

Hazard Assessment and Control Practice

1.0 Purpose

The purpose of the Hazard Assessment and Control Practice is to provide the operational framework for the identification, assessment, and control of hazards on all Cenovus worksites.

2.0 Hazard Assessment and Control

All hazard assessment and control procedures conducted on a Cenovus worksite will be conducted in a manner that aligns with regulatory and company requirements outlined within this practice.

2.1 Hazard Assessment

A hazard assessment is an assessment of a worksite and work activity that includes evaluating what poses a hazard to the health and safety of the workers engaged in the planned work activity, other workers in the immediate area, and the environment. Hazard assessments are required to meet the following requirements:

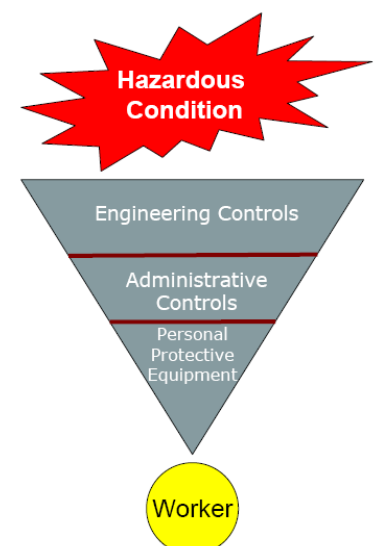
- **Commencing of Work:** A hazard assessment is required to be conducted prior to any work commencing on a Cenovus worksite.
- **Worker Involvement:** Workers involved in the work activity or who may be impacted by the hazardous condition are required to be involved in the assessment process. The workers must be made aware of the hazardous conditions and the methods used to eliminate or control the hazard.
- **Written Assessment:** The assessment must be completed in a written format that includes both the identified hazards and elimination or control techniques.
- **Hazard Controls:** For every hazardous condition identified, there must be an elimination or control technique outlined on the assessment and applied to the worksite or activity (see section 2.2).

2.2 Hazard Elimination and Control

Hazardous conditions are required to have a mitigation plan in place that either eliminates the hazard or implements a suitable control to minimize worker risk. The controls applied to a hazardous condition must reduce the overall risk exposure down to the lowest level. (See section 4.0 for more information on risk.)

Whenever possible, a hazard should always be eliminated or controlled directly at the source. In situations where it may not be practical for engineering controls to be used, a combination of other controls can be used such as administrative controls and personal protective equipment.

Personal protective equipment should always be used as the last line of defence for hazard elimination and control.



2.3 Hazard Assessment Intervals

After an initial hazard assessment has been conducted, there are requirements in which an assessment must be reviewed and/or completed again. Those situations include:

- **At Reasonably Practical Intervals:** Hazard assessments should be periodically reviewed and completed, even when nothing has changed. This is done to ensure that all staff are continuing to follow the correct work procedures and to identify any work that is being completed outside of the original scope of work.
- **A new work process is introduced:** A new work process may involve the use of new material, chemical, equipment, etc. which workers may be unfamiliar with. A new work process can introduce new hazards that could affect the health and safety of the worker and/or potentially impact the environment.
- **A change to existing work processes or operations:** A change to the specific work situations such as work scope change, changes to the operations in the immediate area or worksite conditions (e.g. weather conditions).

2.4 Emergency Situations

In an emergency response situation, it may not be practical for the workers responding to the emergency to complete a documented hazard assessment. In this situation, the workers involved in the response efforts must be adequately trained and deemed competent for the activities associated with the response.

Always reference the applicable Emergency Response Plans for any area specific instructions.

3.0 Identifying Hazards

The identification of hazards is a critical component of the hazard assessment process. To successfully conduct a hazard assessment, the workers involved in the work must evaluate the intended work activity, work area, products/tools, or any other thing that could jeopardize their health and safety or have a negative impact on the environment.

The identification of hazards includes analyzing the worksite and intended activities and asking the following questions:

- What can happen?
- What can it affect?
- How likely is it to happen?
- What can I do to prevent it?

