

## Long Harbour: Site Orientation

### 1. Long Harbour Orientation

#### *1.1 Vale\_Slide*



## ***1.2 L and D slide***



### ***1.3 Introduction***



## **Long Harbour General Orientation**

November, 2020

## **1.4 The Program**

Vale Global and Regional Operations

Human Resource Policies

Operational Controls for Health Safety  
and Environment

Working Safely at Long Harbour

Emergency Preparedness

Summary

Agenda



## 2. Vale Global and Regional Operations

### 2.1 Divider



## 2.2 Introduction

## Vale Global and Regional Operations

Vale is the one of the world's largest mining company and operates in more than 37 countries with over 150,000 employees worldwide.



## 2.3 Introduction

### Vale Global and Regional Operations

A diversified business portfolio...

Vale mining, production and manufacturing

<b>Iron Ore</b> 299.8 Mt (2013)		<b>Coal</b> 8.8 Mt (2013)	
<b>Logistics</b> Operation of ports and railroads		<b>Copper</b> 370,000 tonnes (2013)	
<b>Nickel</b> 260,000 tonnes (2013)		<b>Steel</b> 2 operations & 1 project (joint-ventures/partners)	
<b>Fertilizers</b>		<b>Energy</b> Hydro Plants in Brazil, Canada and Indonesia	

## 2.4 Vale within Canada

### Vale Global and Regional Operations

#### Vale within Canada



## 2.5 Long Harbour Products

### Vale Global and Regional Operations

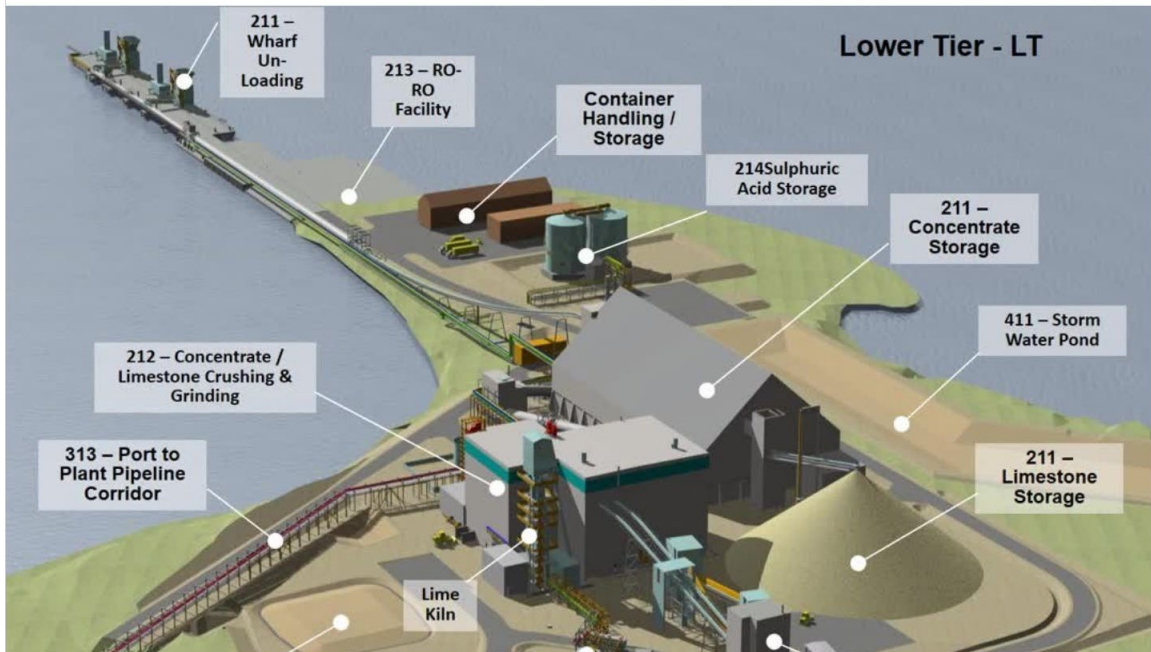
#### Long Harbour Products



## 2.6 Long Harbour Products

### Vale Global and Regional Operations

#### Long Harbour Processing Plant

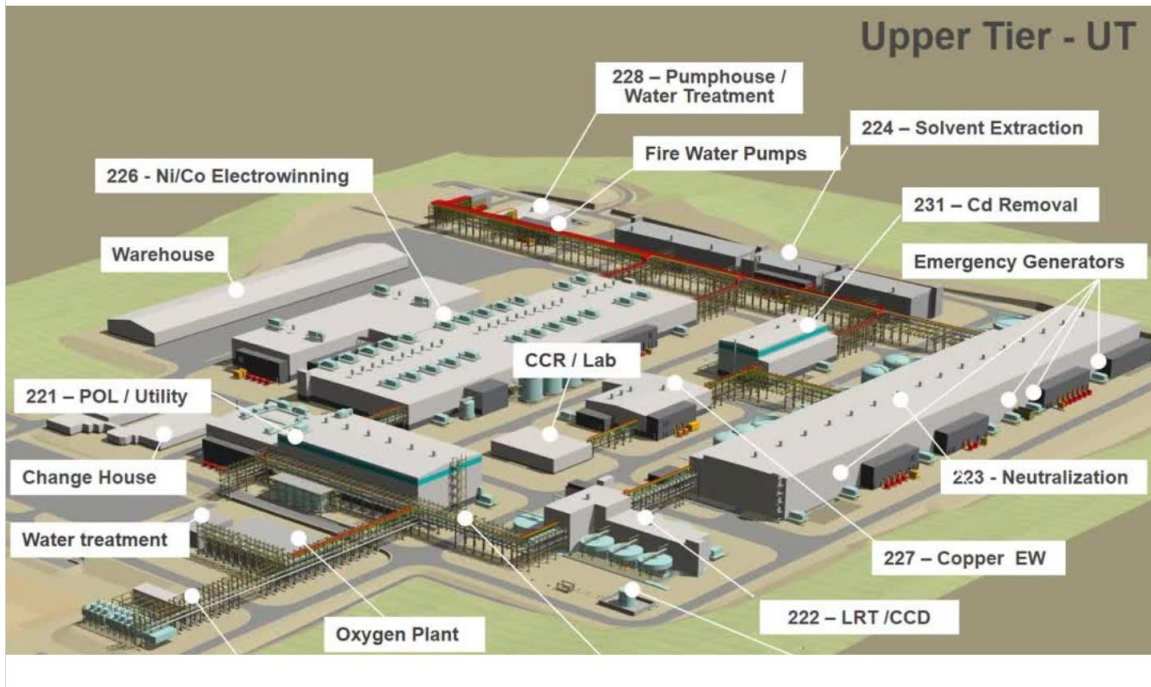




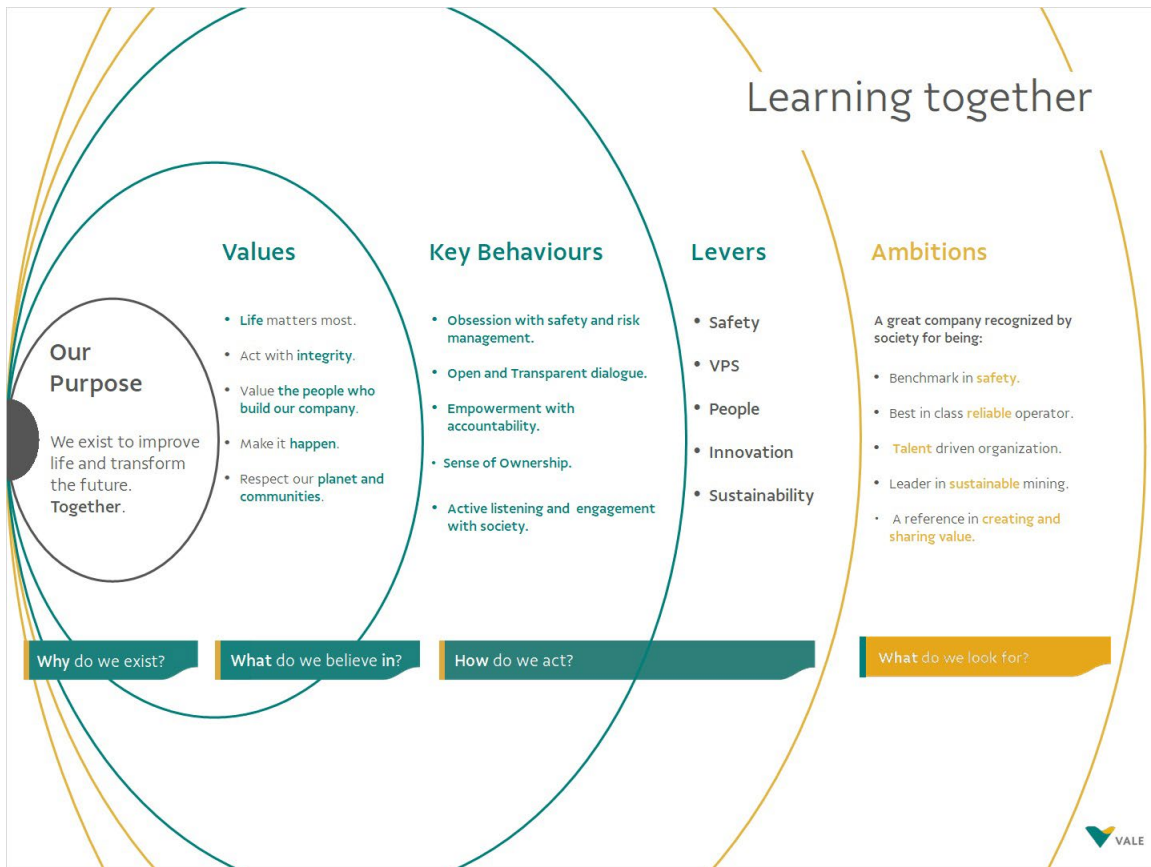
## 2.7 Long Harbour Products

### Vale Global and Regional Operations

#### Long Harbour Processing Plant



## 2.8 Learning Together





### 3. Human Resource Policies

#### *3.1 Divider*



## 3.2 Sustainability Policy

# Safety Policies and Procedures

### Sustainability Policy

#### Basic Beliefs:

- All injuries can be prevented.
- All injuries, accidents / incidents, “near misses”, must be reported immediately to your immediate supervisor.

#### Commitment to:

- Continuous improvement.
- Hazard / Risk Management.
- Pollution Prevention.
- Compliance with legislation and other requirements.

#### Be available to all stakeholders:

- The Sustainability policy is posted in various places throughout the site. Please take the time to review it.



