raised during the inspection,
- Copies of records or other documents obtained during the inspection,
- Protocols used for any tests or sampling conducted,
- Descriptions of any photographs taken, and
- The inspection report itself.

Post Inspection Actions

At the conclusion of the inspection or investigation, the Nexen designate will prepare a summary report of the regulatory official's visit, findings and resulting actions. A copy of this report will be sent to Nexen Oil Sands senior management and legal representatives.

The responsible party will promptly address all regulatory orders or identified deficiencies.

6.7.2 Formal Documented Inspections

All contractors are required to conduct one planned inspection per shift cycle within their area of responsibility. A cross section of participants is encouraged. Typical participants would include a craft worker, line supervisor, superintendent /manager and a Nexen Oil Sands representative representative.

Formal safety inspections shall consist of the following:

- Utilization of an inspection checklist, see Attachment 9.3 – Formal Inspection Form (sample).
- Identification of corrective actions to address substandard compliance.
- Inspection of work activities to verify compliance to the requirements of this **Contractor HSE&SR Manual (OSD-OSD-HS-MNL-0003)** and the **Nexen Oil Sands HSE&SR Practices Manual (OSD-OSD-HS-MNL-0004)**

All actions identified during a planned Inspection must be followed up to completion. It is the responsibility of contractor management to establish a follow-up system to track corrective actions.

Preparation

Prior to the inspection, the superintendent/manager acting as inspection leader will:

- Establish a date, time and meeting place for the inspection;
- Establish the area to be inspected;
- Determine if any specialized PPE is required.

Prior to the inspection the participants will review the established inspection criteria, the previous inspection report, and any outstanding actions.

Inspection Process

During the Inspection:

- Look for off-the-ground and out-of-the-way items;
- Systematically cover the area;
- Describe and locate each item clearly on the inspection report;
- Check color-coding as current.

In the event the inspection team identifies an imminent danger or high hazard situation, the inspection will be suspended until such time as the condition or practice has been resolved or the hazard has been reduced to an acceptable level (e.g. barricade and high visibility signage).

Post-Inspection

After the inspection:

- Conduct a post Inspection meeting to classify identified conditions and assign responsibility for corrective action and due date
- Complete and distribute report with copies to attendees and those with actions.

6.7.3 Informal Inspections

Contractor supervisors will conduct informal inspections of their area of responsibility as a part of their daily routine.

Contractor supervisors are expected to identify substandard conditions, work practices and at-risk behaviours and to initiate prompt corrective action. If a hazard cannot be immediately corrected, the condition will be highlighted so as not to present a risk to other workers. All identified corrective actions must be followed up to completion.

Workers are expected to report any hazardous condition to their line supervisor. Supervisors have the responsibility to investigate and follow up on reported hazardous conditions.

Observations and actions taken should be recorded in the supervisor's personal logbook.

6.7.4 Focus Audits

Contractor managers and HSE&SR personnel shall conduct monthly focus audits of established HSE&SR systems. Audits will be conducted in accordance with the following guidelines:

- Selection of at least one HSE&SR system (e.g. Job Safety Analysis, Lock Out/ Tag Out, Controlled Products, etc.) and verify compliance to the system by:
 - Observing workers;
 - Physically inspecting equipment in use;
 - Interviewing workers regarding their knowledge of the system.
- Determination as to system compliance;
- Provision of positive feedback to personnel if compliant;
- Development of corrective action plans to address deficiencies if required. Involvement of workers and line supervision may be required to identify root causes of non-compliance;
- Preparation of an audit report;
- Compilation of recommendations;
- Follow-up of actions to completion.

6.7.5 Equipment

The following equipment shall be inspected by the contractor (or their agent) prior to bringing it on a Nexen Oil Sands worksite. The purpose of these inspections will be to verify safe operability of the equipment. Equipment to be inspected must include, but not be limited to:

- Cranes
- Vehicles
- Hoisting equipment
- Compressors
- Light towers
- Temporary power/generators
- Fuel tanks
- Welding machines
- Mobile equipment
- Aerial work platforms.

Once complete, the inspection must be documented and the record maintained by the contractor.

6.7.6 Pre-Use Checks

Workers are expected to conduct pre-use checks of tools and equipment before using. Any defective equipment must be tagged as defective, taken out of service, and returned to the tool crib for repair or disposal.

With respect to mobile hoisting equipment, the operator is required to complete a pre-use check and make a log entry.

6.8 HSE&SR Observation Program

An effective HSE&SR observation program focused on the overall management of safe and at risk behaviors and conditions can proactively avert adverse events. By utilizing consistent monitoring, intervention, coaching/correcting, data collection/trending, and communication techniques a safety observation program can reduce event occurrence, improve attitudes, and modify unwanted behaviours.

All contractors are expected to participate in the Nexen Oil Sands HSE&SR Observation Program as described in detail in the **Oil Sands HSE&SR Observation Standard**.

6.8.1 Safety Opportunity Reporting

The objective of the safety opportunity reporting process is to establish a process to:

- initiate reporting and review safety opportunities;
- facilitate changes in safety materials, practices and/or procedures;
- avoid recurrence of similar circumstances by sharing learnings with other Nexen Oil Sands teams.

Nexen Oil Sands policy and culture forbids taking disciplinary actions against any worker reporting a safety concern.

Any observation of a safety opportunity must be reported immediately to the line supervisor. The supervisor is responsible for initiating corrective action and recording all facts and/or circumstances. Line management must review the reports and identify actions to prevent recurrence. Modification to standards, procedures or systems will be coordinated by Nexen Oil Sands and communicated to the contractor.

6.9 Emergency Response Planning

Regardless of the best efforts of an effectively implemented HSE&SR program, the potential for an Incident requiring emergency response still exists.

Emergency response involves managing the situation in the moments and hours following an incident. The mark of an effective Emergency Response Plan is efficiently coordinating and managing the actions required to reduce the loss exposure to people, property and the environment.

6.9.1 Emergency Response Planning Requirements

An Emergency Response Plan (ERP) is a comprehensive document to provide guidance regarding actions to be taken under various emergency conditions including responsibilities of individuals and departments, sources of aid outside the organization, general methods or procedures to follow, authority to make decisions, training and practice of emergency procedures, communications and reporting requirements.

To ensure emergency readiness, Contractors are required to prepare an organization and scope-specific ERP that clearly describes the process for initiating an emergency response, the contractors' emergency contacts, scope-specific response protocols, and applicable evacuation procedures. In most cases, the contractor ERP can and should reference the designated Nexen Oil Sands ERP to address all foreseeable situations.

