Long Harbour Permit User



Hello, welcome to the Long Harbour Permit User course.

In this course, we will focus on the elements of the permit system in Long Harbour including:

- permit types
- roles and responsibilities
- review of the zero energy and zero motion procedures
- entry procedures for restricted and classified area

You must obtain a minimum score of 80% on the quiz to pass this course. Enjoy the course. VES - 88-852-001-KPN-1090 ValeLearning - 57: Long Harbour Permit User Orientation Version 2 Revision Date: August 15, 2022

Welcon	ne
You Wi	ll Learn
Hazard	Recognition and Controls
Overvie	ew
Permit	Roles and Responsibilities
Permits	5
Zero En	ergy and Zero Motion
Restrict	ted and Classified Areas
Emerge	ncy Response
? Quiz	
Conclus	ion

Lesson 1 of 11





Important Considerations

• Upon Completion of each section of this module, you will be given an opportunity to **submit questions** to obtain clarification of any content your are not sure of.

00:25

- At the end of the module, you will also be given the opportunity to **complete a brief survey** designed to support the continual improvement of your Vale learning experience.
- You **must complete** all elements in each lesson block (including audio)before advancing to the next section

CONTINUE

Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact information.

CLICK HERE!

CONTINUE

Lesson 2 of 11

You Will Learn



During this course you will learn about:

The Long Harbour Permit System, the requirements, roles and responsibilities, and entry procedures for restricted and classified areas.

Upon completion of this module you will be able to:

00:25

Identify the roles within the permit system



Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact information.

CLICK HERE!

CONTINUE

Lesson 3 of 11

Hazard Recognition and Controls



Important: this module addresses the requirements for Permits on the Long Harbour site.

HomeSafe



HomeSafe

Is a **call to action** meant to focus us all on the primary goal of our safety efforts: Everyone going **HomeSafe** and Life Matters Most is our goal and our culture.

Is a **personal story** about **why** we work safely – so we can all go home at the end of every shift.

It links why we want to go HomeSafe with how we have to act in order to do so.

Reminds us that our family and friends need us and depend on us to come HomeSafe. **THEY** are our reason to get **HomeSafe**.

00:30

Managing Risk to go HomeSafe



Be Aware

Be aware of my surroundings and the risks around me.



Apply Good Work Practices

Apply good work practices and knowledge, skills, and experiences to safely complete tasks assigned to me.



Ask for Help Apply others' experiences and ask for help when needed.



Stop & Correct Be my brother and sister's keeper and 'stop & correct' when required.



Follow Policies & Procedures

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



Follow Rules & Regulations

Rules and regulations have been established to help us achieve zero harm and can be legislated or internal.

Bowties

Do you know what a bowtie is?

It is a very efficient risk analysis tool that identifies the event, the barriers (controls) and the consequences.

For Permit to Work, bowties assist in understanding the safe permit requirements. This module will show a bowtie diagram about the Zero Energy Isolation process. It is important that you are familiar with this tool!

Watch the video below and understand bowties better!





Watch the video in full to continue.

Energy

Click on the markers below and learn more:





Energy



Exposure to Energy Related to Zero Energy



Preventive Control

Lack or Failure of lockout and tag out:

- Isolation devices identified;
- Lockout devices;
- Lockout tags;
- Lockout and tag out procedures;
- Lockout matrix;
- System to manage the isolation and lockout of electrical energy stages.

Lockout method / procedure failure:

- Lockout and tag out procedures;
- Lockout matrix;
- System to manage the isolation and lockout of electrical energy stages.

Lack of procedure or procedure did not provide for lockout:

- Lockout and tagout procedures;
- Lockout matrix.

Lack or Failure in the lockout efficiency test (zero energy):

- Procedure for testing the efficiency of the lockout (zero energy);
- System to manage the isolation and lockout of energy stages.

Failure in communication between working groups:

- Only one authorized professional designated to confirm the lockout;
- Exclusive lockout.

Failure of work planning:

• Only one authorized professional designated to confirm the lockout.

