

Tier 3: Warehouse Orientation

1. Warehouse Orientation

1.1 Warehouse Orientation



Warehouse

Tier Three – Site Specific Access

1.2 Course Objectives

Course Objectives

Upon completion of this module as a worker you will be able to:

- Understand Plant Entry Procedure
- Identify Site Specific Hazards and Controls for the Warehouse.
- Follow Procedures in the event of:
 - Equipment Damage
 - Personal Injury
 - Process Upset (Emergency Preparedness)
- Complete Plant Exit Procedure Checklist

2. Introduction

2.1 Introduction



Introduction

Warehouse Overview

2.2 Warehouse Overview

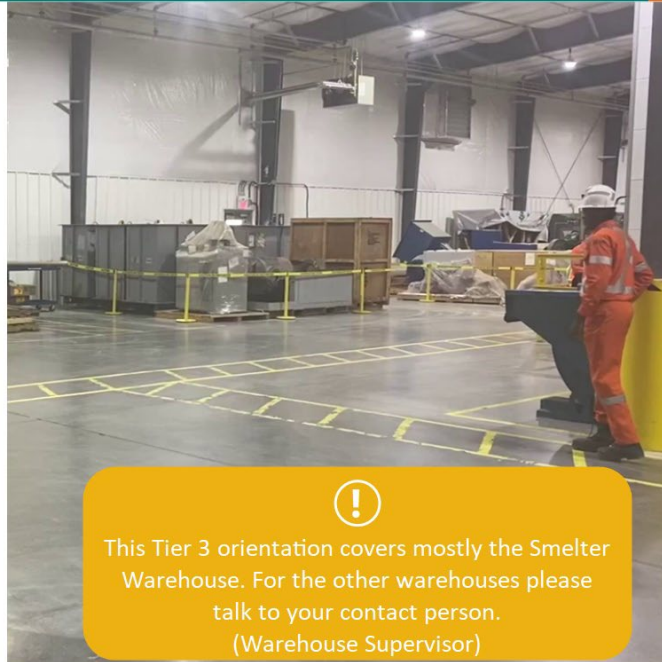
Warehouse Overview

Warehousing involves the receiving, storage and distribution of goods and supplies.

The warehouse can be a high traffic area with delivery vehicles, loading docks, and forklifts used to move goods on standard pallets from point A to point B.

The Warehouse stores valuable materials and supplies; as a result these goods must be kept secure.

Warehouse areas are locked at all times and only authorized personnel are allowed access.



This Tier 3 orientation covers mostly the Smelter Warehouse. For the other warehouses please talk to your contact person.
(Warehouse Supervisor)


2.3 Warehouse Overview

Warehouse Overview

Hours of Operation

The Warehouses at Vale are typically a Monday to Friday dayshift operation.

Operating Hours are:	
Smelter Warehouse 61	7:30AM to 4:00PM
Divisional Shops Warehouse	7:30AM to 4:00PM
Totten Warehouse	7:00AM to 3:30PM
Divisional Shops Warehouse	7:30AM to 4:00PM
Garson Warehouse	6:30AM to 3:00PM
Coleman Warehouse	6:30AM to 3:00PM
North Warehouse	7:00AM to 3:30PM
Clarabelle Warehouse	7:00AM to 3:30PM
Nickel Refinery Warehouse	7:30AM to 4:00PM
Creighton Warehouse	7:00AM to 3:00PM
CMD Warehouse	7:00AM to 3:00PM
KCD Warehouse	6:30AM to 3:00PM



3. Plant Entry

3.1 *Plant Entry*



Plant Entry

Driving in, walking in

3.2 Approaching The Plant

Approaching the Plant

Using the main gate entrance to the Smelter, follow the main route and turn left on Ring Road South at the 'Y', continue to designated door. Identified on the map as building B56.

The Warehouse is located across from the Transportation Department area.

Some workers may have access through the General Office gate.



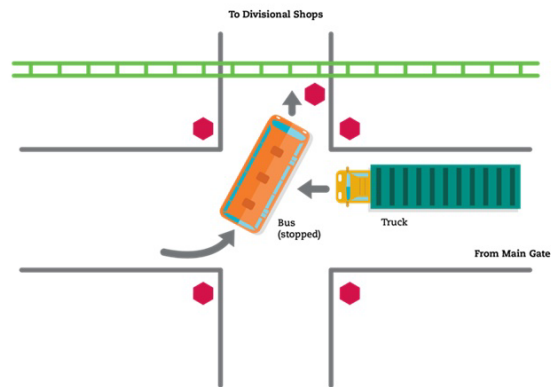
3.3 Approaching The Plant

Approaching the Plant

At the intersection of the Central Gate Road and Divisional Shops Road, there is a history of nearmiss collisions.