6.9.2 Training

All contractor personnel shall be provided instruction concerning their responsibilities during an emergency. The information will include:

- Details of the Nexen Oil Sands and Contractor ERP
- Worker's responsibilities within the plans
- Process for initiating an emergency response
- Worksite evacuation procedures including muster points and assembly areas

6.10 Incident Management

This section will provide a framework for the reporting, recording, investigating and follow-up of incidents that could or did result in injury/illness, property damage, environmental release or business interruption.

Nexen Oil Sands contractors are required to comply with incident notification and investigation requirements. Employees have a responsibility to immediately report incidents to their Line Supervisor. Line Supervisors are responsible for ensuring incidents are properly reported to management and HSE&SR departments and an investigation conducted. It is the responsibility of the line supervisor to conduct the incident investigations. Assistance for completing incident investigations should be obtained from contractor HSE&SR personnel.

To ensure incidents are freely reported, the incident investigation process must focus on the incident circumstances, not on finding blame. If participants have the perception that the motivation is related to identifying who is to blame, employees will not report incidents for fear of disciplinary action.

6.10.1. Incident Reporting

Incidents will be reported on the day of occurrence or discovery through the line organization. Severity and/or severity potential will dictate who within the organizations of Nexen Oil Sands and the contractor will be notified of the incident and how soon notification must occur. Incident notification flow diagrams shall be developed for each scope of work as part of the contractor's HSE&SR Plan.

While loss-producing events are undesirable, line management must create a positive incident reporting environment, or risk driving incident reporting underground. Prompt incident reporting is a key element of effective incident management.

The following incidents must be reported to Nexen Oil Sands representatives immediately, with a written preliminary incident notification following within four hours of the occurrence or discovery. These incident scenes must also be secured and frozen until authorization for release has been given by the designated Nexen Oil Sands representative and Nexen Management (two levels of approval):

- Incidents which resulted in or have the potential to result in fatal injury, permanent disability, temporary disability (potential Lost Workday Cases and

Restricted Workday Cases), Medical Aid injuries or environmental impact (spills greater than 1L);

- Near miss Incidents with the potential for permanently disabling injury/fatal injury or Lost Workday Cases, property loss/damage including fire damage, tool, equipment and material losses, vandalism, or environmental impact;
- Other incidents such as work refusal due to imminent danger, requiring the attendance of a Regulatory Official; situations that are legislated as reportable to a regulatory authority; community complaints; Incidents that involve local police; safety related work stoppages; or production delays.

The following Incidents must be reported to the designated Nexen Oil Sands representatives prior to the end of the current workday. These may also include the use of the preliminary report form while an investigation is under way:

- First aid injury;
- Security incident with a property loss;
- Near misses that could have resulted in a Restricted Workday Case, property damage or environmental interference;
- Property loss (e.g. fire damage; tools, equipment and material losses; vandalism) or environmental impact;
- Other Incidents (work refusals due to imminent danger resolved on the worksite).

6.10.2. Investigation Process

All incidents, including without limitation those described above in section 6.5.1, must be investigated. Responsibility to comply with the incident investigation process lies with contractor management. Contractor HSE&SR personnel shall support the incident investigation process and serve as a resource to line supervision.

Each incident will be fully investigated and a Nexen Oil Sands Incident Report shall be prepared. The report and instructions for completion are attached (see Attachment 9.4)

Investigations must be conducted promptly in order to ensure Incident details are fresh in the minds of personnel involved and that physical evidence remains intact.

Once injured personnel have been cared for and the workplace made safe, the investigation must be initiated. Severity and severity potential of the Incident will determine the depth of the investigation as well as who will lead and participate in the investigation.

Participation and cooperation from involved Workers, witnesses, supervisors and management is essential to identify root causes and preventative measures.

Post-Incident Review

As part of the investigation process, a post-incident review will be conducted on all serious or potentially serious incidents. The review meeting should be held within 48 hours of occurrence of the Incident.

The intent of the meeting is to review and verify information required to close out the incident report (i.e., causes, corrective action and follow-up accountability).

Post-incident review meeting participants will vary depending on the incident.

The following is a typical agenda of the post-incident review meeting:

- safety moment
- opening remarks/meeting purpose – chair
- introductions
- incident review – discipline superintendent or contractor site manager
- summary of the incident (date, time, type of incident – near miss, lost time medical only, environmental)
- people/equipment involved and current status
- incident details
- findings of the investigation team
- basic and root cause
- review of corrective actions (immediate, systematic)
- closure

Meeting minutes will be maintained and attached to the completed incident investigation.

Although disciplinary action may be administered as a result of the incident, it is outside the scope of the meeting and will not be included on the agenda.

Determination of Recordability

Nexen Oil Sands representatives with recommendation from contractor management will make a determination of injury recordability.

Incident Close-Out

Incident reports shall remain open until all identified corrective actions have been completed and the action taken is documented on the incident file. Contractors are required to establish a method for tracking open incidents and associated actions through to closure.

6.11. Workers' Compensation

The purpose of this section is to define the reporting requirements each contractor and their workers have to the Alberta Workers' Compensation Board.

6.11.1. Responsibilities

a) Contractor's Responsibilities

- Provide transportation to the nearest medical facility if required
- Provide the worker with the worker handbook and a copy of all related documentation including first aid records, employer's report of injury, and incident investigation report.
- Report all medical treatment and lost time injuries to the WCB on the employer's report of injury (C040) within 72 hours. Fatalities must be reported immediately.
- Pay the Worker in full for the day of the injury.
- Encourage modified duties whenever possible as well as early return to work.
- Notify the WCB within 24 hours of an injured Worker's return to work.
- Monitor the injured worker's progress during treatment and during their return to work.

b) Worker's Responsibility

- Report all injuries including after hour medical treatment to your employer as soon as possible.
- Report all medical treatments and lost time due to occupational injury to the WCB on the worker's report of injury (C060) as soon as possible.
- Cooperate with your employer and physicians on modified duties and early return to work.

6.11.2. Completion of the WCB Employer Form (C040)

WCB completion time for the C040 is 72 hours.

The contractor must complete a C040 for every worker who seeks external medical treatment beyond the Site; if the case incurs medical costs associated with a workplace incident; or if the worker is on modified duties, or incurs time loss.

Contractor management or Nexen Oil Sands representative, as applicable, must initial all C040s to ensure that they are aware of the WCB experience. This does not have to be done prior to submission of the form to WCB.

A letter should be written for any claim where there are extenuating circumstances that the WCB should know about. For example:

- The worker is doctor shopping where no objective medical findings exist to support a change in work status,
- The worker has had a similar injury before,
- The worker has extra curricular activities such as hockey or rugby that could have impacted on their present problem,
- The worker is not attending scheduled appointments (i.e., doctor, physiotherapist),
- Refusal to participate in modified duties,
- Other activities that may be interfering with, or delaying, the worker's rehabilitation process.