Lack or Failure to lockout potential gravitational energy source:

• Tagout and lockout of gravitational energy.

Failure to make a temporary change to the zero energy:

• Procedure for change of energy state.

Failure to reset protection devices / integrity of safety conditions:

• Procedures for the removal of locks and tags.

Lack of training:

• Training in prevention of Risks in Lockout, Tagout and Zero Energy.



Causes

- Lack or Failure of lockout and tag out;
- Lockout method / procedure failure;
- Lack of procedure or procedure did not provide for lockout;
- Lack or Failure in the lockout efficiency test (zero energy);
- Failure in communication between working groups;
- Failure of work planning;
- Lack or Failure to lockout potential gravitational energy source;
- Failure to make a temporary change to the zero energy;
- Failure to reset protection devices / integrity of safety conditions;
- Lack of training.



Mitigating Control

- Personal protective equipment;
- Emergency response plan.



Consequences

- Injury;
- Fatality.



Incidents

Incident/Accident History

While the overall objective is to reduce or eliminate workplace hazards, it should be recognized that not all workplaces within Vale operations can be made free of all hazards.

Critical to safe operation is the ability to recognize and control hazards that may cause injuries, equipment damage, or even worse, fatalities.



Our injury and fatality index is updated monthly. It shows the numbers for Fatalities and Live Changed (N1), Recordable High-Potential Injuries (N2), Other High-Potential events (N3), Recordable Non-High Potential Injuries (N4), and Other Non-High Potential events (N5)





POL Building Locked on wrong PCB Board

Locking on work Permit Board

While performing a lockout/tagout audit, it was noticed that an employee had placed their personal protection lock on the incorrect permit control board (PCB).

Fatal risk – Employee not protected under the isolation; employee placed lock on incorrect box.

Controls

Permit users must confirm with the lock box noted on the permit, the tag on the gold lock or with the permit office or their Person in Charge (PIC) prior to placing their personal lock. Personal locks give the worker absolute control over the condition of the isolation they are working under – but only if they are locked onto the correct lock box.

Personal lock tags must include your name, permit number, contact number, personal lock number and scope of work. Personal lock tags can be provided from the permit office on request.



Putting What You Know Into Practice: The activities below will give you an opportunity to practice using the information you have just learned.



00:07

This is a risk management method from HomeSafe program (select all that apply)

Be Aware
Ask for Help
Apply good work practices
Follow Policies and Procedures
Follow rules and Regulations
Stop and Correct
SUBMIT

Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact

information.



CONTINUE

Lesson 4 of 11





Why do I need a permit?

Long Harbour Operations Work Permits are written agreements utilized to protect people, equipment, property and the environment.

Work Permits define expectations to ensure work tasks are executed safely and that the risks associated with the completion of the work scope are assessed properly.

Work Permits can become legal documents and must be treated with the utmost respect, care and attention.

Work permits raised from parent permits to perform work in a specified area will be authorized by an Area Authorizer and issued for use by a Permit Issuer.

Work permit activities will be performed with the aid of an electronic permitting system (P2W) configured specifically for LHO.

The electronic permitting system is meant to enhance the permitting process but will not, by itself make the job safe.

\bigcirc	Administrative documents that add no real value to the completion of safe work
\bigcirc	Written agreements utilized to protect people, properties, equipment and the environment
\bigcirc	Procedures to outline how a job should be performed.
\bigcirc	Additional paperwork required for the work pack
	SUBMIT

00:31



Parent Permits

The Parent Permit is used to authorize the overall scope, set a duration, set minimum PPE, and develop permit strategy. Values input to the parent permit are inherited by the child permits.

Parent permits are not issued to work parties. The work permits generated by the parent permit are the documents issued to the work party and will have some of the same information as the parent permit, but it will be in much greater detail. Training certifications are checked by the child permits, not the parent permits.







2 of 4

Permit Issue

Once authorized the permit can be issued. When a permit is issued, the work group training is verified, a hazard assessment is attached, setup work (isolations) are performed, supporting documentation is attached and hazards and precautions are communicated to the



CONTINUE

Lesson 5 of 11

Permit Roles and Responsibilities

In this section of the module, you will learn various roles and responsibilities in the Permit System.