### ***3.3 Drug and Alcohol Policy***

## **Drug and Alcohol Policy**

### ***3.4 Site Drug and Alcohol Standard***

## **Drug and Alcohol Policy**

### **Site Drug and Alcohol Standard**

Designed to support a safe, respectful, positive and productive work environment.

Drug and alcohol testing is a requirement for:

- Pre-access
- Post-incident
- Reasonable cause

Site personnel who test non-negative or refuse to submit to testing will have site access revoked.



### 3.5 Key Requirements

## Drug and Alcohol Policy

### Key Requirements

**Behavior not allowed under the ADI, but not limited to:**

1. Anyone reporting for work unfit or being unfit at work because of the use or after effects of alcohol (from any source) or other drugs;
2. Use, illegal or unauthorized possession (of product or paraphernalia, or no legal prescription), consumption, distribution, manufacturing, offering for sale of illicit drugs, cannabis (in any form) or beverage alcohol, or intentional misuse of medications when on company property and when on duty;
3. Consumption of any product containing alcohol/drugs during the work day including meals and breaks whether on or offsite;
4. Receipt of an impaired driving charge or sanction when operating a company vehicle or driving on company business;
5. Failure to report an impaired charge or license suspension when required to drive company vehicles or if happened on company business;
6. Refusing to submit to a alcohol and drug test, as required.



### 3.6 Key Requirements

## Drug and Alcohol Policy

### Key Requirements

**Behavior not allowed under the ADI, but not limited to:**

7. A positive breath alcohol test or a positive drug test at or above the cut-off levels established in the instruction;
8. Being unfit or reporting unfit If you are scheduled on-call;
9. Reporting for work on an unexpected call-in if you are under the influence of alcohol or other drugs.



### 3.7 Cannabis Legalization

## Drug and Alcohol Policy

### Cannabis Legalization – How Does This Affect Me?

Marijuana is a mood-altering substance that can have significant effects on physical and mental health.

The impairing effects can vary between people and depend on dosage, manner of consumption (e.g. smoked or taken orally), and interactions with other drugs.

Acute intoxication can last for 8-10 hours or longer (12-24 hours).

Impairments in thinking and cognitive abilities persist after the initial intoxication (24 hours and sometimes longer).

We have updated our drug testing technology to account for the legalization of marijuana. Drug testing will still occur as set out in the [Alcohol and Drug Instruction](#). Our testing technology detects recent use where there is a high risk of impairment. Accordingly, although Vale does not endorse recreational use, employees that elect to recreationally use marijuana are advised to ensure a lengthy period of abstinence prior to reporting for work to ensure there are no impairing effects and after effects from use.

If you have been authorized to use marijuana for medical purposes, you are not allowed to work on Vale property. You must inform your supervisor that due to a medication issue you cannot be at work and you are required to contact Vale Occupational Medicine service provider immediately and participate in a medication review.

### ***3.8 Creating a Respectful Workplace***

## **Creating a Respectful Workplace**



### 3.9 Purpose

## Creating a Respectful Workplace

### Purpose

To create awareness around violence, harassment and discrimination and identify ways to effectively address and manage these situations.

Identify organizational and individual responsibilities and expectations.



### 3.10 Purpose

## Creating a Respectful Workplace

### Purpose

Supports the physical, psychological and social well-being of all employees.

Recognizes, welcomes and promotes diversity.

Values employees.

Encourages polite and courteous communication.

Addresses conflicts in a positive and respectful manner.

Addresses disrespectful behaviour and harassment.



### 3.11 Site Drug and Alcohol Standard

## Creating a Respectful Workplace

### Discrimination & Harassment

Not limited to any one particular group or organizational level

Can Be;

- Co-worker to co-worker
- Supervisor to worker
- Worker to supervisor
- Man to woman / Woman to man
- Someone from a different company
- Visitor on site

It can be anyone and can be intentional or unintentional.



### 3.12 Discrimination & Harassment

## Creating a Respectful Workplace

### Discrimination & Harassment

The effects of workplace harassment and discrimination on the individual who is harassed can be very serious. It can cause a variety of effects, including:

#### Physical effects, such as:

- Inability to sleep
- Loss of appetite
- Illness
- Headaches
- Panic attacks
- Heart palpitations



### 3.13 Discrimination & Harassment

## Creating a Respectful Workplace

### Discrimination & Harassment

The effects of workplace harassment and discrimination on the individual who is harassed can be very serious. It can cause a variety of effects, including:

#### Social and work effects:

- Stress on family and interpersonal relationships
- Inability to concentrate at work
- Loss of productivity



### 3.14 Discrimination & Harassment

## Creating a Respectful Workplace

### Discrimination & Harassment

The effects of workplace harassment and discrimination on the individual who is harassed can be very serious. It can cause a variety of effects, including:

Psychological effects, such as:

- Depression
- Stress
- Panic and anxiety
- Frustration
- Shock
- Anger
- Post-traumatic stress disorder (PTSD)



### 3.15 Discrimination & Harassment

## Creating a Respectful Workplace

### What is Harassment?

The effects of workplace harassment and discrimination on the individual who is harassed can be very serious. It can cause a variety of effects, including:

#### Consequences of...

- Decreased productivity
- Climate of low morale
- Increased absenteeism
- Increased staff turnover
- Increased use of Employee Assistance Programs for counselling and other supports
- Increased staff and management time dealing with the effects and complications
- Negative reputation and word-of-mouth
- Risk of legal action against the employer



### 3.16 What is Harassment?

## Creating a Respectful Workplace

### Discrimination & Harassment

#### What is Harassment?

Comments or conduct which are abusive, offensive, demeaning, or vexatious, that are known or ought to reasonably be known to be unwelcome.

*Can be intentional or unintentional.*





### 3.17 What is Harassment?

## Creating a Respectful Workplace

### Discrimination & Harassment

#### Some Examples of Harassment

- Unwelcome remarks, jokes, innuendoes or taunting
- Spreading rumours or gossip
- Racial or ethnic slurs, including derogatory nicknames
- Displaying or sending sexist, racist, or other offensive pictures or emails
- Insulting gestures
- Actual or threatened physical assault
- Threatening or bullying



### 3.18 Sexual Harassment

## Creating a Respectful Workplace

### Discrimination & Harassment

#### Sexual Harassment

Sexual harassment is defined as a course of *unwanted unwelcomed behaviors of a sexual or sexist nature that makes a person feel uncomfortable or unsafe.*

The term 'harass' is defined by the Newfoundland and Labrador Human Rights Commission as '*to engage in a course of vexatious comment or conduct that is known or ought reasonably to be known to be unwelcomed*'.

Three Types – *Verbal, Physical and Visual*



### 3.19 What is Discrimination?

## Creating a Respectful Workplace

### Discrimination & Harassment

#### What is Discrimination?

The refusal to employ or continue to employ, or to intentionally or unintentionally deny a right, benefit or opportunity on the basis of an actual or perceived prohibited ground of discrimination as outlined in the Human Rights Act, 2010.



### 3.20 What is Discrimination?

## Creating a Respectful Workplace

### Discrimination & Harassment

#### What is Discrimination?

- Race discrimination
- Age discrimination
- Wage discrimination
- Gender discrimination
- Sexual discrimination
- Sexual orientation discrimination
- Religious discrimination
- Disability discrimination
- Conviction for which a pardon has been granted
- Family Status
- Political Affiliation



### 3.21 What is Bullying?

## Creating a Respectful Workplace

### Discrimination & Harassment

#### What is Bullying?

Workplace bullying is the mistreatment of an individual in the workplace by one or more perpetrators, usually repeatedly or persistently.



### 3.22 What is Bullying?

# Creating a Respectful Workplace

## Discrimination & Harassment

## Types of Bullying

- Verbal abuse
- Non-verbal tactics
- Psychological abuse
- Humiliation, and sabotage that interferes with work
- Being overt, with other people watching or participating in it
- Being covert, noticed only by the victim
- Cyber-bullying



### 3.23 What is Bullying?

## Creating a Respectful Workplace

### Discrimination & Harassment

#### Organizational Responsibility

- Set tone for respectful work environment.
- Monitor atmosphere in the workplace.
- Pay attention to signs of harassment and discrimination.
- Ensure that the policy and other relevant information on violence, harassment and discrimination are accessible to all employee.
- Conduct awareness raising sessions for all staff on discrimination and harassment issues.
- Implement an internal system for dealing with complaints of discrimination/harassment.



### 3.24 Organizational Responsibility

## Creating a Respectful Workplace

### Discrimination & Harassment

#### How to Prevent...

- Refrain from actions that may offend or embarrass others.
- Remember to treat people as they wish to be treated and not as you would like to be treated.
- Let others know that you do not approve of disrespectful behaviours – be open and respectful.
- Participate in learning opportunities related to a harassment and discrimination free workplace.





### 3.25 What do you do if...

## Creating a Respectful Workplace

### Discrimination & Harassment

What do you do if... You are the victim? The accused? A witness?

- Thoroughly review the Vale Workplace Violence, Harassment and Discrimination Policy.
- If possible, speak with the person about the behaviours, sometimes people do not realize the impact of their action on others.
- Be open and respectful and avoid angry behaviour, speak to whoever you need to get the problem resolved.
- Keep a record of events, emails, letters, memos etc..
- Respect confidentiality
- Seek support and/or counselling from family and friends or a professional.

EFAP 1-800-387-4765 - [www.workhealthlife.com](http://www.workhealthlife.com)



### 3.26 Taking Steps to Prevent...

## Creating a Respectful Workplace

### Discrimination & Harassment

#### Taking Steps to Prevent...

Vales' Workplace Violence, Harassment and Discrimination Policy includes the procedures for reporting and investigating harassment or other inappropriate behavior, which includes:

- Recording the details (time/date, nature) of incidents.
- If safe, speak to the person about their behavior.
- If continues or if you feel unsafe discussing it with this person speak with your supervisor, Labour Relations or HR.
- An investigation will then begin and required actions taken.

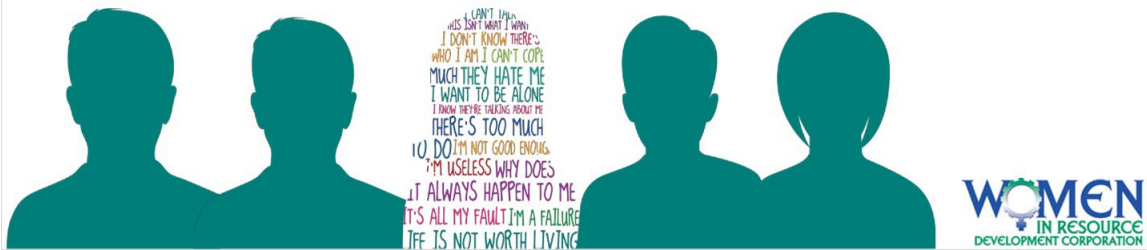


### 3.27 Taking Steps to Prevent...

## Creating a Respectful Workplace

### Mental Illness Facts

- 1/5 Canadians will experience a mental illness sometime during their life.
- Mental health problems i.e. depression and anxiety are common.
- Mental health in the workplace has the potential to affect everybody.
- By 2020 the World Health Organization predicts depression will rank second to heart disease as the leading cause of disability.