If the contractor is unable to complete the explanatory letter within 72 hours, the C040 must be submitted noting that a letter is to follow.

If there isn't enough room to write a complete description of the incident, attach a letter with all the pertinent details.

For all lost time claims, the person completing the C040 will also submit an Employment Confirmation form. This form is used to indicate how long this worker would have been working on the job had the accident not happened.

If a case is a lost time case, when the worker returns to work, a return to work notice must be completed and submitted to the WCB.

6.11.3. Modified Work Program

Each contractor shall develop and implement their own modified work program. The worker will be allowed to return to work if:

- The worker's standing physician supports early return to work,
- The worker agrees to return in a modified work assignment,
- The contractor is able to identify a productive work assignment, and
- The work will not exacerbate the condition.

Line supervision has a responsibility to monitor the worker's compliance to modified work assignments.

Responsibilities

Worker:

- Takes fitness form to a doctor at least every two weeks for regular medical assessments
- Informs supervisor of any issues or concerns
- Provides up to date information on restrictions and medical status
- Ensures compliance with assigned modified work duties and conditions
- Attends all scheduled medical treatment appointments and return to work following appointments

Supervisors:

- Assign appropriate work based on identified medical restrictions and ensure that the Worker is not directed to perform work that they are not medically approved for
- Accountable for identifying job tasks available in their area.

Off-Site Medical Treatment Procedure

A Worker requiring off-site medical treatment will be provided with:

- Information letter to the treating physician
- Fitness form – prior to leaving the workplace
- The worker must be directed to provide the information letter and fitness form to the health care provider

The worker must be accompanied by a contractor representative when leaving site to attend to health care matters.

Workers eligible to accept modified work duties must return all forms to the contractor representative.

Offer of Modified Work

- The contractor representative will develop and present a written offer of modified work to the worker
- The work offer must contain a specific list of the job duties to be performed
- The offer must specify the length of placement of the modified work
- The contractor representative ensures that both the worker and the supervisor sign the offer of modified work

If any restrictions change, repeat the above steps.

Refusal of Offer

If a worker refuses modified work, the worker must record the reasons for not participating and advise their employer and the Nexen Oil Sands representative.

Monitoring Worker's Progress

Once a worker is placed on modified work, the relevant supervisor must monitor the progress of the worker's rehabilitation.

The worker is to communicate regularly with the contractor representative and external medical provider as directed.

Return to Regular Duties

Encourage worker to return to regular duties as soon as practical.

The contractor representative must ensure that medical clearance, indicating the worker is fit for regular work, has been received and that the Nexen Oil Sands representative is advised.

The contractor is responsible to submit a return to work letter to the Worker's Compensation Board.

6.12. Environmental Considerations

Environmental awareness and good operating practices are very important to Nexen Oil Sands. In addition to the requirements outlined in this **Contractor HSE&SR Manual (OSD-OSD-HS-MNL-0003)**, contractors must adhere to **all** applicable regulatory requirements, the applicable requirements described in the **Oil Sands HSE&SR Practices Manual (OSD-OSD-HS-MNL-0004)** and to any site-specific standards which may be required for the contracted services.

6.12.1 General Requirements

- All contractors and subcontractors must adhere to and comply with all environmental regulations provided by Nexen Oil Sands.
- The Nexen Oil Sands designated representative shall provide the contractor with copies of any regulatory authorizations and shall identify any site-specific corporate standards relevant to the work.
- All contractors shall follow "good environmental operating practices" in addition to any regulatory or Oil Sands requirements and site-specific standards.

- The contractor is responsible for ensuring that all of its employees, representatives and subcontractors, are aware of and abide by all applicable regulatory, Oil Sands and/or site-specific requirements.
- Environmental issues shall be addressed during the required orientation(s) described in Section 6.6 of this manual. A Nexen Oil Sands representative and the contractor must be in attendance at these sessions. Discussion items shall include the provisions outlined in this manual, the **Oil Sands HSE&SR Practices Manual (OSD-OSD-HS-MNL-0004)** and any site-specific environmental protection requirements

7. SPECIFIC TRAINING NEEDS

7.1 **All personnel** who have specific duties relating to *HSE&SR Document Management Standard (OSD-OSD-HS-STD-0006)* shall have appropriate training in this Standard.

7.2 **It shall include but not be limited to**

1. Understanding the objective of the Standard.
2. Developing Skills at using information known to enhance *HSE&SR Document Management Standard (OSD-OSD-HS-STD-0006)*

8. METHOD(S) OF MEASUREMENT AND CONTINUOUS IMPROVEMENT

8.1 **Verification**

8.1.1 The level of compliance with this Standard shall be assessed through program evaluation systems, such as annual internal and/or external audits as set out in the External / Internal Audit Guidelines.

8.1.2 Verification shall also be done by Key Performance Indicators (KPI) where those indicators are specifically mentioned and apply to this Standard.

8.1.3 Audit results and Key performance Indicators shall be reviewed regularly by Department Management according to the method and frequency established.

1. Audit results reviewed
 - a. Within 1 month after the Audit report is completed.
 - b. Action Items assigned from the audit; reviewed Monthly

2. Key Performance indicators reviewed Monthly
 - a. Action items assigned for KPIs; reviewed monthly.
3. Audits results, KPIs, and Action Items Reviewed at least Quarterly by Senior Managers

8.2 Review

8.2.1 This Standard shall have documented reviews as per the following:

1. at the minimum every 3 years,
2. if changes are identified during the MOC approval process,
3. if there is a significant regulation/best industry practice change that indicates the need for review,
4. if an incident investigation indicates the causes were related to unclear or inadequate written instructions described within this Standard.

8.3 Key Records and Reporting

8.3.1 Original paper records shall be kept in the Department Management System active filing system until they are closed.