Be aware that adjacent to this intersection lies a set of railway tracks with an additional stop sign.

Be sure that before proceeding through the intersection that vehicles at this stop sign are completely clear of the crossing before you proceed through the 4-way stop.



3.4 Parking

Parking

The parking lot for the Warehouse consists of designated spots in front of the building as well as docking locations for delivery trucks.

Please note: All vehicle operators are required to back their vehicles into parking spots.

Sign in Location (Smelter Warehouse):

Door 545 – Office Door

Door 547 – Front Entrance

Door 556A – Heavy Storage



3.5 Personal Protective Equipment

Personal Protective Equipment

In the previous Tier 1 and Tier 2 Orientation, general equipment for personal protection was discussed.

Minimum PPE requirements in the Warehouse are:

- Safety Glasses
- Work Boots
- Hard Hats
- High-Vis Clothing

Other PPE may be required depending on the work being performed.



4. Plant Hazards and Controls

4.1 Plant Hazards and Controls



Plant Hazards & Controls

4.2 Site Specific Hazards

Site Specific Hazards

Using the tools that you learned in Tier 1 Orientation, ensure to use operation controls to mitigate risk associated with the identified hazards.



Be Aware

Be aware of your surroundings and the risks around you.



Follow Policies & Procedures

Our internal policies and procedures guide us in doing our work in a manner that reduces risk.

The following section lists identified hazards that may be encountered in the work you're doing. Knowing if these hazards apply to your work can be found through:

- Vale Contact Person
- JHA/PHR (or other Risk Assessment Tools)
- SLAM

4.3 Site Specific Hazards

Site Specific Hazards

At the Warehouse, workers need to be aware of site specific hazards and their related controls.

These include but are not limited to:

- General Warehouse Hazards
- Mobile Equipment
- Docking Hazards
- Storage and Racking Hazards
- Material Handling Hazards
- Cranes
- Elevators



4.4 Warehouse Specific - Hazards

Warehouse Specific Hazards

The warehouse area has its own unique set of hazards due to the work and arrangement of the area:

- Numerous aisles that can be narrow and have reduced visibility for mobile equipment operators to see pedestrians.
- Increased frequency of mobile traffic within the area increases the possibility of collisions with pedestrians and/or other equipment.
- Vehicular access is restricted using the appropriate measures when pedestrians are in the area.



4.5 Warehouse Specific - Hazards

Warehouse Specific Controls

To manage the hazards in the Warehouse area, the following controls have been implemented:

- Always notify a warehouse person of your presence when entering the Smelter Warehouse (61) for a job and when leaving the warehouse.
- Walk within designated walkways (hatched yellow lines) where available.



4.6 Mobile Equipment: Hazard

Mobile Equipment: Hazard

The Warehouse utilizes various pieces of mobile equipment to aid in the movement of materials or in the maintenance of areas.

Forklifts: transporting supplies and materials.

Sweepers: dust control and collection.

Elevated Work Platforms: used to perform various maintenance activities.

Service Vehicles: ½ ton trucks or cube vehicles deliver small quantity goods to the building.

Transport Trucks: most of the larger equipment brought on-site for servicing is done so with large transport trucks.

Mobile equipment presents several hazards including restricted visibility, limited clearance and shifting loads all of which can lead to potential collisions with pedestrians, machinery or other mobile equipment.

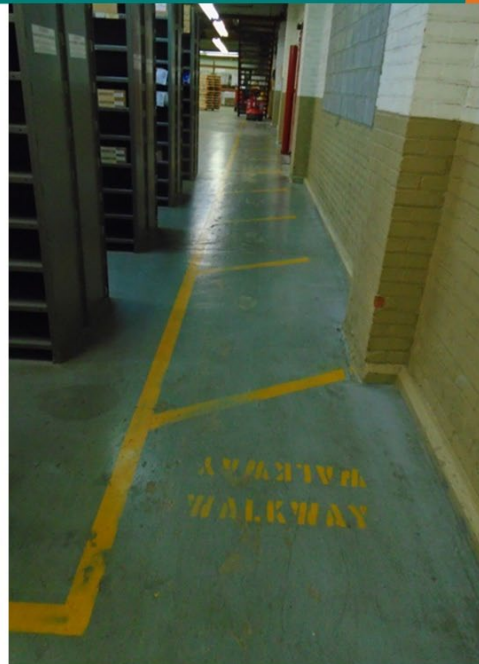


4.7 Mobile Equipment: Control

Mobile Equipment: Control

In addition to the general controls associated with mobile equipment, the Warehouse has mandated the following controls applicable to mobile equipment in their area:

- The use of overhead doors is restricted to mobile equipment only. Pedestrians are only to use personnel-doors.
- Walk within designated walkways (hatched yellow lines) where available.
- Horns are to be sounded at all aisle entrances and exits.
- Mobile equipment shall not enter work area without authorization of the employees present in work area.



4.8 Docking: Hazard

Docking: Hazard

Loading and unloading materials, goods and products from trucks are daily activities at the shipping dock. Globally, these activities are also a regular and frequent source of workplace injuries and incidents due to any of the following.

- Congestion and traffic
- Inadequate lighting
- Uneven surfaces
- Contaminants in the air such as exhaust
- Equipment in poor working order
- Lack of safe working procedures
- Hazards associated with lifting devices, trucks, rolling conveyors, doors and other moving equipment and parts



4.9 Docking: Control

Docking: Control

Good Practices to follow in docking areas include:

- All personnel on foot must be clear of the loading zones during all mechanized loading or unloading operations
- Identify potential hazards before loading or unloading
- Properly secure loads before moving
- Protect all drop-offs, and pinch points on loading docks and lift gates
- Never be downhill from a moving load
- Use chocks and other devices
- Comply with Vale High-Vis Clothing Standard (SPI-23)
- When driving equipment on to a trailer the transport ignition keys must be secured in the lock box.

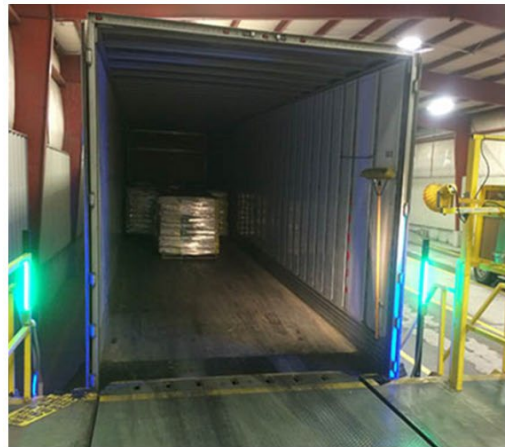


4.10 Docking: Control

Docking: Control

To minimize the risk of atmospheric hazards from vehicle exhaust, all trucks entering door # 555 and 556 must shut off engines while loading or unloading.

To maintain the quality of air in the area, the warehouse is equipped with a monitor to measure carbon monoxide (CO) and provide a 120dB pulsating alarm that will warn people in the event of CO.



4.11 Material Handling: Hazard

Material Handling: Hazard

Each day many materials are shipped, moved or otherwise handled within Vale. Whether it be supplies and materials being brought in from external sources, or moved interplant, the hazards associated to the movement of material are many.

- Strains/Sprains/Fractures
- Musculoskeletal Disorders
- Spills
- Transportation of dangerous goods



4.12 Material Handling: Control

Material Handling: Control

To minimize the risk of injury or incident with regard to material handling, some safe work practices include:

- Always centre loads on associated lifting equipment (Forklifts, Pallets, etc.).
- Avoid overloading.
- Wear hand and forearm protection such as gloves and long sleeved shirts.
- Observe height limitations when stacking materials.
- Follow the Warehouse Shipping Standards to ensure safety for those handling these materials.



4.13 Material Handling: Control

Material Handling: Control

To minimize the impact of spills, especially those containing fuel or oil, the warehouse requires that all spills be reported to the worker's Vale contact person or the "Warehouse On-Call" person.

Warehouse on-call Phone number:
705-507-3689



4.14 Material Handling: Control

Material Handling: Control

Transport Canada, develops risk based safety standards and regulations on the transport of dangerous goods to promote public safety in their shipping by all modes of transport in Canada.

Where applicable, delivery personnel handling materials at the Warehouse must comply with the Transportation of Dangerous Goods Act (TDG) through proof of training and certification.