### 3.28 Taking Steps to Prevent...

## Creating a Respectful Workplace

### Let Us Remember...

- On this worksite there is zero tolerance for harassment.
- Mutual respect is key.
- Avoid behaviours that may be misread or misinterpreted.
- Be aware of the impact you can have on others and act accordingly.



## 4. Operational Controls for Health Safety and Environment

### 4.1 Divider



## 4.2 SafeProduction - Orientation

### Introduction

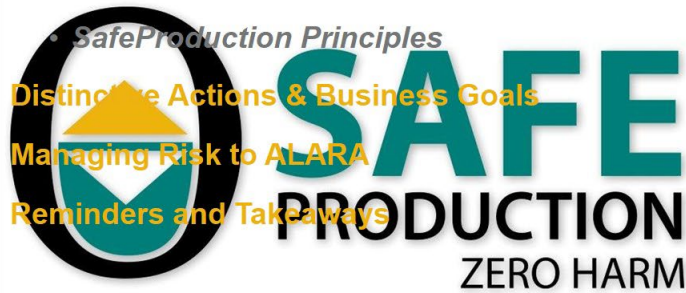
- *Our Goal of Zero Harm*

- *SafeProduction Principles*

Distinctive Actions & Business Goals

Managing Risk to ALARA

Reminders and Takeaways



## SafeProduction - Orientation

Care for yourself. Care for others. Let others care for you.

### 4.3 Our Goal of Zero Harm is to...

## SafeProduction

Our Goal of Zero Harm is to...





## 4.4 SafeProduction Principles

### SafeProduction

#### SafeProduction Principles

A promise of **Zero Harm**.

**Distinctive Actions and Business Goals** – Plan, Accept, Care and Lead; & Profit, Cost, Margin and Compete.

**Risk Management** and how to use it to achieve Zero Harm.

Managing risk to **ALARA** to achieve Zero Harm.





## 4.5 SafeProduction Principles

### SafeProduction

#### SafeProduction Principles

To achieve our goal of Zero Harm we must all understand what this means and follow our **SafeProduction** program.

Let's start by watching our SafeProduction video.



## ***4.6 SafeProduction Principles***



## 4.7 Distinctive Actions & Business Goals

### SafeProduction

#### Distinctive Actions & Business Goals

The SafeProduction **Distinctive Actions** as demonstrated through risk management will help us achieve the promise of zero harm.

It is also how we conduct our business: using SafeProduction's actions to manage risk while meeting our **Business Goals**.



## 4.8 Distinctive Actions & Business Goals

### SafeProduction

#### Distinctive Actions & Business Goals

**PLAN** all work with risk management tools and processes to prevent harm.

**ACCEPT** boundaries established in training, work within your capabilities and use procedures and rules to prevent harm.

**CARE** about yourself and co-workers, work as a team to prevent harm.

**LEAD** at least one person; yourself, have the courage to lead by example and help others.



## 4.9 Distinctive Actions & Business Goals

### SafeProduction

#### Distinctive Actions & Business Goals

**PROFIT** by using risk management processes, identify opportunities to pursue growth.

**COST** managed and waste reduced, by planning work.

**MARGIN** achieved through quality, efficiency and safe productivity, demonstrating our advantage over competitors.

**COMPETE** in the world market through our individual efforts to realize Vale's vision to be the number one global natural resources company in creating long term value, through excellence and passion for people and the planet.

## 4.10 Managing Risk to ALARA

### SafeProduction

#### Managing Risk to ALARA



As  
Low  
As  
Reasonably  
Achievable

#### ALARA

"The conditions you want to meet to work productively while achieving zero harm"

## 4.11 Managing Risk to ALARA

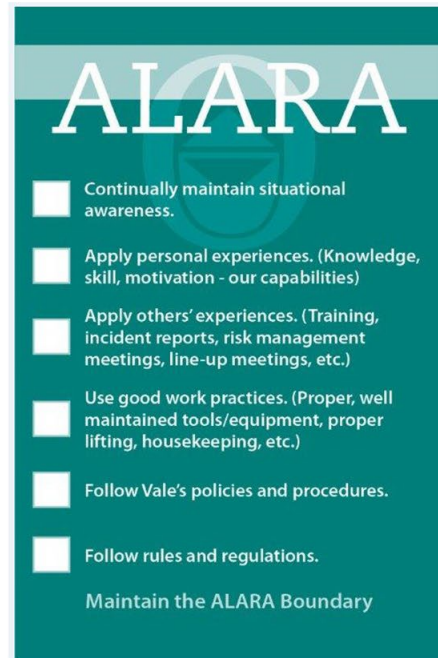
### SafeProduction

#### Managing Risk to ALARA

It is important to understand what we mean by **ALARA** as there is risk in all tasks we undertake at work and at home.

We must only perform work where risk has been managed to **ALARA**.

We **can not** accept uncontrolled risk.

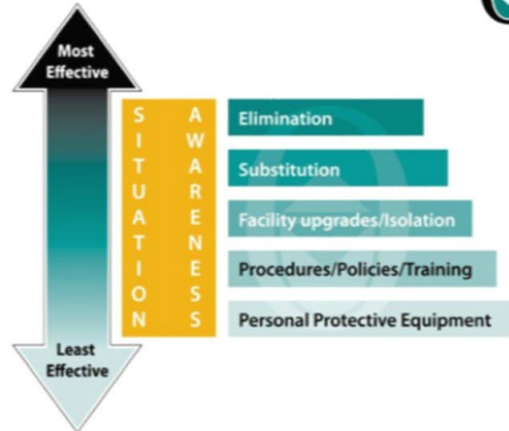


## 4.12 Hierarchy of Controls

### SafeProduction

#### Managing Risk to ALARA

#### Hierarchy of Controls



Our **Hierarchy of Controls** helps us identify what controls are most effective to manage risk to **ALARA**.




## 4.13 Hierarchy of Controls

# SafeProduction

## Hazard Alerts & Notices

### SHE Notice



**Notice Type – Personal Protective Equipment (PPE) Regulation**

Action: For information of all personnel working on this site.

July 16, 2014 Reference Number: 14-SH-0009

To: All Personnel Working on the Long Harbour Operations Site

Re: Personal Protective Equipment (PPE) Regulation

The purpose of this notice is to communicate the Personal Protective Equipment Regulation that outlines the minimum requirements for PPE on the Long Harbour Operations site.

It is the expectation of Vale's Safety, Health & Environment team that this regulation is reviewed by all personnel at the next start of shift meeting. Upon review of this regulation it is the responsibility of all site personnel to read by example and uphold this regulation.

For more information please contact the SHE department at [hspsafety@vale.com](mailto:hspsafety@vale.com)

SHE Notice  
Long Harbour Operations

Page 1 of 2

### SHE Alert



**Safety & Health Alert**

Action: For review by all Long Harbour Processing Plant personnel

June 3, 2014 Reference Number: 14-SH-0004

To: All Long Harbour Processing Plant Personnel

Re: Silica (Silicon Dioxide) Awareness

Silica is the scientific name for a group of minerals made of silicon and oxygen. It is the second most common mineral on earth and makes up nearly all of what we call "sand" and "rock." It is also commonly found in construction materials composed from sand and rock.

**Health Effects**

Acute exposure to silica may cause irritation of the eyes, nose and/or lungs. Irritation of the lungs may include symptoms such as shortness of breath, coughing and wheezing.

Prolonged exposure to silica has been shown to cause silicosis, lung cancer, COPD, bronchitis, pulmonary tuberculosis and other airway diseases.

Silicosis is a type of fibrotic lung disease that develops when silica dust particles become trapped in the lungs and form scar tissue. This disease reduces the lung's ability to work to extract oxygen from the air.

Short of a lung transplant, silicosis cannot be reversed, so it's best to minimize exposures now to prevent disability later in life.

**LHPP Exposure**

At LHPP, silica is a large component of the earth that composes our unpaved roads. To reduce worker exposure to silica dust motorists shall adhere to the following:

- All vehicles operated on unpaved roads must drive with the windows closed. This includes personal and company vehicles, as well as heavy equipment.
- Motorcycles, dual purpose dirt bikes, mopeds, etc. are not permitted to be operated on unpaved roads.

For more information please contact the SHE department at [hspsafety@vale.com](mailto:hspsafety@vale.com)

Thank you,  
Safety, Health & Environment Team

Safety, Health and Environment Team  
Long Harbour Operations

Page 1 of 1

IF YOU AREN'T ON EMAIL, HOW WILL YOU RECEIVE THESE ?

#### 4.14 Our Goal of Zero Harm is to...

## SafeProduction

Remember,  
Our Goal of Zero Harm is to...

Everyone in the Workplace



The Environment Around Us



The Workplace Itself



Our Communities Where We Live



#### 4.15 Our Goal of Zero Harm is to...

## SafeProduction

### Distinctive Actions & Business Goals



The SafeProduction **Distinctive Actions** guide us in our work.

We must all **Plan**, **Accept**, **Care** and **Lead**.

## 4.16 SafeProduction Principles

### SafeProduction

#### Zero Harm

Vale will achieve zero harm – and, be a sustainable business – when we all demonstrate our commitment to **SafeProduction**.

Thank you for your time and your commitment to join our goal of **Zero Harm**.



#### ***4.17 SafeProduction Principles***

### **SafeProduction**



Care for yourself. Care for others. Let others care for you.

#### ***4.18 Occupational Health and Safety Regulations***

### **Occupational Health and Safety Regulations**

## 4.19 Internal Responsibility System (IRS)

### OH&S Legislation and Regulations

#### Internal Responsibility System (IRS)

The Internal Responsibility System involves everyone at every level of the organization.

How well the system works depends on whether there is a complete, unbroken chain of responsibility.

The IRS requires a sound management system – clear obligations and responsibilities - with supporting policies and procedures.



**IRS**  
**Internal Responsibility System**

## 4.20 Employer / Contractor Obligations

# OH&S Legislation and Regulations

## Employer / Contractor Obligations

### Employers must:

- ✓ Provide and operate a safe & healthy workplace and tools.
- ✓ Provide training, safe work instruction and guidance to employees, eg. confined space, fall protection, WHMIS, etc.
- ✓ Make workers and others aware of hazards in the workplace.
- ✓ Give workers job-related instruction on tools and processes.