8.3.2 Closed files are deemed inactive once their closed duration (example Cld + 2) expires.

8.3.3 Inactive files are transferred to secure off-site storage following mandatory procedures.

8.3.4 Destruction of files shall follow the Nexen Records and Information Management Policy and Codes of Practice. (see A113 - Nexen Records and Information Management Policy)

9 ATTACHMENTS

- 9.1: Contractor Performance Summary Form (OSD-OSD-HS-FRM-0001)
- 9.2: HSE&SR Request for Variance Form (OSD-OSD-HS-FRM-0002)
- 9.3: Formal Inspection Form (Sample) (OSD-OSD-HS-FRM-0003)
- 9.4: Contractor Incident Report Form and Instruction (OSD-OSD-HS-FRM-0004)

9.1: CONTRACTOR PERFORMANCE SUMMARY (OSD-OSD-HS-FRM-0001)

Contractor Name: _____ **Work Area:** _____ **Report Period** **From:** _____ **To:** _____

SAFETY STATISTICS						
Hours This Period:		Hours to Date:		LTI Rate:		Recordable Rate:
INCIDENTS	1.0 THIS PERIOD	2.0 TO DATE	3.0 # OF INVESTIGATIONS COMPLETED	4.0 # OF ACTIONS IDENTIFIED	5.0 # OUTSTANDING	
First Aid						
Medical Aid						
Lost Time Incident						
Modified/Restricted Work						
Environmental						
Property Damage						
Near Miss						
TOTAL						
HAZARD IDENTIFICATION	This Period	To Date	# of Actions Identified	# Outstanding		
Formal Inspections						
FLRA/JSA						
Behavior Observations						
TRAINING AND COMMUNICATION	This Period			To Date		
Orientations						
Toolbox Talks						
Shift Safety Meetings						
Job/Task Specific Training						
Safety Awards & Recognition						
Construction Manager:				Date:		

- Calculation Lost Time Frequency: # of Lost Times x 200,000 / Total Hours
- Calculation Recordable Frequency (# of medical aids + # of Lost Times) x 200 000 / Total Hours

9.2: REQUEST FOR VARIANCE (OSD-OSD-HS-FRM-0002)

Date: Area: Control No.

Requested by: Date:

Standard, procedure,
regulation or rule:

Variance requested:

Rationale: attach
analyses, reports,
drawings, other
supporting
information:

Alternate risk
mitigation:

Risk assessment completed Yes Name No

(If yes, a copy of the risk assessment must be attached to this request)

Safety Implications:

Environmental Implications:

Regulatory Considerations:

Proposed effective date: TIME: DATE:

Proposed expiry date: TIME: DATE:

This variance has no effect unless signed by all proper approvers – see below.

Position (Requester) **Name (print)** **Signature** **Date**

Position (Approver) **Name (print)** **Signature** **Date**

9.3: FORMAL INSPECTION FORM (SAMPLE) (OSD-OSD-HS-FRM-0001)

Date: _____	Scope of Work at Location: _____	
Attendees: _____		
Rating: 4 – Acceptable; 3 – Minor Infraction; 2 – Serious Infraction; 1 – Imminent Danger; N/A – Not Applicable		
TSTI	Fire Protection & Prevention	Oxygen Acetylene Equipment
In Effect _____	Fire extinguisher _____	Proper training received _____
Analyze each task _____	Inspected _____	Hoses free of defects _____
Permit gone over _____	Available / accessible _____	Hoses out of aisles/protected _____
Team Knowledge of task _____	Combustibles removed from area _____	Flash back arrestor (2) _____
Safety planned into job _____	Flammables stored in approved cans and labeled properly _____	Regulators and gauges sound _____
Hazards recognized _____	Proper grounding _____	Compressed gas cylinders securely fastened _____
Accountability of employee _____		Protection caps in place _____
Evacuation route and plan _____		Isolation from sources of ignition _____
First aid location _____	Scaffolds	Burning/cutting goggles worn _____
Reporting _____	Tagged / Signature _____	Leather gloves worn _____
Treatment _____	Erected plumb / sound footing _____	Keep oil away from gauges _____
	Guard rails in place _____	
	Decking completed and secured _____	Weld, Burn, Grind _____
Personal Protection	Toe boards in place _____	Permit _____
Hearing and head _____	Safe access / ladder in place _____	Respirators required _____
Eye and face _____	Competent person overseeing / inspecting _____	Fire extinguishers available _____
Gloves _____		Sewers covered _____
FRC Clothing _____	Ladders / Access and Egress	Fire watch if needed _____
Drinking Water _____	Ladders free from defects _____	Fire monitor if needed _____
Respirators _____	Extended 36 " above landing _____	Fire blanket if needed _____
Safety Harness _____	Secured at top _____	
Lanyards _____	Solid footing / proper angle _____	Tools (Hand / Power)
	Non-conductive for electric work _____	Mushroom heads on tools _____
Housekeeping	Retractable hung if needed _____	GFCI on portable electric tools _____
Removal of scrap _____	Escape routed known and clear _____	Handles on hammer in good condition _____
Material stored orderly _____	Pathways clear _____	Proper tools for job _____
Trash containers, cords, hoses and leads cleared of traffic aisles _____	Obstructions marked / identified _____	
Use of proper containers _____		

Clean as you GO _____		Guards in place _____
	Rigging/Mobile Equipment Cranes	Proper inspection of electric tools _____
	Overhead power lines clear _____	Cords / hoses in good condition _____
Excavations	Qualified workers _____	
Barricaded _____	Brake lights / warning devices _____	De-energize when changing / replacing blades / bits _____
Sloped or shored _____	Employees transported safely _____	Safety wire where required _____
Access ladder within 25 ft _____	Chokers & shackles	
Spoils at least 2 ft from edge _____	Load tested _____	Environmental
No equipment on edge while personnel in excavation _____	Inspected _____	Work environment _____
Permit to enter _____	Tagged _____	Ground contamination _____
Hole watch _____	Extinguishers on equipment proper inspection _____	Proper waste disposal _____
No water in excavation _____	Outrigger pads if needed _____	Water contamination _____
Competent person overseeing _____	Rig barricaded / flagged _____	Air contamination _____
	Boom angle indicator function _____	Spills cleaned up / disposed of _____
Hygiene	Level crane _____	Ergonomics
Port-a-cans _____	Cable wound on drum properly _____	Body position _____
Hand wash facilities _____	Tag lines in use _____	Repetitive trauma _____
Exposure to Chemicals _____		Accessibility to materials _____
Drinking Water _____	Hazard Communication	Proper tool for job _____
	WHMIS markings _____	Environment extremes _____
	MSDS available _____	

All unsafe deficiencies shall be action planned on attached sheet and corrected immediately

All other observations to attached sheet

SITE SUPERVISOR:

Signature

Print Name

NEXEN REPRESENTATIVE:

Signature

Print Name

FORM 4: CONTRACTOR INCIDENT REPORT (OSD-OSD-HS-FRM-0001)

(Use additional paper where required)

(REFER TO PAGE 2 OF INCIDENT REPORT FOR FURTHER INSTRUCTIONS)

TYPE OF INCIDENT

NEAR MISS
 INJURY/ILLNESS
 PROPERTY DAMAGE
 ENVIRONMENTAL
 REFUSAL TO WORK
 FIRE

COMPANY / CONTRACTOR

DATE & TIME INCIDENT OCCURRED

DATE & TIME REPORTED TO NEXEN HSE&SR-SR

MM/DD/YY

TIME (24 HR CLOCK)

MM/DD/YY

TIME (24 HR CLOCK)

