

**Title: Hazard Assessment Policy**

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**Purpose:** The purpose of this policy is to outline the procedure of Greenview regarding hazards in the workplace and methods used to control or eliminate any hazards identified.

**DEFINITIONS**

**FLRA** means Field Level Risk Assessment.

**JHA** means a Job Hazard Assessment.

**SDS** means Safety Data Sheets.

**PPE** means Personal Protective Equipment.

**OH&S** means Occupational Health and Safety.

**POLICY**

**1. Policy Statement:**

1.1 Maintenance tasks present varying degrees of hazards to people and equipment. At Greenview, hazards are managed at multiple levels by working collectively, hazards can be minimized and work carried out incident free.

All routine work that is carried out must have Hazard Assessment completed through the use of a Field Level Risk Assessment card and a Job Hazard Assessment.

Tasks that by their nature expose workers to an abnormally high degree of personal risk are subject to special planning. This planning will be done by the Safety Committee, Supervisor, as they deem necessary. The Safety Committee will issue procedures to cover hazardous work and these procedures will be appended to the Safety Manual as they are issued.

1.2 THE SAFETY INFORMATION IN THIS POLICY DOES NOT TAKE PRECEDENCE OVER OH&S REGULATIONS. ALL WORKERS SHOULD BE FAMILIAR WITH THE OH&S ACT AND REGULATIONS.

## 2. General Requirements:

- 2.1 Hazards must be identified and procedures developed to minimize risk associated with performing dangerous work. The following list includes hazardous work that has been identified as major risks of death, serious injury, or industrial disease in the construction industry.
- a) Workers working in a confined space.
  - b) Working on equipment that is not locked-out when required.
  - c) Working in an excavation greater than 4 feet deep without adequately supporting or sloping the sides of the excavation.
  - d) Working at heights where no fall protection system is in place.
  - e) Working within the specified minimum distances from unguarded overhead energized high voltage electrical conductors.
  - f) Workers that are exposed to respiratory/environmental hazards which are immediately dangerous to life or health.
  - g) Workers working excessively long hours or shifts without appropriate breaks being taken.
  - h) Not providing adequate protection to workers who are exposed to dangers, which can cause chronic health effects.

## 3. Hazard Controls:

3.1 Hazard Controls reduce risk to the lowest and most reasonable level possible. There are 3 main types of Hazard Controls to consider:

- a) Engineering.
- b) Administrative.
- c) Personal Protective Equipment.

3.1.2 **Engineering Controls:** this method is the best way to control or reduce risks as it controls potential hazards at the design stage. There are four types of Engineering Controls:

Elimination	Substitution	Isolation	Ventilation
Design new equipment.	Purchase less toxic materials.	Lock out.	Mechanical and General ventilation Systems.
Remove sharp edges.	Wet sanding vs. Dry sanding	Mechanical Guards.	Fume Hoods.
Remove defective tools or equipment.	Smaller (less heavy) packaging.	Worker enclosures.	Scrubbers.
Improve housekeeping practices.		Insulation of piping or tanks.	Local exhaust.

3.1.3 **Administrative Controls:** These are tools designed to promote safety in the workplace and involve all levels of workers. There are many types of Administrative Controls:

- a) Pre-job safety meetings.
- b) Safe Work Practices.
- c) Job Procedures.
- d) Written policies, rules.
- e) Warning/Safety signage.
- f) SDS.
- g) Training.
- h) Inspections.
- i) Active Supervision.

3.1.4 **Personal Protective Equipment (PPE):** PPE does not eliminate hazards, but minimizes impact and severity of potential injuries in the event of an incident.

### 3.2 Selecting Hazard Controls:

3.2.1 When selecting a Hazard control, workers are not limited to one control. Depending on the nature of the work and the people assigned to execute the task multiple controls may be selected. Before a control is selected these factors must be considered:

- a) Regulations, codes and manufacturers specifications.
- b) SDS.
- c) Greenview policies.
- d) Effects of hazard controls on other processes or people.
- e) Existing in-house resources.