## 4.21 Employee Obligations

# OH&S Legislation and Regulations

## Employee Obligations

Employees must take reasonable care to:

- ✓ Ensure your own safety.
- ✓ Only do tasks that you are trained and competent to perform.
- ✓ Do not adversely affect the safety or health of any other person through act or omission.
- ✓ Comply with legislation, rules, procedures, standards and verbal safety



## ***4.22 Early and Safe Return to Work***

# **OH&S Legislation and Regulations**

## **Early and Safe Return to Work**

- All employers and employees obligated to co-operate.
- Suitable and available employment to accommodate injured worker.



## 4.23 Early and Safe Return to Work

# OH&S Legislation and Regulations

### Role of the Employer when worker is Injured

- Contact the worker as soon as possible after the injury occurs.
- Maintain effective communication with the worker and the Commission throughout the period of the worker's recovery or impairment.
- Provide information to the Commission about the return to the work processes.
- Provide suitable available employment.
- Pay the worker's salary earned during the early and safe return-to-work process.



#### ***4.24 Early and Safe Return to Work***

## **OH&S Legislation and Regulations**

### **Role of the Employee / Injured worker**

- Contact the employer when injury occurs.
- Maintain communication with the employer and commission throughout the period of recovery or impairment.
- Assist the employer to identify suitable and available employment.
- Provide required medical information for employer to make assessment.
- Provide information to the commission about the return-to-work process.
- Accept suitable employment when identified.



## 4.25 Employee's Rights / Obligations

# OH&S Legislation and Regulations

### Employee's Rights / Obligations

- ✓ *The Right to Know*
- ✓ *The Right to Refuse*
- ✓ *The Right to Participate in Safety Program*



## 4.26 Occupational Health & Safety Committee

### OH&S Legislation and Regulations

#### Occupational Health & Safety Committee

At the LHO Site, a OHSC is in place with the following responsibilities:

- Identify H&S hazards and solutions to respond to hazard.
- Audit compliance with H&S requirements.
- Receiving, investigating and properly handling complaints.
- Participate in inspections (weekly) & investigations with OH&S inspectors.
- Maintain records of committee meetings and post minutes throughout the site





## 4.27 Hazard Assessment and Control

### OH&S Legislation and Regulations

#### Hazard Assessment and Control

Always be aware of your surroundings and continue to identify hazards through:

- Formal or informal site inspections conducted weekly by Contractors and Management Team.
- Audits to compare task to existing procedures.
- OH&S Committees - where workers identify hazards.
- Injury and incident trends.
- Job safety analysis and safety task management.
- General discussion with workers
- Actions identified and assigned with timelines.



#### ***4.28 Golden Rules: Vale's Base Metals Business***

### **Golden Rules: Vale's Base Metals Business**




## 4.29 Golden Rules: Vale's Base Metals Business




### Global Golden Rules


- **1. Alcohol and other drugs - Fitness-for-work**  
Never work under the influence of alcohol, drugs, or substances that reduce fitness for work.
- **2. Working at height - CAR 01**  
Never perform work at height ( $\geq 1.8\text{m}$ ) without proper training, authorization, and always use a safety harness secured to an appropriate anchor point.
- **3. Vehicles and mobile equipment - CAR 02 e 03**  
Never operate motor vehicles or mobile equipment without proper training, authorization and safety devices. Respect the traffic plan.
- **4. Lockout, Tagout and Zero Energy - CAR 04**  
Never perform maintenance or interventions on installations or equipment without confirming that all sources of energy have been blocked, identified and tested to be in a state of "zero energy"
- **5. Lifting Loads - CAR 05**  
Never place yourself under a suspended load or enter an isolated area. Only use certified lifting devices.

## 4.30 Golden Rules: Vale's Base Metals Business




### Global Golden Rules







**6. Confined spaces - CAR 06**  
Never work in a confined space alone, without training, authorization, an entry permit and appropriate PPE.




**7. Restricted areas - Operational discipline**  
Never enter into production areas, tailings areas, electrical rooms/substations or any other restricted areas without authorization.



**8. Tools and equipment - Operational discipline**  
Never use improvised or faulty tools, machines, or equipment to execute work.



**9. Risk analysis - Operational discipline**  
Never perform any work without understanding the risks and comply with all required controls.



**10. Electronic Devices - Operational discipline**  
Never use cell phones or other electronic devices while using equipment or in an operational area where they are unauthorized and while using stairs and crossing streets.

#### **4.31 WHMIS**


**WHMIS**

#### 4.32 Occupational Health & Safety Committee

# WHMIS

## 4 Key Elements to WHMIS

- Labels
- SDS
- Training
- Document Control



Version: 1.7

Revision Date: 12-06-2015

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** HYDROCOOL (DIE-ACID)

**Other names of identification**

Multic Acid, Hydrogen-Chloride, Acids

**Synonyms:**

1996-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024, 2024-2025, 2025-2026, 2026-2027, 2027-2028, 2028-2029, 2029-2030, 2030-2031, 2031-2032, 2032-2033, 2033-2034, 2034-2035, 2035-2036, 2036-2037, 2037-2038, 2038-2039, 2039-2040, 2040-2041, 2041-2042, 2042-2043, 2043-2044, 2044-2045, 2045-2046, 2046-2047, 2047-2048, 2048-2049, 2049-2050, 2050-2051, 2051-2052, 2052-2053, 2053-2054, 2054-2055, 2055-2056, 2056-2057, 2057-2058, 2058-2059, 2059-2060, 2060-2061, 2061-2062, 2062-2063, 2063-2064, 2064-2065, 2065-2066, 2066-2067, 2067-2068, 2068-2069, 2069-2070, 2070-2071, 2071-2072, 2072-2073, 2073-2074, 2074-2075, 2075-2076, 2076-2077, 2077-2078, 2078-2079, 2079-2080, 2080-2081, 2081-2082, 2082-2083, 2083-2084, 2084-2085, 2085-2086, 2086-2087, 2087-2088, 2088-2089, 2089-2090, 2090-2091, 2091-2092, 2092-2093, 2093-2094, 2094-2095, 2095-2096, 2096-2097, 2097-2098, 2098-2099, 2099-2100, 2100-2101, 2101-2102, 2102-2103, 2103-2104, 2104-2105, 2105-2106, 2106-2107, 2107-2108, 2108-2109, 2109-2110, 2110-2111, 2111-2112, 2112-2113, 2113-2114, 2114-2115, 2115-2116, 2116-2117, 2117-2118, 2118-2119, 2119-2120, 2120-2121, 2121-2122, 2122-2123, 2123-2124, 2124-2125, 2125-2126, 2126-2127, 2127-2128, 2128-2129, 2129-2130, 2130-2131, 2131-2132, 2132-2133, 2133-2134, 2134-2135, 2135-2136, 2136-2137, 2137-2138, 2138-2139, 2139-2140, 2140-2141, 2141-2142, 2142-2143, 2143-2144, 2144-2145, 2145-2146, 2146-2147, 2147-2148, 2148-2149, 2149-2150, 2150-2151, 2151-2152, 2152-2153, 2153-2154, 2154-2155, 2155-2156, 2156-2157, 2157-2158, 2158-2159, 2159-2160, 2160-2161, 2161-2162, 2162-2163, 2163-2164, 2164-2165, 2165-2166, 2166-2167, 2167-2168, 2168-2169, 2169-2170, 2170-2171, 2171-2172, 2172-2173, 2173-2174, 2174-2175, 2175-2176, 2176-2177, 2177-2178, 2178-2179, 2179-2180, 2180-2181, 2181-2182, 2182-2183, 2183-2184, 2184-2185, 2185-2186, 2186-2187, 2187-2188, 2188-2189, 2189-2190, 2190-2191, 2191-2192, 2192-2193, 2193-2194, 2194-2195, 2195-2196, 2196-2197, 2197-2198, 2198-2199, 2199-2200, 2200-2201, 2201-2202, 2202-2203, 2203-2204, 2204-2205, 2205-2206, 2206-2207, 2207-2208, 2208-2209, 2209-2210, 2210-2211, 2211-2212, 2212-2213, 2213-2214, 2214-2215, 2215-2216, 2216-2217, 2217-2218, 2218-2219, 2219-2220, 2220-2221, 2221-2222, 2222-2223, 2223-2224, 2224-2225, 2225-2226, 2226-2227, 2227-2228, 2228-2229, 2229-2230, 2230-2231, 2231-2232, 2232-2233, 2233-2234, 2234-2235, 2235-2236, 2236-2237, 2237-2238, 2238-2239, 2239-2240, 2240-2241, 2241-2242, 2242-2243, 2243-2244, 2244-2245, 2245-2246, 2246-2247, 2247-2248, 2248-2249, 2249-2250, 2250-2251, 2251-2252, 2252-2253, 2253-2254, 2254-2255, 2255-2256, 2256-2257, 2257-2258, 2258-2259, 2259-2260, 2260-2261, 2261-2262, 2262-2263, 2263-2264, 2264-2265, 2265-2266, 2266-2267, 2267-2268, 2268-2269, 2269-2270, 2270-2271, 2271-2272, 2272-2273, 2273-2274, 2274-2275, 2275-2276, 2276-2277, 2277-2278, 2278-2279, 2279-2280, 2280-2281, 2281-2282, 2282-2283, 2283-2284, 2284-2285, 2285-2286, 2286-2287, 2287-2288, 2288-2289, 2289-2290, 2290-2291, 2291-2292, 2292-2293, 2293-2294, 2294-2295, 2295-2296, 2296-2297, 2297-2298, 2298-2299, 2299-2300, 2300-2301, 2301-2302, 2302-2303, 2303-2304, 2304-2305, 2305-2306, 2306-2307, 2307-2308, 2308-2309, 2309-2310, 2310-2311, 2311-2312, 2312-2313, 2313-2314, 2314-2315, 2315-2316, 2316-2317, 2317-2318, 2318-2319, 2319-2320, 2320-2321, 2321-2322, 2322-2323, 2323-2324, 2324-2325, 2325-2326, 2326-2327, 2327-2328, 2328



### 4.33 Hazardous Substances

## WHMIS

### Hazardous Substances (*not limited to*)

- Sodium Hydroxide (caustic)
- Hydrogen Sulphide
- Sulfuric Acid
- Hydrochloric Acid
- Sodium Hypochlorite (bleach)
- Chlorine Gas
- Barium Hydroxide
- Lead
- Lime
- Sulphur Dioxide
- Hydrogen Gas
- Oxygen Gas
- Nitrogen Gas
- Argon Gas
- Petroleum products (i.e. diesel, gasoline, acetylene, propane, etc.)
- Silica (i.e. sand, etc.)
- Metals (Cadmium, Nickel, Magnesium, etc.)