PERSON(S) INVOLVED

PROFESSION / TRADE (J/M OR APP)

EXPERIENCE (YRS)

TIME ON PROJECT (DAYS)

<1 YR
 2 YR
 3YR
 4 YR
 > 5 YR

<30
 31-60
 61-90
 91-120
 121-150
 151-180
 > 180 DAYS

AREA / LOCATION WHERE INCIDENT OCCURRED

INDIVIDUAL REPORTING INCIDENT

CONTACT NUMBER

TODAY'S DATE

NAME OF NEXEN MANAGEMENT/COORDINATOR NOTIFIED OF THE INCIDENT:

DATE

TIME

DESCRIPTION OF INCIDENT

(REFER TO APPENDIX A, Pg. 7)

**IMMEDIATE / DIRECT CAUSE
SUBSTANDARD ACTIONS**

SUBSTANDARD CONDITIONS

EXPLAIN WHY YOU CHOOSE CAUSE

**BASIC / ROOT CAUSE
PERSONAL FACTORS**

**(REFER TO APPENDIX A, Pg. 7)
JOB FACTORS**

EXPLAIN WHY YOU CHOOSE CAUSE

(REFER TO APPENDIX B, Pg. 3)

IS THIS A RECORDABLE INCIDENT? Yes No
 WAS AN ALCOHOL & DRUG TEST COMPLETED WITHIN THE ALLOTTED TIMEFRAME?
 Yes No

IF NO, PLEASE INDICATE WHY AN A&D TEST WAS NOT COMPLETED:

ATTACHMENTS

PHOTOGRAPHS
 SKETCHES/MAPS
 WITNESS STATEMENTS
 TRAINING RECORDS
 OTHER SUPPORTING DOCUMENTATION

ACTIONS TO PREVENT A REOCCURRENCE

ACTION BY

COMPANY / POSITION

DUE DATE (MM/DD/YY)

ACTION COMPLETE
 Yes No

INVESTIGATED BY

COMPANY / POSITION

DATE (MM/DD/YY)

HSE&SR COORDINATOR

SIGNATURE

DATE (MM/DD/YY)

PROJECT MANAGER REVIEW

SIGNATURE

DATE (MM/DD/YY)

**AS PER THE "TYPE OF INCIDENT CATEGORY" ON SIDE 1, PLEASE PROVIDE THE
REQUIRED INFORMATION AS DESCRIBED BELOW**

INJURY (REFER TO APPENDIX A, PG. 5)

- NATURE OF INJURY OR ILLNESS: _____
- SOURCE OF INJURY OR ILLNESS: _____
- PART OF BODY AFFECTED: _____
- TYPE OF INCIDENT: _____
- INJURY SEVERITY: FIRST AID MEDICAL AID LOST TIME ACCIDENT MODIFIED DUTIES FATALITY
- IS THIS A BACK INJURY THAT COULD HAVE THE POTENTIAL TO BECOME MORE SERIOUS? YES NO
- HAS THE INDIVIDUAL SOUGHT MEDICAL ATTENTION BY A PHYSICIAN? YES NO
- HAS THE INDIVIDUAL BEEN PLACED ON MODIFIED DUTIES? YES NO
- DOES THE WORKER REQUIRE PHYSIOTHERAPY? YES NO
- DOES THE WORKER REQUIRE FURTHER MEDICAL ASSISTANCE? YES NO

EQUIPMENT / PROPERTY / VEHICLE DAMAGE

- TYPE OF EQUIPMENT / PROPERTY DAMAGED: _____
- YEAR / MAKE / MODEL: _____
- SERIAL NUMBER: _____ UNIT NUMBER: _____
- ESTIMATE OF DAMAGE TO NEXEN PROPERTY: \$ _____ ACTUAL ESTIMATE
- ESTIMATE OF DAMAGE TO 3RD. PARTY PROPERTY: \$ _____ ACTUAL ESTIMATE
- IS THE EQUIPMENT LEASED / RENTED? YES NO
- IF YES, HAS THE LEASOR BEEN NOTIFIED? YES NO
- IF VEHICLE DAMAGED OFFSITE, HAVE THE RCMP BEEN NOTIFIED? YES NO
- 3RD. PARTY NAME: _____ TELEPHONE NUMBER: _____
- 3RD PARTY INSURANCE COMPANY: _____
- 3RD PARTY INSURANCE POLICY NUMBER: _____
- WERE THERE INJURIES RELATED TO THE MOTOR VEHICLE ACCIDENT? YES NO

ENVIRONMENTAL REPORT

- TYPE OF MATERIAL RELEASED: _____
- RELEASED TO: AIR SOIL WATER
- CAUSE OF RELEASE: _____
- AMOUNT OF MATERIAL RELEASED: _____ ACTUAL ESTIMATE
- AMOUNT OF MATERIAL RECOVERED: _____ ACTUAL ESTIMATE
- PRODUCT IDENTIFIER NUMBER: _____
- WAS THE MSDS REVIEWED PRIOR TO CLEAN-UP? YES NO
- COST OF CLEAN-UP AND DISPOSAL: _____ ACTUAL ESTIMATE
- HAS A LOCAL AUTHORITY BEEN NOTIFIED? YES NO
- POLICE REPORT NUMBER, IF APPLICABLE: _____
- NAME OF LOCAL AUTHORITY: _____ CONTACT #: _____

RISK ANALYSIS

- DETERMINATION OF SEVERITY: (1) MINOR (2) SERIOUS
 (3) MAJOR (4) CRITICAL (5) CATASTROPHIC
- DETERMINATION OF LIKELIHOOD: (A) REMOTE (<ONCE IN 40 YRS) (B) UNLIKELY (ONCE EVERY 20 YRS)
 (C) POSSIBLE (ONCE EVERY 10 YRS) (D) PROBABLE (ONCE EVERY 3 YRS)
 (E) FREQUENT (ONE OR MORE TIMES PER YR)

DETERMINATION OF CONSEQUENCE (REFER TO APPENDIX A, PG. 6 – RISK ANALYSIS)

CONSEQUENCE: WHAT IS THE MOST LIKELY WORST POSSIBLE CONSEQUENCE THAT MIGHT HAVE OCCURRED UNDER SLIGHTLY DIFFERENT CIRCUMSTANCES? (I.E. A 20LB OBJECT FALLS AND NARROWLY MISSES A WORKER COULD HAVE RESULTED IN A FATALITY; RATE AS 'HIGH' IF THE LIKELIHOOD OF THIS CONSEQUENCE IS EVERY 3 YRS). THE CONSEQUENCES IN THIS SITUATION COULD HAVE BEEN A BROKEN NOSE OR A LOST TOOTH.