While considering the following impacts:

- Health and Safety
- Environment and Regulatory
- Reputation
- Financial
- Productive Assets

3.1 Identification Tools

There are many varieties of tools available that can assist with the completion of a hazard assessment. The type of hazard assessment tool used depends on the size and scope of work. Some of the tools used to conduct a hazard assessment are called:

- Field Level Hazard Assessment (FLHA)
- Job Safety Assessment (JSA)
- Job Hazard Assessment (JHA)

Cenovus currently has the following tools available for hazard assessments:

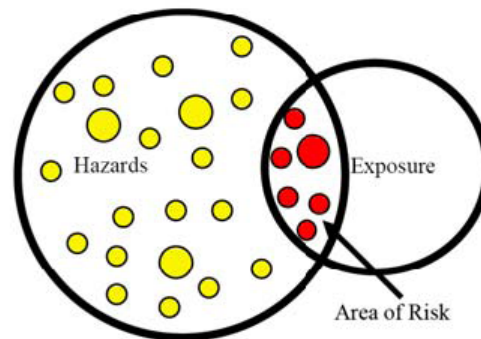
- CEN021 – Record of Safety Meeting and Hazard Assessment
- CEN729 – Field Hazard Assessment Card

4.0 Assessing the Risk

Every hazard identified within a hazard assessment will have some level of risk associated with it. The risk level associated with a hazard depends on the severity of the impact and likelihood of that impact occurring.

4.1 Risk vs. Hazard

Everyone participating in a risk or hazard assessment must clearly understand the difference between hazard and risk. Cenovus has adopted specific definitions for these terms (*see section 9.0*). In simple terms, hazards are things that can lead to negative consequences. When the hazard overlaps with an exposure, then there is a probability of experiencing the consequence which can be qualified as a risk.



4.2 Risk Tolerance

Cenovus’s risk tolerance is communicated through the Cenovus Risk Matrix tool. Risks identified as “extreme” (red) or “high” (orange) require implementation of a risk elimination, reduction, transfer, or exploitation strategy to reduce the residual risk level to an acceptable level (to “medium” or “low”). Risks identified as “medium” (yellow) or “low” (green) require no further mitigation provided controls or procedures are in place and monitored to ensure functionality. It may be desirable from efficiency, operational, or human factors view to consider alternatives resulting in risk reductions that can be made in a cost-effective way.

For more information on risk assessment and Cenovus’s EH&S/Operations risk management practice, please reference CEN-EHS022 EH&S/Operations Risk Management Practice.

5.0 Training

All workers are required to have specific competence in conducting effective hazard assessments. Those competencies shall include the following:

- Regulatory requirements relevant to the jurisdiction where work is being conducted
- Hazard recognition and types
- Evaluation of hazards for risk using the Cenovus Risk Matrix
- Selecting control methods
- Communication and monitoring for control of hazards
- Application of hazard identification and control tools including applicable permits, checklists, worksheets, etc.

Workers must also be competent in the specific tasks that they will be undertaking in either a routine or non-routine work situation. Competency includes adequate qualifications, training, and experience to conduct the work safely and is supplemented, where necessary, by appropriate levels of supervision.

6.0 Roles and Responsibilities

Roles and responsibilities for safety documents are described in the link below:

Cenovus CEN-EHS234, Roles and Responsibilities Standard

7.0 Governing and Reference Documents

7.1 Internal Governance

| Document Type | Governance Documents |
|---------------|--|
| Policy | Corporate Responsibility Policy |
| Framework | Cenovus Operations Management System (COMS) |
| Policy | Enterprise Risk Management Policy |
| Regulatory | Alberta OHS Code (2009) – Part 2, Section 7, 8, 9 and 10 |
| Regulatory | Saskatchewan OHS Regulation – Part III Section 12 and 22 |

7.2 Internal References

| Document Ref. # | Internal Reference Documents |
|-----------------|--|
| CEN-EHS022 | EH&S/Operations Risk Management Practice |
| CEN125 | Cenovus Risk Matrix |
| CEN127 | Risk Assessment Worksheet |
| CEN-EHS114 | Safe Work Permit Standard |
| CEN021 | Record of Safety Meeting and Hazard Assessment |
| CEN729 | Field Hazard Assessment Card |

7.3 External References

| Document Origin | External Reference Documents |
|-------------------|--|
| Work Safe Alberta | Hazard Assessment and Control E-Learning |

8.0 Change Management

Proposed changes to this standard can be directed to EH&S Document Management

9.0 Definitions and Acronyms

Definitions and acronyms for safety documents are described in the link below:
Cenovus CEN-EHS243, Definitions and Acronyms

The following definitions and acronyms are specific to the CEN-EHS019 Hazard Assessment and Control Practice:

Hazard is a source of danger; a condition with the potential for causing an undesirable consequence.

Hazard Assessment is a process for identifying hazards and associated risks by recognizing, evaluating, and eliminating or effectively controlling hazards in the workplace.

Risk, in the context of health and safety is the measure of hazard potential in the workplace expressed in terms of impact and probability of occurrence.