3.2.2 When control is selected, it is imperative that ongoing inspections are conducted. These inspections serve two purposes:

- a) **Workers must be on the lookout for any changes** to the scope of work, duties of workers or environmental changes.
- b) Workers will monitor the effectiveness of the controls in place and **be sure that the controls themselves are not the source of new hazards.**

## 4. Risk Assessment:

4.1 Prior to any job commencing, the supervisor, together with the Safety Advisor will conduct an in depth Risk Analysis. The purpose of the Risk Analysis is as follows:

4.1.1 To identify the Primary sources of loss to the project to include the following types of incidents/events:

- a) Risk associated with location and proximity to emergency services.
- b) Transportation of workers (air/ground).
- c) Excavations and ground disturbance, exposure of hydrocarbons/existing facilities.
- d) Environmental considerations (weather/wildlife, water/waste management) and risk mitigation plans.
- e) Classification of worksite (Canadian Electrical Code).
- f) Public Safety.
- g) Emergency Response Planning.
- h) Others as identified by the Risk Assessment Teams.

## 5. Pre-Job Hazard Assessment:

- 5.1 Prior to each task beginning, all front-line supervisors are required to complete a Hazard Assessment.
- 5.2 The Supervisor will review the Pre-Job Hazard Assessment with the workers involved. The worker will then sign onto the Hazard Assessment sheet acknowledging the steps and their roles in the work.
- 5.3 The Supervisors will then ensure that each worker completes a Field Level Risk Assessment.

## 6. Field Level Risk Assessment (FLRA):

- 6.1 FLRA cards will be used on a daily basis and can be a highly effective tool to combat workplace incidents and injuries. An FLRA must be completed for any routine work.
- 6.2 The Hazard Assessments are a method of evaluating a job in order to:
  - a) Identify the hazards or potential accident causes associated with each step of the operation.
  - b) Develop solutions that will eliminate or control the hazards that are identified.
- 6.3 There are 5 basic steps to doing a Hazard Assessment:
  - a) Select the job to be analyzed.
  - b) Break the job down into steps.
  - c) Identify the hazards or potential accidents.
  - d) Develop solutions for the hazards or potential accidents.
  - e) To instruct or to train personnel performing the job in the proper procedure to follow.
- 6.4 The maximum benefits of a Hazard Assessment are obtained only when the finished product is used. Supervisors learn more about their work as a result of doing the assessment. Ideas about improving job safety are frequently generated and cost reducing improvements are often developed. This generates maximum benefits by:

- a) Initial job planning.
- b) Planned safety contacts.
- c) Planned safety observations.
- d) Pre-job safety instructions.

## 7. Hazardous Work Permits:

- 7.1 Hazardous Work Permits are required when the work to be performed holds a higher degree of risk than would normally exist. When this higher level of risk is present a Hazardous Work Permit must be in place. In this permit the work is examined by the following workers:
  - a) Safety Representative.
  - b) Department Manager.
  - c) Supervisors responsible for the execution of the task.
  - d) Workers directly involved in the execution of the task.
- 7.2 The Team is led by the Supervisor directly responsible for supervising the work, completes the Hazardous Work Permit document listing the hazards identified and the controls employed to minimize the hazards.
- 7.3 The Supervisor submits the completed permit to the Safety Representative or designated permit issuer, for approvals.
- 7.4 The Supervisor responsible for the work will review the Hazardous Work Permit with all workers performing the work as well as any worker that may be impacted by the work being performed. Once reviewed, the workers sign the permit. The Permit is then posted at the work site.
- 7.5 In the event of an emergency the permit will be used as a headcount document. Once supervision and/or emergency response personnel account for all workers, the permit will be turned into the Safety department or issuer and deemed void. A new permit must be issued taking into account any changes to the work as a result of the emergency.
- 7.6 General Requirements for a Hazardous Work Permit:
  - 7.6.1 Listed below are some typical classifications of hazardous work. All types of classifications require a Hazardous Work Permit or a Safe Work Procedure. These procedures furnish workers with detailed job procedures for performing specific types of hazardous work and are to be used in conjunction with the Hazardous Work Permit.

- a) Confined Space Entry.
- b) Plant or major equipment start-up.
- c) Locked-out systems.
- d) Work on high-pressure liquids or gas systems.
- e) Hydro-testing at high pressures.
- f) Toxic or hazardous substances.
- g) Cutting into existing lines and tanks.
- h) Major traffic patterns.
- i) Excavations.
- j) Working at heights.
- k) Operating sewer work.
- l) Work with gases present.
- m) Work around high voltage power lines and bus bars.
- n) Exposing underground Utilities.
- o) Demolition.