LIKELIHOOD: HOW OFTEN WOULD IT BE EXPECTED TO HAVE SIMILAR INCIDENTS HAPPEN IF NOTHING IS DONE TO CHANGE HOW THE WORK IS DONE? INCIDENTS LIKE THIS PROBABLY HAPPEN QUITE OFTEN WITH SCAFFOLDERS AND IRON WORKERS.

INSTRUCTIONS FOR COMPLETING 'INCIDENT REPORT' FORM

TYPE OF INCIDENT

Place a check mark in the box or boxes that categorize the incident you are reporting.

COMPANY / CONTRACTOR

Identify the name of the company who had the incident. If the company involved with the incident is a subcontractor to another company, this information shall be indicated. *Example: Joe's Welding subcontracts to Harris Steel Erection*

DATE & TIME INCIDENT OCCURRED (24 Hr clock)

The actual date & time the incident occurred written using the 24-hour clock.

Example: November 12, 2006 (month, day, year) 14:30 hrs is written instead of 2:30 p.m.

DATE & TIME INCIDENT REPORTED TO NEXEN HSE&SR-SR

The actual date & time the incident was reported to your Nexen HSE&SR-SR representative using the 24-hour clock.

PERSON(S) INVOLVED

The names of the people involved in the incident; given name first, surname last.

Example: Pat Riley

PROFESSION / TRADE (J/M OR APPRENTICE)

Identify the profession or trade of those involved in the incident and whether they are a journeyman (J/M) or apprentice. If the person is an apprentice, identify what level of apprentice they are.

Examples: J/M Carpenter or 3rd Year Apprentice Insulator or Office Manager

EXPERIENCE (YRS)

Indicate how many years the person(s) have worked in their profession or trade.

TIME ON PROJECT (DAYS)

Indicate how many days the person has been employed on the project.

AREA / LOCATION WHERE INCIDENT OCCURRED

Place a check mark in the appropriate box. If you check the box 'Other', please explain where the other location is.

INDIVIDUAL REPORTING INCIDENT & CONTACT NUMBER

Insert the name of the person who is completing the incident report or the person(s) that can provide follow-up information on this incident and a telephone number to contact that person(s). Telephone number should include area code.

Example: Susan Tate (780) 900-0001

TODAY'S DATE

Insert the date the Incident Report form is actually completed. The date should be written in the following sequence: month – day - year

HAVE THE APPROPRIATE MANAGEMENT/SUPERVISION BEEN NOTIFIED OF THE INCIDENT?

Place a checkmark in the appropriate box.

WHO WAS NOTIFIED? DATE / TIME

Identify the name of the Nexen Manager or Construction Coordinator that was notified of the incident and the time notification was provided using the 24 hour clock.

DESCRIPTION OF INCIDENT

Provide a detailed description of the incident after all of the facts have been gathered. Use the '5W' approach when obtaining the facts regarding the incident: "Who, What, Where, When and Why".

The incident description should be written in such a manner that if a complete stranger read the report, they would have a good picture of what happened.

IMMEDIATE / DIRECT CAUSES - SUBSTANDARD ACTIONS

Use the items listed below to describe what made the incident happen. These are the substandard actions that were probable factors in the incident. Once you have picked the item, explain why you choose it.

As an example: Failure to Secure and Failure to Identify Hazard / Risk

When the zoom boom came to an abrupt stop, the load it was carrying slid off the forks and slammed into the building. Loads are required to be secured and if the FLRA was done correctly this should have been recognized.

Substandard Actions	
Operating equipment without authority	Servicing equipment in operation
Failure to warn	Horseplay
Failure to secure	Under influence of alcohol and/or other drugs
Operating at Improper Speed	Using equipment improperly
Making safety devices inoperative	Failure to follow procedure / policy / practice
Using defective equipment	Failure to identify hazard / risk
Failing to use PPE properly	Failure to check / monitor
Improper loading	Failure to react / correct
Improper placement	Failure to communicate / coordinate
Improper lifting	None identified / not able to determine
Improper position for task	Other

IMMEDIATE / DIRECT CAUSES - SUBSTANDARD CONDITIONS

Use the items listed below that best describes the substandard conditions that existed at the time of the incident and contributed to it. Once you have picked the item(s), explain why you choose it. In some cases substandard conditions may not be a contributing factor. If this is the case, simply state that none were identified or that you were not able to determine the substandard condition.

Substandard Conditions	
Inadequate guards or barriers	Presence of harmful materials
Inadequate or improper protective equipment	Inadequate instructions / procedures
Defective tools, equipment or materials	Inadequate information / data
Congestion or restricted action	Inadequate preparation / planning
Inadequate warning system	Inadequate support / assistance
Fire and explosion hazards	Inadequate communications
Poor housekeeping / disorder	Road conditions
Noise exposure	Hazardous environmental conditions
Radiation exposure	Weather conditions
Temperature extremes	None identified / not able to determine
Inadequate or excess illumination	Other
Inadequate ventilation	

BASIC / ROOT CAUSES - PERSONAL FACTORS

Consider the items you chose from the Substandard Actions above.

Take one step back and ask yourself “Why did this person do what they did?”

Why did this person use the wrong tool, or why did this person not follow the procedure or why did they violate a safety standard. Are there reasons? Are the right tools not available? Was the approved procedure completely wrong? Is there a long history of people doing it this way and getting away with it? Did the person not know any better?

As an example: Lack of Knowledge

The operator is new to the site and did not know that loads had to be secured.

Personal Factors	
Inadequate Physical / Physiological Capability	Lack of knowledge
Inadequate Mental / Psychological Capability	Lack of skill
Physical or Physiological Stress	Improper motivation
Mental or Psychological Stress	Abuse or Misuse
None identified / not able to determine	Other

BASIC / ROOT CAUSES - JOB FACTORS

Consider the items you choose from the Substandard Conditions above.

Take one step back and ask yourself, “Why did they exist and why were they allowed to exist?”

Have the conditions existed for a long time? Is everyone just used to the current conditions? Do conditions like this arise on a regular basis? Are these conditions allowed to remain or is there a system for spotting them and fixing them? Does everyone know they have to report substandard conditions?

As an example: Inadequate Leadership and/or Supervision; Inadequate Communication

The worker was not given clear instructions on how the load should be secured at this site.

Job Factors	
Inadequate leadership and / or supervision	Inadequate work standards
Inadequate engineering	Excessive wear and tear
Inadequate purchasing	Inadequate Communication
Inadequate maintenance	None identified / not able to determine
Inadequate tools and equipment	Other

IS THIS A RECORDABLE INCIDENT?

Refer to Appendix B: ACCIDENT SUMMARY DEFINITION OF TERMS and place a checkmark in the appropriate box

WAS AN ALCOHOL AND DRUG TEST CONDUCTED WITHIN THE ALLOTTED TIME FRAME?