#### ***4.34 Incident Reporting / Investigation***

### **Incident Reporting / Investigation**

## 4.35 Incident Reporting / Investigation

### Incident Reporting / Investigation

#### All incidents must be reported immediately:

- Near Miss
- Injury
- Property / Equipment
- Environmental



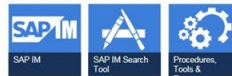
#### Reporting is Everyone's Responsibility:

- Team based approach to investigation
- Lessons learned must be communicated

#### Recording Events:

- SAP IM is Vale's system for recording near misses and incidents
- Provides accountability and action completion

#### Incident Management



Report Incident or NM PDFs   Report Unsafe Condition PDFs   IM Status Reports   Tools   Communications

SAP IM Status Report   IM Reporting & Investigation   2017 SAP IM

## 4.36 Incident Reporting / Investigation

### Incident Reporting / Investigation

#### Why and What?

- Method of systematically examining all accidents and incidents in the workplace.
- Incidents are warning signs that something is wrong in the workplace.
- Used to identify trends and provide adequate resources to mitigate risk.
- Used to prevent reoccurrence and provide best practices.



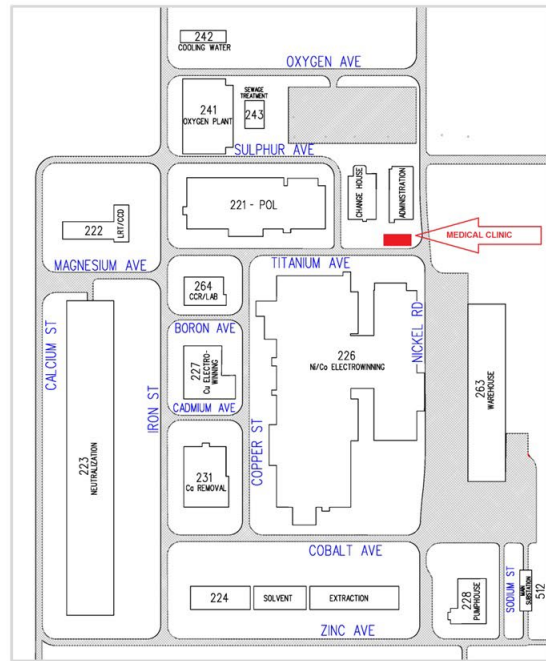


## 4.37 First Aid / Injury Reporting

### Incident Reporting / Investigation

#### First Aid / Injury Reporting

- Injuries must be reported immediately to your coach / supervisor; a visit shall be made to the site medical clinic.
- Coach / supervisor to accompany employee to medical clinic.
- Early intervention will improve outcome.



#### ***4.38 Environmental Management***

### **Environmental Management**

## 4.39 Environmental Management

### Environmental Management

**One of Vale Values is to “Prize our Planet”. Therefore, Vale is committed to:**

- Complying with applicable legal and other requirements
- Pollution prevention
- Protecting and preserving the environment

**Vale recognizes that incident prevention through proper management is the most effective way to avoid damage to the environment.**

**Goals of environmental management:**

- Minimize adverse impacts, should they occur
- Maximize positive impacts
- Good Neighbour to nearby communities



## ***4.40 Environmental Management***

# Environmental Management

### **Environmental Protection Plan (85-814-003-LPL-002)**

- Reference to implement appropriate environmental protection measures and monitor compliance.
- Gives steps to avoid or minimize negative impacts on the environment.
- Ensures commitments made in policy statements are implemented and monitored.



## 4.41 Incident Notification

# Environmental Management

### Incident Notification

#### 1. Environment Incident Form (88-814-001-LFM-002)

- Send to [Lhpp.environment@vale.com](mailto:Lhpp.environment@vale.com) within 4 hours of incident or end of shift, whichever is shorter.
- Additional information as required by regulators.

#### 2. SAP - Incident management – standard investigation

- Incident Notification to be completed within 4 hours of incident or end of shift, whichever is shorter.
- Incident Investigation
  - Witness statements
  - Pictures



## 4.42 Waste Management

# Environmental Management

### Waste Management

Employees are responsible for the management, collection and disposal of:

- Non-hazardous solid waste
- Hazardous materials
- Recyclable materials



Segregate at the source - Proper items in the proper bins:

- Cardboard
- General Waste
- Metal / Contaminated Metal
- Wood
- Recyclables
- Other Segregated Items - batteries, ink cartridges, paint cans etc.
  - Contact LHO Environment Department if required



## 4.43 Waste Management

# Environmental Management

### Fuel Management

- All fuel sources must have secondary containment equipment.
- Fuel shall be stored greater than 100m from a water body.
- Refueling should take place greater than 100m away from a water body.
- Spill Kits available on site.

#### Prior to using a spill kit consider:

- What is it?
- Do I have appropriate PPE?
- How should it be cleaned up?
- If you are unsure of any of the above report the spill to a supervisor or the environmental department.
- All spills should be reported.



## 5. Working Safely at Long Harbour

### 5.1 Divider





## ***5.2 Site Entry Requirements***

### **Site Entry Requirements**

### 5.3 General requirements for accessing the site

## Site Entry Requirements

### General requirements for accessing the site

Employees must complete Orientation (*this module*) before entering the site, available through Long Harbour Operations' Learning and Development department.

After orientation, employees receive their site access card, which must be carried at all times and swiped at security check-in/out points.

Report to security if card is misplaced . (To ensure deactivation and request for new one)

If job is complete, and no longer working on site, (or changing companies). Ensure to submit card before leaving (or request for updated info on existing card).

Parking permits are required to drive on site. Personal vehicles can only be driven to designated parking areas.



## 5.4 Security

### Site Entry Requirements

#### Security

- Random security inspections occur at the gate, failure to consent to inspection may result in denial of entry.
- The following items are prohibited on Vale property including parking areas:
  - Firearms and/or weapons of any kind
  - Illicit drugs and/or alcohol
  - Unauthorized materials, equipment, etc.
- Surveillance cameras are currently in use on site both internally and externally.



## ***5.5 Personal Protective Equipment Requirements***

### **Personal Protective Equipment Requirements**

## 5.6 Head and Eye Protection

### Personal Protective Equipment Requirements

Where PPE is required the following types are permitted for general visitor use:

- Class E CSA **hardhat** (only things allowed to be worn under the hardhat are those items designed for hard hat use)



- CSA approved **safety glasses**, including prescription **safety glasses** when required.



- Contact lenses **ARE NOT** permitted to be worn on site.



- Single or double **hearing protection** in Production Area buildings as dictated by signage.



## 5.7 Additional Information around PPE

### Personal Protective Equipment Requirements

**Personal Protective Equipment must be worn at all times onsite unless in a PPE free area or in a vehicle. Offices and trailers are common PPE free areas.**

**PPE shall be worn in all areas of the LHO site.**

**Exception areas are:**

- Offices / Administration Areas
- Lunchrooms
- Washrooms
- Identified PPE-free zones outdoors
- Site vehicles / equipment that have an enclosed cab

Individual company policies may require the wearing of PPE inside the cabs of vehicles. Check with your supervisor if you have any question on this PPE donning requirement.



## 5.8 Hi-Vis Clothing and Footwear

### Personal Protective Equipment Requirements

**Personal Protective Equipment must be worn at all times onsite unless in a PPE free area or in a vehicle. Offices and trailers are common PPE free areas.**

- Mandatory **hearing protection** in all buildings and depending on noise levels outside these areas may also require hearing protection
- Some areas require double hearing protection, these areas will be marked with signage.
- There are two types of hearing protection used at VALE – ear muffs and earplugs. Ear muffs and earplugs can provide about the same protection.





## 5.9 Hi-Vis Clothing and Footwear

### Personal Protective Equipment Requirements

**Personal Protective Equipment must be worn at all times onsite unless in a PPE free area or in a vehicle. Offices and trailers are common PPE free areas.**

- A high visibility **safety vest, jacket or coveralls**. This clothing must have a orange, lime yellow or red bright colored background with continuous striping that crosses in the back.



- CSA grade 1 **footwear** (green triangle) and electrical shock resistance (Y letter "omega") with minimum 6" in height.





## 5.10 Clothing Requirements

### Personal Protective Equipment Requirements

**Personal Protective Equipment must be worn at all times onsite unless in a PPE free area or in a vehicle. Offices and trailers are common PPE free areas.**

- **Clothing** must provide full arm and leg coverage.
- **Hooded Jackets, or Hoodies** are not permitted in Production Areas. This creates an entanglement and hygiene hazard. Along with the risk of impaired peripheral vision. Hood/Hoodies must be removed or tucked under clothing.



## 5.11 Respiratory Protection

### Personal Protective Equipment Requirements

**Personal Protective Equipment must be worn at all times onsite unless in a PPE free area or in a vehicle. Offices and trailers are common PPE free areas.**

- **Respiratory Protection** – confirm with onsite contact if required
- Clean Shaven” means no hair, stubble, moustache, sideburns, beard, low-hairlines, bangs, that pass between the face and the sealing surface of the face piece.



Sealing surface is from the inside edge of the face piece to outer the edge.



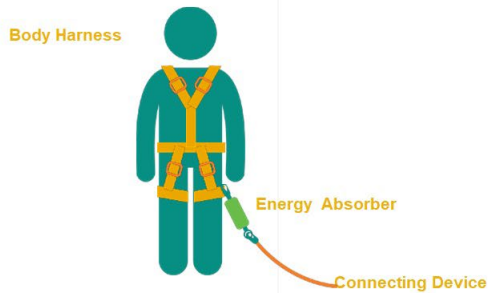
## 5.12 Fall Protection

### Personal Protective Equipment Requirements

**Personal Protective Equipment must be worn at all times onsite unless in a PPE free area or in a vehicle. Offices and trailers are common PPE free areas.**

Where PPE is required the following types are permitted for general visitor use:

- **Fall Protection – 6 ft or higher**
- A **Fall Arrest System** consists of a full body harness, an energy absorber, a suitable connecting device, a suitable anchor point and a written rescue plan.

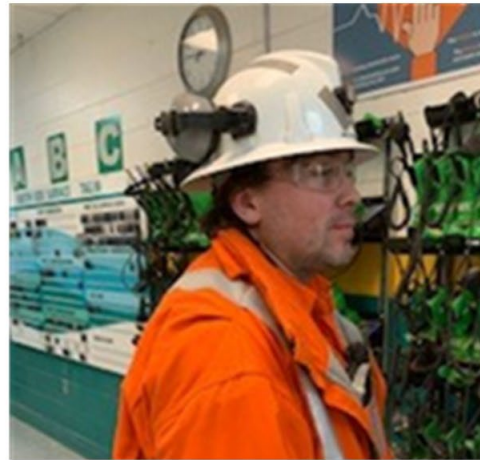


### ***5.13 Additional Information around PPE***

## **Personal Protective Equipment Requirements**

### **Jewelry, Hair and Beard Restriction**

- Long hair up in under the hard hat at all times.
- Workers required to wear a respirator must be clean shaven.
- No employee is permitted to wear jewelry of any type in work areas.
- Personnel in administrative positions, with no exposure to workplaces outside of the office environment, are exempt from the requirements of this regulation.