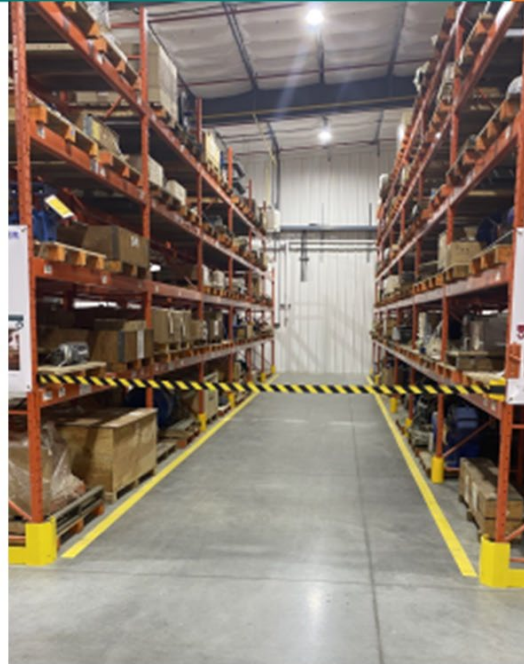


4.15 Steel Storage Racking - Hazard

Steel Storage Racking: Hazard

Steel racking presents a number of hazards including:

- Materials being stored at varying heights of elevation.
- Possible unsecured materials.
- Unstable or off-center loads.
- Reduced visibility.



4.16 Steel Storage Racking - Control

Steel Storage Racking: Control

Applicable Controls

- Steel Storage Racking is installed by qualified and authorized workers.
- Recurring inspections and audits are conducted on racking and material placement.
- Exercise caution when using mobile equipment.



4.17 Elevators: Hazard and Control

Elevators: Hazard and Control



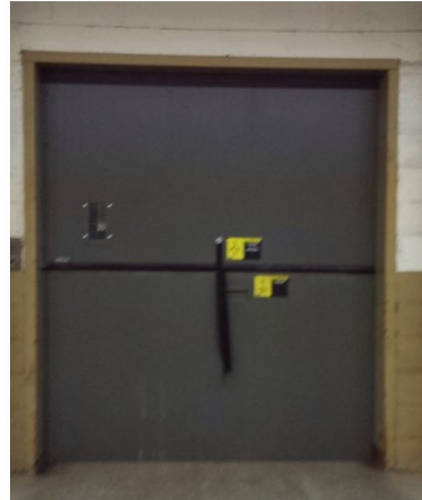
Freight Elevators are potential sources of serious injuries to workers who aren't mindful of the task or situation at hand.

Restricted clearance, shifting loads, and the general orientation/layout of the elevator introduce many hazards.



The Warehouse mandates the following controls:

- Elevators require permission from the Vale Contact before use.
- Do not use elevator with a forklift.
- No personnel riding unless accompanying freight and the personnel must have a suitable means of communication such as radios, portable phone, etc.



4.18 Additional Controls

Additional Controls

Due to the nature of hazards at the Warehouse, it's critical that all work is authorized and controls are followed.

- The "Non-Warehouse Personnel" must supply and keep in a safe condition all their related equipment that they bring into the warehouse to perform the work they have been contracted to do.
- "Non Warehouse Personnel" shall not, except in cases of emergency, use or operate company owned equipment or machinery.
- All "Non-Warehouse" personnel must ensure that the area in which they are working is kept as clean as possible. Daily clean up is required.



The Warehouse is a busy and complex area. For the safety of all people performing work, avoid distracting others.

5. Incident/Accident Reporting

5.1 Incident/Accident Reporting



Incident/Accident Reporting

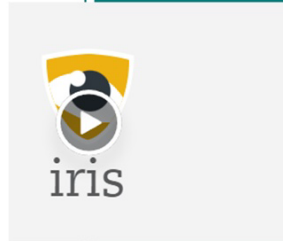
5.2 Incident/Accident Reporting

Equipment Damage

An incident is an event that results in loss or harm to personnel (injury/illness), environment, asset, or equipment.

Even with "near misses", all workers, including Offsite Personnel are encouraged to initiate and/or participate.

Intent is to prevent recurrences and reduce or eliminate any further injuries.



Have you seen an unsafe process, something that could harm a colleague or affect the environment? Log into Iris and report the situation. Iris was designed using the best user experience practices available in the market with the aim of making your registration experience as user friendly and simple as possible. Available in desktop and mobile versions, Iris is the go-to-tool for reporting adverse events that may have an impact on the safety of our workers, the environment, community members and our assets.