Place a checkmark in the appropriate box.

All recordable incidents require an Alcohol and Drug test. An alcohol test must be performed within 8 hours of the time of the incident. A drug test must be performed within 32 hours of the time of the incident.

IF NO PLEASE EXPLAIN WHY THIS WAS NOT COMPLETED.

Provide an explanation why an Alcohol and Drug test was not completed.

You may want to consult the “Long Lake Alcohol and Drug Work Standard”.

ATTACHMENTS

Place a checkmark in the appropriate box and attach the documentation to the report.

As an example: Other Supporting Documentation

For a worker injury, you can check this box and provide a copy of the Long Lake Medical Center 'Initial Treatment form'.

ACTIONS TO PREVENT RECURRENCE

In conjunction with your management team, provide recommendations for changes you believe will prevent this type of accident from happening again.

In general, each cause identified above should lead to a recommendation.

Some causes can be broken down further into various elements. In that case, each element should lead to a recommendation.

INJURY ANALYSIS REFERENCE LIST

Nature of Injury	Part of Body
Amputation	Abdomen
Bruise / Contusion	Ankle
Burn	Arm
Concussion	Back
Crush	Body Parts (not otherwise classified)
Cut / Laceration	Body System
Dermatitis	Chest / Rib cage
Dislocation	Ear / Hearing
Drowning	Eye / Vision
Exposure to Weather	Face / Mouth
Foreign Body	Foot / Toes
Fracture	Hand / Fingers
Hernia	Head / Face
Infection	Hips / Groin
Inhalation of Toxic Substance	Internal
Not Elsewhere Classified	Knee
N/A	Legs / Thigh
Poisoning	Multiple Parts
Puncture	Neck
Scrape / Abrasion	No Injury
Sprain / Strain	Respiratory System
Other	Shoulders
	Wrist
	Other
Source of Injury	Type of Event

<p>Hand Tool - Knife Hand Tool - Other Rotating / Moving Machinery Power Tool Ladders Scaffold Working Surface Crane / Rigging Manually Handled Material Welding / Grinding Tools Toxic Substances Vehicle / Mobile Equipment Other</p>	<p>Abnormal Operation Caught In (pinch and nip points) Caught On (snagged, hung) Caught Between or Under (crushed or amputated) Contact With (electricity, heat, cold, radiation) Equipment Failure Environmental Release Fall from Elevation to Lower Level Fall on Same Level (slip, fall, trip over) Overstress, Overexertion, Ergonomic Product Contamination Struck Against (running/bumping into) Struck By (hit by moving object) Other</p>
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RISK ANALYSIS

Risk Matrix (Risk = Consequences x Likelihood)									
Consequence					Likelihood				
Describe below what is the most likely, worst possible consequence that might have occurred under slightly different circumstances? For example: A 20 lb. dropped object that narrowly missed a worker on the drill floor, could have resulted in a fatality, and shall be rated as 'High', if the likelihood of this consequence is once every 3 years. Similarly, a head-on vehicle collision with minor injuries could have resulted in multiple fatalities, shall be rated as 'High', if the likelihood is once every 10 years.					How often would it be expected to have similar causes or circumstances aligned for this event to reoccur? Please make reference to site, company and industry historical data to help predict the reoccurrence frequency of such an event.				
Harm to People Yes/no	Environment Effects Yes/no	Financial loss Yes/no	Impact on Reputation Yes/no	Severity	A Remote: < once in 40 years	B Unlikely: Once every 20 years	C Possible: Once every 10 years	D Probable: Once every 3 years	E Frequent: One or more times/yr
Multiple fatalities	Outside spill response assistance required (beyond local co-op) Long term impact and clean up required (>5 years)	> \$10 million > 60 days business interruption	National or International media attention Shut down of operations by regulators	5 Catastrophic	M	M	H	H	H
Single fatality or permanent disability injury/illness	Outside spill response assistance required (local co-op) Long term impact and clean up required (< 5 years)	\$1 to \$10 million 30 to 60 days business interruption	Regional media attention Regulatory or legal action taken	4 Critical	L	M	M	H	H
Lost time injury/illness	Company spill response required Localized, short term impact and clean up required (< 2 years)	\$500 k to \$1 million 5 to 30 days business interruption	Local media attention Regulatory action likely	3 Major	I	L	M	M	H
Modified work or medical treatment injury/illness	Reportable event	\$50 k to \$500 k 1 day to 5 days business interruption	Public awareness may exist, but there is no public concern	2 Serious	I	I	L	M	M

First aid injury/illness	Non- reportable event	\$5 k to \$50 k 4 - 24 hours business interruption	On site communications	1 Minor	I	I	I	L	M
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INCIDENT CAUSE ANALYSIS

Substandard Actions	Substandard Conditions
Operating equipment without authority Failure to warn Failure to secure Operating at Improper Speed Making safety devices inoperative Using defective equipment Failing to use PPE properly Improper loading Improper placement Improper lifting Improper position for task Servicing equipment in operation Horseplay Under influence of alcohol and/or other drugs Using equipment improperly Failure to follow procedure / policy / practice Failure to identify hazard / risk Failure to check / monitor Failure to react / correct Failure to communicate / coordinate Other	Inadequate guards or barriers Inadequate or improper protective equipment Defective tools, equipment or materials Congestion or restricted action Inadequate warning system Fire and explosion hazards Poor housekeeping / disorder Noise exposure Radiation exposure Temperature extremes Inadequate or excess illumination Inadequate ventilation Presence of harmful materials Inadequate instructions / procedures Inadequate information / data Inadequate preparation / planning Inadequate support / assistance Inadequate communications Road conditions Hazardous environmental conditions Weather conditions Other
Personal Factors	Job Factors
Inadequate Physical / Physiological Capability Inadequate Mental / Psychological Capability Physical or Physiological Stress Mental or Psychological Stress Lack of knowledge Lack of skill Improper motivation Abuse or Misuse Other	Inadequate leadership and / or supervision Inadequate engineering Inadequate purchasing Inadequate maintenance Inadequate tools and equipment Inadequate work standards Excessive wear and tear Inadequate Communication Other

INCIDENT Summary Definition of Terms

Near Miss

An event that if the circumstances were slightly different, would have the potential to result in an injury, damage to property or equipment or an environmental spill.

Work Related Injury

Any injury arising out of or in the course of employment is considered work related.

Not all cases need to be classified as work related. For example, if an employee experiences symptoms such as pain or swelling in the knee while climbing a ladder (a normal job requirement), without having slipped or fallen, for reporting purposes, would not constitute a work related incident. However, if the employee were to slip while on the ladder (an unexpected happening) and pain or swelling resulted, this would constitute a work related injury.