This regulation applies to all Vale personnel, contractors / sub-contractors and their employees.

### ***5.14 Pedestrian and Mobile Equipment Safety***

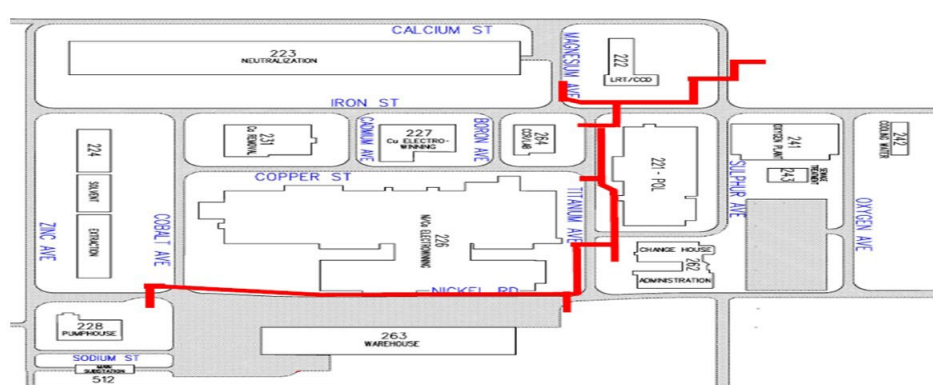
## **Pedestrian and Mobile Equipment Safety**

## 5.15 Walking Safely at Site

### Pedestrian and Mobile Equipment Safety

#### Walking Safely at Site

- Always walk on left side facing oncoming traffic unless marked otherwise.
- Do not take shortcuts through prohibited areas or through buildings.
- Walk in single file and on designated walkways.
- Watch for movements of forklifts, skid steer loaders, aerial lifts, etc.

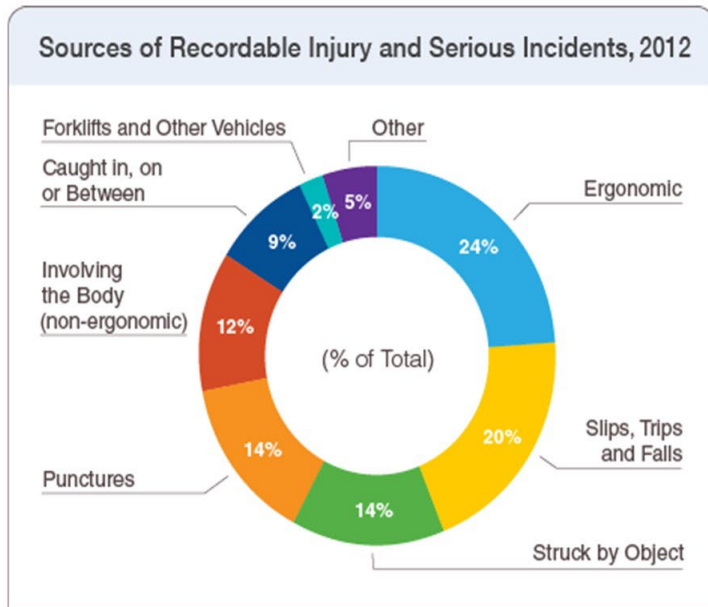


## 5.16 Why is Slip, Trip & Fall Training Important?

### Pedestrian and Mobile Equipment Safety

#### Why is Slip, Trip & Fall Training Important?

Slips, trips and falls are the #1 cause of workplace accidents in Newfoundland Labrador (NL) and Canada.



## 5.17 Vehicle & Equipment Safety

### Pedestrian and Mobile Equipment Safety

#### Vehicle and Equipment Safety

- Observe posted speed limits and traffic signs.
- Practice safe driving and parking procedures.
- Seat belts are to be worn at all times.
- Always back into your parking space and sound your twice horn before reversing.
- When moving forward sound your horn once to let people know you are about to move.
- Do not use equipment that you are not trained or certified on.
- Ensure windows up at all times.
- Make sure you have received operating and safety instructions.
- You must always have a valid driver's licence.





## 5.18 Vehicle & Equipment Safety

### Pedestrian and Mobile Equipment Safety

#### Vehicle and Equipment Safety

##### Safe Access / Egress for Equipment

- When doing safety task assignments, consider safe access / egress for equipment.
- Access hazards are often created when the equipment is positioned in a manner that prevents use of manufacturer's access devices.
- Hazard controls to be considered for use include:
  - Ladders
  - Fall arrest
  - Retractable devices



### ***5.19 Building Entry Procedures***

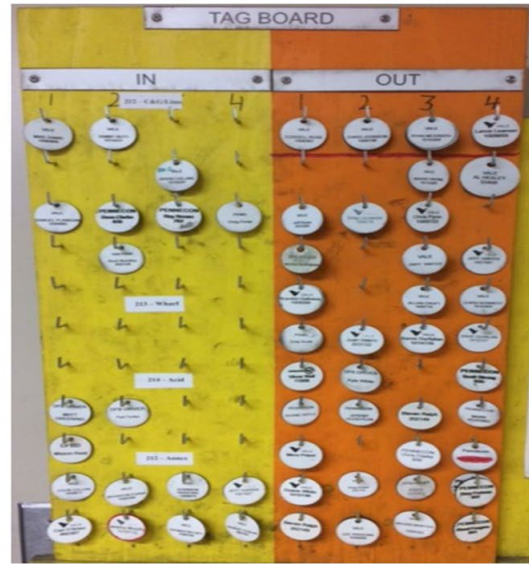
## **Building Entry Procedures**

## 5.20 Taging In/Out

### Building Entry Procedures

#### Tag Board

- Employees must Tag in/out of building they are working in.
- There is also a sign in/sign out book if you do not have a tag.



## 5.21 Blue Lights

### Building Entry Procedures

Blue lights will be used to indicate there is gas in the area *or* has the potential of being in the area.



Strobing **BLUE** lights will be installed *inside* Building 231 to indicate STEL limit exceeded in an area, and to leave that area.



A strobing **BLUE** light on *outside* of Building 231 storage area indicates you cannot enter the storage area without SCBA.  
(cylinder change-out)  
NOTE: THESE LIGHTS ARE STROBE LIGHTS



A rotating **BLUE** light on a portable stand will be used to warn people to *stay out* of the area while maintenance work occurs on a gas line.

## **5.22 Site Rules**

### **Site Rules**

## 5.23 Cell Phones and Radios

### Site Rules

#### Cell Phones and Radios

The use of cell phones is prohibited for safety specific roles such as confined space entry attendant, fire watch, traffic management/flag person, vehicle or equipment spotter, equipment operation, and any other similar roles involving critical activities.

Cell phone calls must be kept to a minimum in the work place. A person using a cell phone must leave the Production Area where practicable to do so.

A person who uses a cell phone must not compromise the protection of respiratory equipment or hearing protection when using the device.

Carrying a cell phone is prohibited in Classified Areas on site, such as the Solvent Extraction Building (224), the H<sub>2</sub>S storage area Cadmium Removal (231) and sewage treatment plant. The use of cell phones is also prohibited at diesel offloading area and gas pumps.

The cell phone owner is responsible for damages to personal cell phones.



## 5.24 Cell Phones and Radios

### Site Rules

#### Cell Phones and Radios

Where a cell phone is used it must be in an area or work environment where it does not increase risk when interacting with a hazard.

Examples of unacceptable cell phone use include, but are not limited to:

- Walking through a Production Area building;
- Walking across roadways;
- Traveling up or down a flight of stairs;
- Standing in close proximity to moving equipment;
- Walking in slippery conditions or over uneven ground; and
- Where the use of a cell phone creates a dropped object from height hazard.



Workers in Production Areas can use the Central Control Room as a resource for emergency contact purposes for external calls. This communication strategy is only to be used in an emergency situation. The Control Room Technician taking the call can advise the worker of a call back number.

## ***5.25 Cell Phones and Radios***

### **Site Rules**

#### **Cell Phones and Radios**

Radios must be secured / holstered at all times.





## 5.26 Activities Requiring a Work Permit

### Site Rules

#### Activities Requiring a Work Permit

##### Tasks Include:

Mechanical Isolation	Breaking Containment on a Oxygen line
Electrical Isolation	Breaking Containment on a Barium Hydroxide line
High Voltage Isolation	Breaking Containment on a Sodium Hydroxide line
Radioactive Source Isolation	Breaking Containment on a Steam line
Hot Work	Classified Area
Confined Space	Travel Over and Work on Ice
Working On Energized Radioactive Equipment	Work around Bodies of Water
Working Near Energized Radioactive Equipment	Restricted Area
Working with Exposed Electrically Energized Equipment	Work on Piles
Breaking Containment on a Chlorine line	Roof Travel
Breaking Containment on a Hydrogen Sulphide line	Fire Protection/Suppression System
Breaking Containment on a Hypo line	Control Reliable System
Breaking Containment on a Hydorchloric Acid line	Safety Shower/Eyewash Station
Breaking Containment on a Sulphuric Acid line	Guard Removal
Breaking Containment on a Hydrogen line	Non-Destructive Testing
	Excavation/Ground Disturbance
	Temp Change/Bypass
	Removal of Grating/Floorplate/Guardrail
	Work Requiring Fall Protection
	Special Event

## 5.27 Single Point Isolations



# Single Point Isolations

A single point Isolation can effectively bring a system or piece of equipment to zero energy by applying a personal protection lock to a single isolation point.

Single point isolations can only be performed by trained and authorized personnel.

To complete a single point isolation, the following training is required:

- 88-852-001-KPN-0079 CAR 04 Zero Energy Isolation: Application (Long Harbour)
- 88-852-001-KPN-0096 – CAR 10 Electrical Hazard Awareness
- 88-852-001-KPN-0090 – Long Harbour Permit User



## 5.28 Purpose of the Barricading Procedure

### Site Rules

#### Purpose of the Barricading Procedure

Provide personnel with clear, consistent instructions on how to recognize and use barricades for the protection of personnel from hazardous or potentially hazardous conditions.

**Employer responsibility:**

provide the regulations and standards for the barricading procedure.

**Worker responsibility:**

installation of barricades and tags, as required, and obeying all barricading rules.



## 5.29 Flagging & Tagging

### Site Rules

#### Flagging & Tagging

**RED - Danger. Do Not Enter. An imminent hazard exists. Authorized access only.**

Workers are required to obtain permission from person's whose name is on the tag prior to entering.

