

## Workplace Hazardous Materials Information System (WHMIS)

Hazardous materials handling is critical in NCC T&D operations, particularly during substation construction, transmission line maintenance, and underground cable installation. Effective management ensures compliance with client requirements and NCC T&D's HSE protocols. Proper management of these materials is essential to prevent injuries and environmental incidents. This requires careful planning, thorough training, and the correct use of personal protective equipment or engineering controls.

### Common Hazardous Products in project site (but not limited to)

- Compressed gases (such as acetylene, nitrogen, oxygen)
- Flammable and combustible products (for example, solvents)
- Oxidizing substances (like epoxy hardeners)
- Solvents, coatings, and sealers
- Silica dust
- Acids and alkalis

### Overview of the WHMIS

The Workplace Hazardous Materials Information System (WHMIS) is designed to provide essential health and safety information regarding the safe use of hazardous products. WHMIS ensures that everyone involved—from field workers to project leaders—has access to accurate hazard information through the following components:

- Hazard Identification and Product Classification: Clearly identifying hazards associated with each product.
- Labels: Ensuring all hazardous products are marked with clear and informative labels.
- Safety Data Sheets (SDS): Providing detailed information on the hazards, safe handling, and emergency measures for each product.
- Worker Training and Education: Equipping employees with the knowledge needed to handle hazardous materials safely.

### Roles and Responsibilities

#### Suppliers

- Product Classification: Ensure that hazardous products are accurately classified based on their risks.
- Labeling: Provide clear and compliant labels with necessary hazard information.
- Safety Data Sheets: Supply up-to-date SDSs with every hazardous product.

#### NCC T&D Project Leaders

- Education and Training: Develop and deliver comprehensive training programs on the hazards and safe handling procedures for all hazardous products encountered on site.
- Label Management: Verify that all hazardous materials brought into the workplace are properly labeled, and prepare additional workplace labels when necessary.
- SDS Accessibility: Ensure that employees have immediate access to current SDSs.
- Program Review: Regularly review and update training and safety programs, especially when work conditions or hazard information change.

#### Workers

- Active Participation: Engage fully in all training and educational sessions provided.
- Personal Safety: Use the provided personal protective equipment and follow safe handling practices at all times.
- Hazard Reporting: Promptly report any potential hazards or unsafe conditions to supervisors or the HSE department.

### Labeling Requirements

Labels on hazardous products must include key elements such as:

- Product identifier
- Supplier information



- Pictograms or clear visual warnings
- Signal word or hazard alert
- Specific hazard statements
- Recommended precautionary measures

If a product's original label is unavailable, damaged, or unreadable, employers are responsible for preparing an appropriate workplace label. In cases where products are transferred into another container or produced in-house, a workplace label must provide the identity of the product, instructions for safe handling, and a statement indicating that a Safety Data Sheet is available.

### **Safety Data Sheets (SDS)**

Safety Data Sheets (SDSs) offer detailed information about each hazardous product, including its properties, potential hazards, safe handling practices, and emergency response procedures. Key points include:

- **Accuracy and Timeliness:** SDSs must be current and reflect the most recent hazard information.
- **Responsibility:** While suppliers usually provide SDSs, employers may be required to create them for products produced on-site.
- **Regular Updates:** SDSs should be updated promptly when new safety data becomes available.

### **Worker Education and Training**

Effective education and training programs are critical to ensure safe operations. Training should cover:

- The significance and content of product labels and SDSs.
- Proper safe use, storage, handling, and disposal procedures for hazardous products.
- How to respond to emergencies involving hazardous materials.

Training initiatives must be integrated into the overall health, safety, and environmental (HSE) management system and reviewed regularly to remain effective.

### **Key Takeaways**

- **Clear Identification:** Ensure all hazardous products are accurately classified and labeled.
- **Access to Information:** Maintain up-to-date Safety Data Sheets for every hazardous product.
- **Comprehensive Training:** Provide thorough and regular training to all workers on handling hazardous materials.
- **Responsibility and Accountability:** Suppliers, employers, and workers each play a crucial role in managing hazardous materials safely.

For more information, refer to NCC T&D's relevant IMS procedures or consult our HSE Department for expert guidance and training resources.