Aggravation or recurrence at work of symptoms resulting from a non-work injury should be considered a non-recordable case, unless there is a new incident or unusual occurrence at work.

Non-Work Related Injury

An employee is not considered to be in the course of employment while he/she is outside Company property during working hours for personal reasons, on a Company parking lot provided for his convenience to park his car, while not performing duties of employment, or taking part in a specifically defined or off-duty period. If, however, at such time an injury arises out of hazards of the work area, it would be considered a work-related injury.

Injury Classification

An injury or illness should be classified according to its most severe consequence. If there are multiple injuries involved in an accident, the most severe consequence will determine its classification.

Accident

An event that results in unintended harm or damage.

Incident

An event that could or does result in unintended harm or damage. This definition includes accidents, near-accidents, security breaches, production or quality losses or near-losses, etc.

First Aid

Any one-time treatment and subsequent observation of minor scratches, cuts burns, splinters and so forth that do not require advanced medical care, even though provided by a physician or registered medical professionals. Examples of first aids include placing or changing the

bandage / dressing on an injury, visit to a physician for observation only, application of ointments or salves to prevent the drying or cracking of skin at the site of a minor injury, removal of foreign body to eye through irrigation, one-time administration of oxygen treating inhalation of toxic or corrosive gases

Medical Aid

Any injury requiring medical intervention above the skills of a person trained in first aid.

Examples of medical aids:

X-ray of a fracture (fracture found)

Reaction to tetanus shot

Setting of broken bones / placement of casts

Sutures

Removal of foreign body by a Physician due to foreign body being embedded

All cases involving loss of consciousness

Administration of prescription medicines

Draining of collected blood

Surgical debridement

Physiotherapy – ergonomic injuries

Lost-Time Accident

Any work-related injury or illness that prevents an individual from completing the next scheduled work shift. Time begins on the day following the injury and includes all regularly scheduled workdays. Weekends, or days when no actual work time is lost because the employee could not have worked even if not injured, are not included.

Should a worker who received an injury that was classified as a first aid at the time of the incident, lose a full day of work due to treatment of the injury at a later date, the injury is to be upgraded to a LTA. (I.e. hernia / operation at a later date).

Severity

The determination of how big or bad a loss is likely to be if the exposure is not adequately controlled.

Frequency

The determination of how often the exposure occurs.

Probability

The determination of how likely a loss will occur considering all pertinent people-equipment-materials-environment-process factors.

Recordable Injury

Work-related injury or illness that results in the need for medical attention above that of a first aider or results in an individual being unable to perform normal job duties (restricted duty / modified duties) as classified by Canadian OH&S Record Keeping Guidelines.

All workers having a recordable injury must be drug & alcohol tested as per Nexen requirements.

Work related cases which involve any of the following are recordable:

- Occupational death – regardless of the time between injury and death or the length of illness.
- Occupational Injury – cuts, fractures, sprain or amputation that results from a work accident or from an exposure involving an event in the work environment.
- Occupational Illness – is any abnormal condition or disorder other than one resulting from an occupational injury caused by exposure to environmental factors associated with employment.

This includes acute and chronic illnesses or diseases caused by inhalation, absorption, ingestion or direct contact.

- Occupational Skin Diseases / Disorders – contact dermatitis, eczema or rash caused by primary irritants and sensitizers or poisonous plants, oil acne, chrome ulcers, chemical burns or inflammations, etc.
- Dust Diseases of the Lungs (Pneumoconiosis) – silicosis, asbestosis, etc.
- Respiratory Conditions Due to Toxic Agents – pneumonitis, pharyngitis, rhinitis or acute congestion due to chemicals, dust, gases or fumes, farmer's lung, etc.
- Poisoning by – lead, mercury, cadmium, arsenic or other metals; by carbon monoxide, hydrogen sulphide or other gases; benzol, carbon tetrachloride or other organic solvents; insecticide sprays such as parathion, lead arsenate; formaldehyde, plastics and resins, etc.

Cases that result in one or more days away from work (consecutive or not) which the employee could have worked, but due to the occupational injury or illness, was not able to work. Here is an example:

Weekends: An employee who is scheduled to work Monday through Friday is injured on the Friday and returns to work on Monday. This case does not involve any days away from work, even if the employee was unable to work on Saturday or Sunday due to the injury severity. This would not be classified as a lost workday case. If this same employee was scheduled to work on Saturday, even if the Saturday was an overtime day, then the case would be classified as a lost workday case.

WCB Claim

Any work-related or incurred injury/illness that requires a First Report of Injury/Illness Form and/or generates a medical bill.

Exposure Hours

The total number of employee hours worked by all employees, including those in operating, production, maintenance, transportation, clerical, administrative sales and other activities (calendar month-to-month and calendar year-to-date).

Occupational Injury

Any injury, such as a cut, fracture, amputation, etc., which results from a work accident or from an exposure involving a single incident in the work environment.

Occupations Illness

Any abnormal condition or disorder of an employee that results from an exposure to environmental factors associated with employment.

Recordable Incident Rate

The rate at which Recordable and Lost-Work Day incidents occur per 100 workers in one year, as calculated by the following formula:

$$\frac{(\# \text{ of Incidents}) \times (200,000 \text{ hours})}{\text{Total Exposure Hours}} = \text{Recordable Incident Rate}$$

Lost-Time Severity Rate

This incidence rate is based upon the total number of workdays lost which occurred during the period covered by the rate.

Severity Incident Rate

The number of workdays (consecutive or not) on which, because of a work related injury or illness the employee:

- was assigned to another job on a temporary basis;
- worked at a permanent job less than full time; or
- worked at a permanent assigned job but could not perform all duties normally connected with it.

$$\frac{(\# \text{ of days lost}) \times (200,000 \text{ hours})}{\text{Total Exposure Hours}} = \text{Injury Severity Rate}$$

Modified Work / Duties

An injury or illness that results in a worker being assigned different duties other than those they normally perform.

An injured worker must be assessed by a physician before being assigned to modified duties.

Days of modified work activity should include all days that the employee was scheduled to work and could not perform all or part of the duties connected with it, excluding the day of the injury or onset of the illness.

An injured worker who is transferred to another job as a precautionary measure, while the injury or illness is being diagnosed and is unable to perform all or any of the duties normally connected with the job should be classified as days of modified work only. If the diagnosis does not support the transfer based on medical reasons, the case is not recordable.

Non-Reported Injuries

If the report of an injury is delayed with symptoms developing beyond 48 hours of the alleged injury, and there is legitimate doubt that it is truly work related, the incident should not be reported.

An aggravation of a precise pre-existing condition should not be reported if there is no external factor such as a sudden pull, wrench, slip or strain (this may occur without work conditions being at fault).