**Yellow - Caution. A warning that a hazard exists.**

Workers must read the tag and take the time to look around prior to entering area and exercise caution.

**Magenta – Radiation hazard exists.**

Authorized personnel only.

**All flagging is required to have a tag, filled out with correct and legible information**

## 5.30 Confined Space and Fall Protection

### Site Rules

#### Confined Space and Fall Protection

##### Confined Space:

Enclosed or partially enclosed space which is or may become hazardous by way of O<sub>2</sub> deficiency, explosive, or toxicity (e.g. tank or pit) and may have restricted access and egress, and not intended for human occupancy.

Workplace NL Training required for all personnel involved in entry.

Procedure Review with those involved;

- Entry permit
- Air quality test (continuous monitoring)
- Safety watch
- Written Rescue Plan



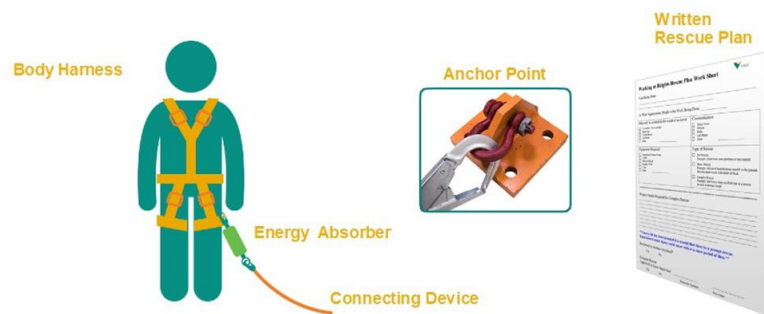
## 5.31 Confined Space and Fall Protection

### Site Rules

#### Confined Space and Fall Protection

##### Fall Protection:

- 100% tie-off used on all unprotected elevations 6 feet and higher.
- Anchors must be capable of supporting 5,000 lbs. per worker.
- Tie-off as high as possible. Free-fall distance shall be limited to 4 feet (shock absorber equipped).
- Use other protection methods where possible.
- A Permit has to be In Place.





## 5.32 Scaffolding

### Site Rules

#### Scaffolding

Scaffold tags shall be inspected before use is permitted. Always ensure inspection date is valid on scaffold tags before accessing scaffold. Only scaffold foreman are authorized to inspect and tag scaffold.



**GREEN:**  
Safe for Use



**YELLOW:**  
Caution.  
Hazards or Special  
Precautions



**YELLOW:**  
Flip over and check the  
inspection date.



**RED:**  
Danger.  
Do Not Use. Scaffold is  
incomplete and unsafe.

## 5.33 Radiation

### Site Rules

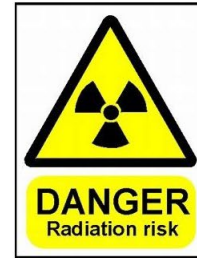
#### Radiation

Both Pressure Oxidative Leach and Neutralization Process utilize instrumentation with radiation sources to monitor process variables of level and density.

- This equipment is designed and manufactured to prevent radiation leakage and is safe for use in areas where people are working.
- Routine monitoring and analysis sampling on these instruments is performed to ensure instrumentation safe guards are functioning.

Routine maintenance and inspection activity on site may employ instrumentation with radiation sources for materials testing (metal structures, tanks and pipework, etc.).

This activity is conducted with use of specialized equipment with proper safeguards and to ensure all personnel safety by attention to safe-work procedures and controls.





## 5.34 Wharf and Water Safety

### Site Rules

#### Wharf and Water Safety

Require certified life vest when within 3.03 metres of waters edge.

The work crew shall prepare a JSA / JHA for the work to be carried out.

Prior to the task being conducted a FLHA / SLAM must be conducted with all affected workers.

A rescue plan shall be developed by the work crew and all work crew members shall be aware of the plan.

Maintain good housekeeping in area of work and make sure that all areas are free of blockages.

Spill kits and containment equipment will be provided at the work site.

Buddy system required for work around water.



## 5.35 Material Handling and Storage

### Site Rules

#### Material Handling and Storage

- Secure all materials in a elevated work environment.
- Do not block exits.
- Block objects that may roll.
- Keep materials 6 ft. from hoist-ways and floor openings.



## 5.36 Material Handling and Storage

### Site Rules

#### Hand and Portable Power Tools

- Additional PPE may be required depending on the tool(s) being used.
- Utilize canvas bags for hoisting.
- Remember to always do your pre-use inspection.
- Do not remove handles / modify guards.
- Trigger locks are prohibited.



## 5.37 Housekeeping

### Site Rules

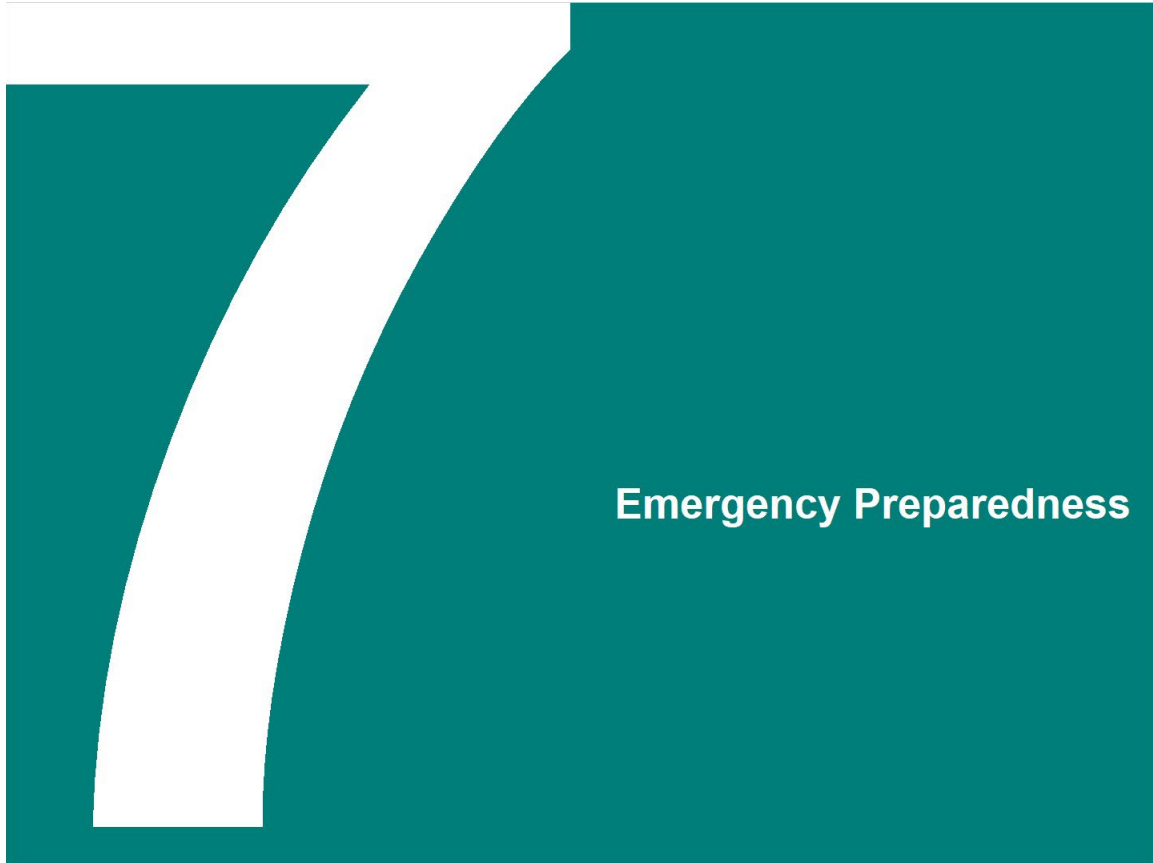
#### Housekeeping

- Clean as you go.
- Keep walkways clear and maintain clear access to all work areas.
- Remember environmental conditions.
- Store materials safely.
- Store tools in proper location.
- Maintain waste disposal areas.
- Separate trash and recycling, using the blue-bin system now in place at site.



## 6. Emergency Preparedness

### *6.1 Emergency Preparedness*



## 6.2 Introduction

# Emergency Preparedness

### Introduction

Vales' Long Harbour Operation Emergency Procedure establishes an effective response to help manage risk, they include;

- Emergency Activation.
- Emergency Notification.
- Responding in on an Emergency.



*Everyone is to know and understand their role in the event of an emergency.*



## 6.3 Emergency Activation

### Emergency Preparedness

#### Emergency Activation

If an emergency occurs, make sure no one else gets hurt Contact Security by radio **Channel 1** or by phoning **752-3111** and state in a clear loud voice:

1. ***"Code 1 – Code 1 – Code 1"***
2. Your Name
3. Nature of Emergency (fire, medical, environmental, other)
4. Location of Emergency
5. Answer any questions asked
6. Do not hang up unless directed to do

If no response from security repeat the CODE 1 call on Radio channel 1.



## 6.4 Emergency Activation

### Emergency Preparedness

#### Emergency Activation

If an emergency occurs, make sure no one else gets hurt Contact Security by radio **Channel 1** or by phoning **752-3111** and state in a clear loud voice:

In the event of an emergency situation all high risk work may commence unless directed otherwise. ERT currently have the capabilities and resources to respond to additional emergency situations.

ERT will advise through a site wide communication if all high risk activities must cease. In these situations all personnel must stop work immediately, make the area safe and await further direction.

Once an all clear announcement has been made across all radio channels personnel are able to re-occupy their area and return to work.





## 6.5 Emergency Notification

### Emergency Preparedness

#### Emergency Notification

There are two alarms onsite include a Gas Alarm and a Fire Alarm.

##### Gas Alarm:

- Activated when gas is near an unsafe level.
- Upon hearing this alarm evacuate the area and proceed to the safest emergency assembly area.
- Using the windsocks consider wind direction to determine the safest emergency assembly area.



## 6.6 Emergency Notification

### Emergency Preparedness

#### Emergency Notification

There are two alarms onsite include a Gas Alarm and a Fire Alarm.

##### Fire Alarm:

- Activated when a fire has been reported.
- Upon hearing this alarm evacuate the area and proceed to the safest emergency assembly area.
- Using the windsocks consider wind direction to determine the safest emergency assembly area.