Get in touch with your Vale Contact Person for any information required on the Incident/Accident Investigation system.

6. Personal Injury

6.1 Personal Injury



Personal Injury

6.2 Personal Injury

Personal Injury

Warehouse

In the case of personal injury, generally, contact your Supervisor.....
report immediately to First Aid. In the event you cannot physically
report to First Aid, phone first aid:

Emergency Numbers:

Smelter	682-6622
Nickel Refinery	682-7214
Coleman Mine	966 – 4111
Copper Cliff Mine	682-5264
Frood/Stobie	525-3282
Copper Cliff Mine	682-5264
Garson Mine	693-2224
Totten Mine	866-3800



7. Emergency Preparedness

7.1 Emergency Preparedness



7.2 Emergency Preparedness

Emergency Preparedness

The Surface Tier 2 Orientation provided guidance on the application of Emergency Preparedness including activating an emergency and how to classify one.

The following is how to respond to an emergency at the Warehouse.

! Be aware that AED units are located inside door 545.
(Smelter Warehouse and Divisional Shop Only)



7.3 External Safe Assembly Area

External Safe Assembly Area

The External Safe Assembly areas for Warehouse are shared with the Transportation Department and they're located in the parking lot across the street and East of the building (near door 522).

This is where to proceed in the case of a continuous tone alert emergency.

- The Emergency Designate will account for Crew Members.
- Report immediately to Emergency Designate if you suspect someone is still inside the building.



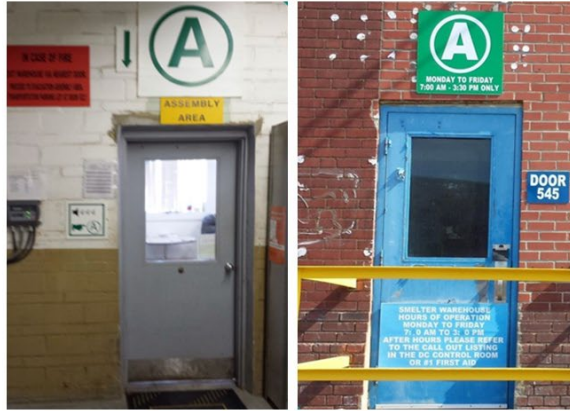
7.4 Internal Safe Assembly Area

Internal Safe Assembly Area

The Internal Safe Assembly area for the Warehouse is the lunchroom at Door 545.

This is where to proceed in the case of an intermittent tone alert emergency.

- The Emergency Designate will account for Crew Members.
- Report immediately to the Emergency Designate if you suspect someone is still inside the building.



8. Plant Exit

8.1 Plant Exit



8.2 Plant Exit

Plant Exit

Good work practices dictate that you close the loop on work you were doing to avoid creating risks or hazards for other work groups, cross shifts, or other work in the area. Here are some tasks to consider when getting ready to exit the plant to ensure your safety and that of those around you:

- ✓ **Housekeeping** – Is your worksite cleaned up after your job?
- ✓ **Personal Lock and Tag** – Has your personal protection been removed at the end of the shift?
- ✓ **Status Tagging** – Is there ongoing work that needs a status tag placed or is there equipment in Bad Order that needs to be identified?
- ✓ **End States** – Have you left the process in the proper state?
- ✓ **Waste Segregation** – Have you disposed of materials in the appropriate waste receptacles/bin/area?
- ✓ **Control room** – Do I need to let the control room know that I'm clear of an area?
- ✓ **Vale Contact Person** – Do they need an end of shift report from me?
- ✓ **Permits** – Do I need to close or hand in any permits?
- ✓ **Sign out** – At the gate or other designated areas.

9. Conclusion

9.1 Conclusion



9.2 Conclusion

Conclusion

This concludes the material for the Warehouse 61 Tier 3 Orientation. You should now have a working knowledge and understanding of:

- Plant Entry
- Site Specific Hazards and Controls for the Warehouse.
- Procedures in the event of:
 - Equipment Damage
 - Personal Injury
 - Process Upset (Emergency Preparedness)
- Plant Exit Procedure

This Orientation provided information to access the Warehouse. In order to feel comfortable with the area, you may arrange a field visit with your Vale Contact Person to specifically identify procedures provided in the Orientation.

Additionally, depending on the site or work you're doing, you may require task-specific information through either the local Learning & Development Group or your Vale Contact Person.