7.6.2 If any worker is unsure when determining whether a Hazardous Work Permit is required, consult the Immediate Supervisor, Area Superintendent, or Safety Representative.

## 8. Hours of Work:

- 8.1.1 Hours of Work for all Greenview Employees will be in accordance with the Staff Agreement.
- 8.1.2 Regular hours of work are 7.5 hours per day, unless otherwise indicated in a written and approved work arrangement. A modified work arrangement and hours of work for contractors shall be in accordance with Alberta Employment Standards.
- 8.1.3 Hours worked in excess of 12 hours in a single shift require specific project approvals. While the job tasks will strive to schedule work to exclude 12 hour shifts, shut down upsets or other emergency may require workers to work prolonged shifts. In these cases, the following items must be reviewed by the supervisor, department management and Safety Advisor prior to any approvals being given to extend the work day:
  - a) Start time.
  - b) Nature of work/duties.
  - c) Condition of worker (fatigue, alertness, etc.).
  - d) Breaks/meals.

## 9. Procedures for High Hazard work:

9.1 The Safety Manual contains procedures to be followed to ensure safe work as follows:

- a) Confined Space Entry.
- b) Lockout/Isolation.
- c) Emergency Preparedness.
- d) Rigging/Critical Lifts.
- e) Fall Protection.
- f) Excavations Exceeding 4 feet.
- g) Respiratory Protection.
- h) Assured Equipment Grounding.

9.2 In addition to Section 10.1, any work where it has been deemed by the Safety Committee to hold an elevated risk to Health or Safety of the workers, will be reviewed and a detailed procedure completed. This Procedure will be completed by:

- a) Safety Committee.
- b) Department Manager.
- c) Supervisor.

9.3 The Safety Committee will issue Procedures to cover hazardous work and these Procedures will be appended to the Safety Manual as they are issued.

## 10. Safe Work Practice Manual:

10.1 Greenview have compiled a listing of hazardous tasks common to industrial maintenance. These practices include specific hazards associated with the task, safe handling, personal protective equipment, emergency preparedness and basic safe work practices. These practices include:

- a) Personal Protective Equipment.
- b) Motorized Equipment.
- c) Abrasive Wheels.
- d) Garages.
- e) Hand Tools.
- f) Ladders.
- g) Materials Handling.
- h) Eye-Wash Stations.
- i) Power Tools/Other Tools.
- j) Housekeeping.

10.1.2 Where a task is identified that a new Safe Work Practice is required; a written request will be made to the Safety Representative stating the topic and any specific information required. The written request must be submitted on a Request for Development of a Safe Work Practice.

## Hazard Assessment and Control

### 11. HAZARD:

**Any circumstance that poses the risk of an incident and/or accident is considered a hazard.**

Without the task inventory completed, Greenview cannot successfully identify critical tasks that could cause potential loss.

Greenview shall prepare and maintain an inventory of tasks through a review of existing procedures, practices, worker training system material and discussions with workers.

**12. RISK ASSESSMENT:**

12.1 Without assessing the risk of identified hazards, an organization cannot successfully implement effective controls to prevent potential loss.

12.2 Greenview shall use the risk assessment matrix to determine the following:

- Probability.
- Severity.

**Priority Analysis Grid:**

**Severity;**

- 1: Negligible injury (No health effect/injury)
- 2: Slight (Slight health effect/injury)
- 3: Moderate (Major health effect/injury)
- 4: Serious Injury (Long term serious injury)
- 5: Very Serious (Death or Permanent Total Disability)

**Probability;**

- A: Highly unlikely
- B: Unlikely but possible
- C: Likely
- D: Highly likely
- E: Very Likely

Each hazard is assigned both rankings, and the result determines priority in terms of corrective action. Using the grid on the following page will determine what risk level each hazard is prioritized at.

**Low risk:**

Manage for continuous improvement

**Medium risk:**

Incorporate risk reduction measures

**High/Unacceptable risk:**

Intolerable – Investigate alternatives