## 6.7 Emergency Notification

### Emergency Preparedness

#### Emergency Notification

**Shelter in Place (Inside Alarm)** Stay inside and report to sign in area of building.

**Shelter in Place (Outside Alarm)** Go to nearest safe building and report to sign in area.



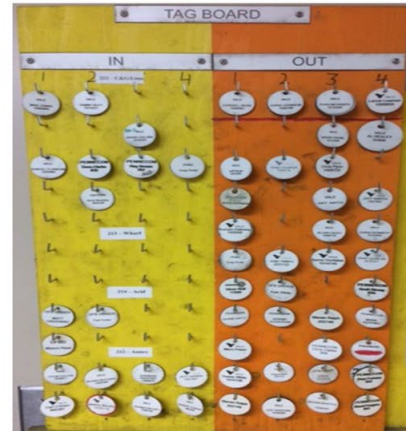
## 6.8 Responding in an Emergency

### Emergency Preparedness

#### Responding in an Emergency

**Shelter in Place (Inside Alarm)** Stay inside and report to sign in area of building.

- Immediately following sounding of the Shelter-in-Place alarm, all personnel are to **stop work in a safe fashion** and are to assemble at their SAA (tag board).
- All employees are to report to their assigned Shelter in Place Assembly area and **tag out**.



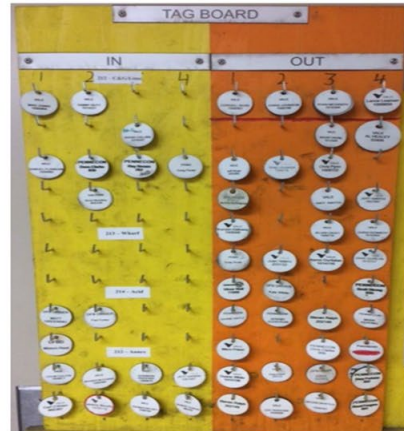
## 6.9 Responding in an Emergency

### Emergency Preparedness

#### Responding in an Emergency

**Shelter in Place (Outside Alarm)** Go to nearest safe building and report to sign in area.

- If an employee is not in the building of their assigned Shelter-in-Place assembly area, they do not try to get to their building, instead all employees are to **remain in the building they are in** and report to the building's SAA (tag board).



## 6.10 Responding in an Emergency

### Emergency Preparedness

#### Approaching the Area During an Emergency

- If driving on site and you hear a shelter in place alarm do not exit the vehicle.
- Instead turn off your vehicles air intake fan, drive away from building 231 and report to the main security gate parking lot.
- Stay in your vehicle at the parking lot and wait for further directions.



## 6.11 Emergency Assembly Areas (EAA)

### Emergency Preparedness

#### Emergency Assembly Areas (EAA)

- Emergency Assembly areas are where you will go to in the event of an emergency so your supervisor can do a role call.
- It is important you get familiar with your EAA so you know where to go to in emergency situations.
- You must also consider wind direction when determining your safest EAA.

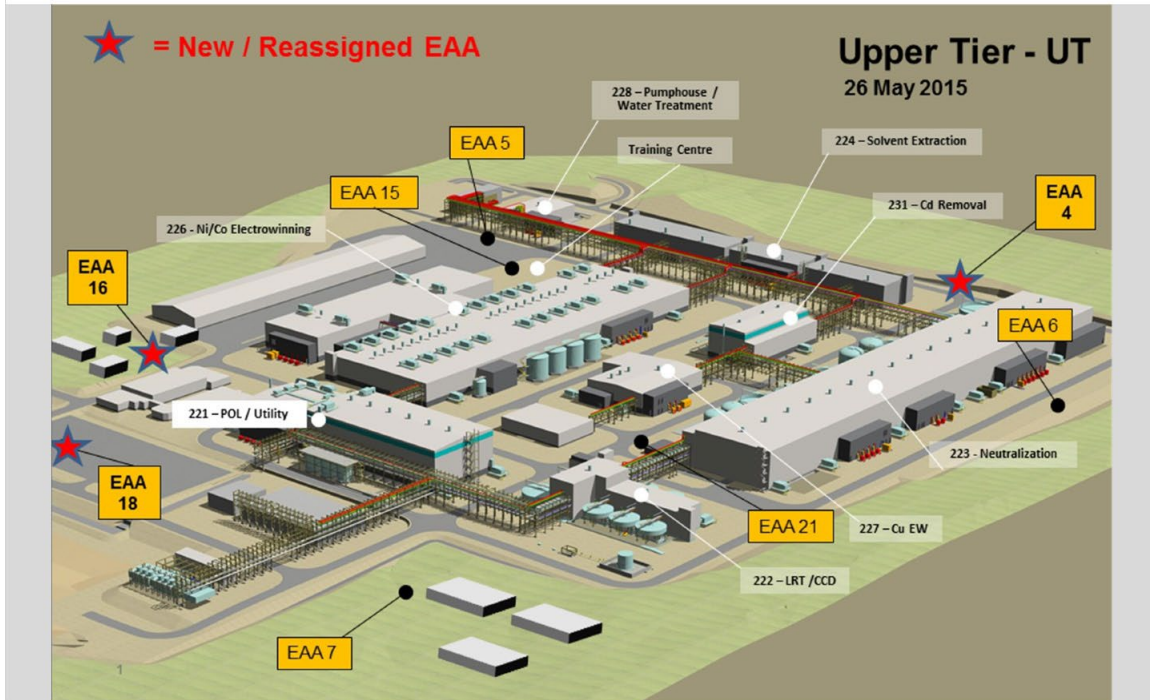




## 6.12 Emergency Assembly Areas (EAA) Lower Tier

### Emergency Preparedness

#### Emergency Assembly Areas (EAA)

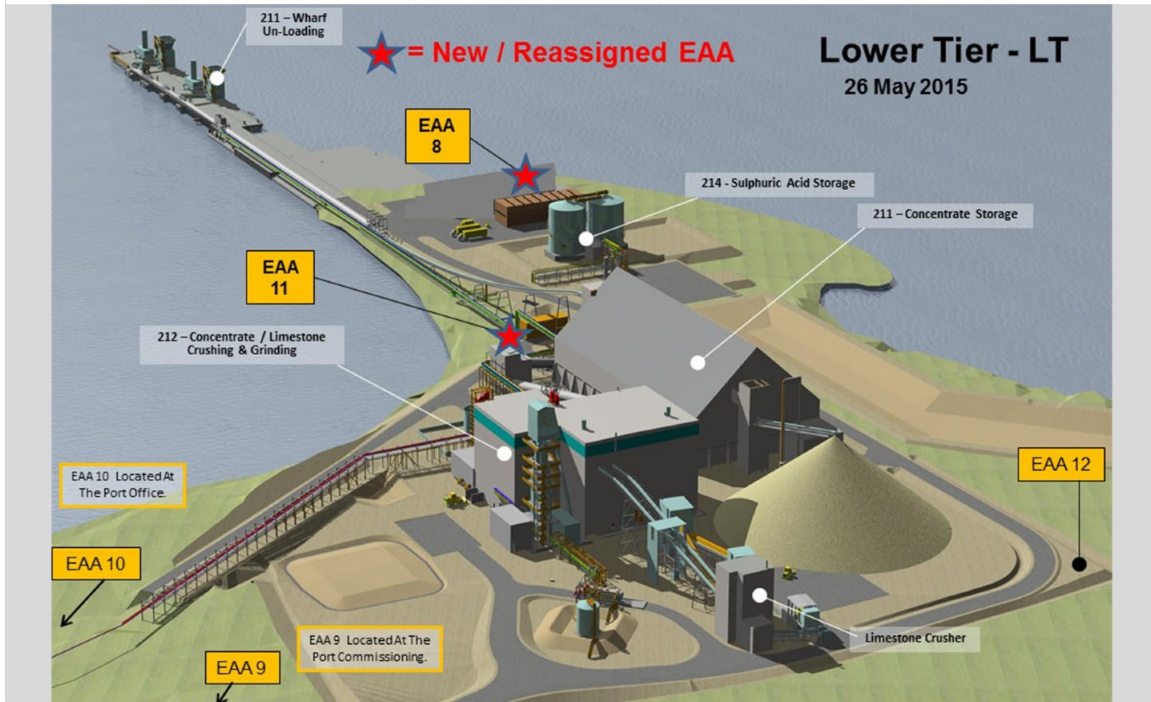




## 6.13 Emergency Assembly Areas (EAA) Upper Tier

### Emergency Preparedness

#### Emergency Assembly Areas (EAA)



## 6.14 Emergency Assembly Areas (EAA)

### Emergency Preparedness

#### Fire Safety

At no time shall an employee put his or her safety, or the safety of others, at risk to extinguish a fire.

A person discovering a fire may attempt to extinguish it, if it is small and only if they are knowledgeable in the use a fire extinguisher and it is safe to do so.



**P**ULL THE PIN



**A**IM AT THE BASE



**S**QUEEZE TRIGGER



**S**WEEP

## 7. Summary

### 7.1 Summary

#### Summary

##### Our goal is Zero Harm

- ✓ Put your safety and the safety of others first.
- ✓ Perform SLAM / FLHA and/or JSA / JHA.
- ✓ Recognize and avoid the hazards likely to be encountered at the work site.
- ✓ Respect all barriers and tags; recognize what the colours mean.
- ✓ Report near misses and incidents appropriately.

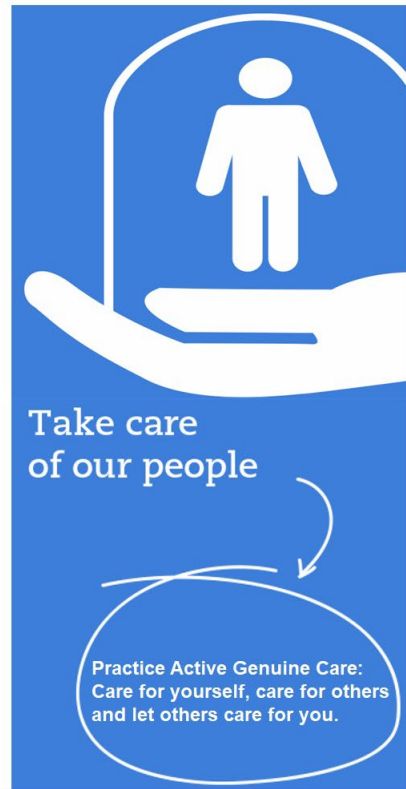


## 7.2 Summary

### Summary

#### Our Expectations of You:

- ✓ Work Safely.
- ✓ Report to work fit for duty.
- ✓ Perform a full and fair day's work, everyday.
- ✓ Report to work regularly and on time.
- ✓ Respect the rights of others and equipment of other workers and their companies.
- ✓ Plan your work and follow the plan.
- ✓ Take pride in your work!
- ✓ Practice Active Genuine Care!



### 7.3 Conclusion

Remember, At Vale we believe  
**Life Matters Most** and that  
no job is worth doing if it cannot  
be done safely.

Thank-you for your participation  
and your commitment to safety at Vale.



## 7.4 Start The Module Quiz



Thank you for completing the  
Vale Online Module Training.

To start the module Quiz

[CLICK HERE](#)