Click on the plus signs below to learn more about the various roles and responsibilities in the Permit System.

Permit Requestor

Anyone with additional P2W training, that has a P2W system password and has access to the P2W system can raise (request) a Permit.

The Permit requestor is responsible for preparing and submitting the permit application using the P2W system.

The permit application shall include all information relevant to the scope of work, including reference to all relevant documents, drawings etc. and must include specific information regarding scope of work, location and equipment to be worked on.

Permit Authorizer

The Permit Authorizer is a coach or area lead assigned to an area the permitted work will occur.

Port Authorizer – Area 211; 212; 213; 214; 252

Leach Authorizer – Area 221*; 222; 223; 228*; 264; 271; 272; 312

Refinery Authorizer - Area 224; 226; 227; 231; 521; 229*

Utilities Authorizer – Area 010; 221*; 228*, 229*; 241; 242; 243; 254; 261; 262; 263; 281; 282; 313; 412 Depending on the area you are in it will determine who will authorize your permit.

The Authorizer must authorize any permit raised to perform work in an area they are assigned,

regardless of the team performing the work. *Authorization is dependent on equipment included on the permit.

The authorizer reviews the permit application, verifies it is accurate and determines which permit will be issue based on priority.

Permit Issuer

Each area has permit issuers, who's role it is to review and issue work permits for their team(s). The Permit Issuer is trained and authorized to review PTW applications and cross check the application against other work being performed in the area.

Permit Issuers have a number of responsibilities, including:

- Have full control on the administration of documents related to PTW system. Properly administering Permit to Work processes including: issuing; suspending; re-issuing; extending, and abandoning permits.
- Reviewing PTW application for completeness.
- Review the scope of work and documentation presented by the Permit Requester in an effort to identify conflicts with other work taking place and to identify if the planned work contains additional permitted tasks.
- Verify that workers have the correct training to be included in the permit. (P2W system does this automatically)
- Refuse to issue a PTW if permit application is not complete.
- Refuse a permit if broad scopes of work of a general nature and poorly defined locations are used.
- Visit the place of work with a member of the work party to ensure it is safe to proceed at the time of Issue.

Person in Charge (PIC)

Once a permit has been authorized it will then go to the permit office where the PIC or Permit acceptor and Permit issuer will review the permit application ensuring that work can be performed safely, and it is not conflicting with other work in the area.

The PIC will ensure all items identified on the permit have been fulfilled prior to issuing the permit.

As a permit user every permit you work under will have an assigned PIC or PA that is responsible to communicate hazards, work scope and controls in place that are required for the safe execution of the work scope. The PIC or PA must be available at the work site during completion of the work scope.

Permit User

A permit user is anyone at LHO that is required to sign onto a permit for the purpose of overseeing or completing any permitted task.

The role of a permit user includes:

- Contributing to the development of the risk assessment used for completion of the work scope defined on the permit.
- Review the PTW and all associated documents with the PIC / Acceptor.
- Comply with the requirements of the PTW and all associated permits.

Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact information.

CLICK HERE!



Lesson 6 of 11

Permits



Activities Requiring a Permit
- Mechanical Isolation
- Electrical Isolation
- High Voltage Isolation
- Radioactive Source Isolation
- Hot Work
- Confined Space
- Working On Energized Radioactive Equipment
- Working Near Energized Radioactive Equipment
- Working with Exposed Electrically Energized Equipment
- Breaking Containment on
 - a Chlorine line
 - a Hydrogen Sulphide line
 - a Hypo line
 - a Hydrochloric Acid line
 - a Sulphuric Acid line
 - a Hydrogen line
 - an Oxygen line
 - a Barium Hydroxide line
 - a Sodium Hydroxide line
 - a Steam line

- Classified Area
- Travel Over and Work on Ice
- Work around Bodies of Water
- Restricted Area
 - Restricted area access to building 214 all access to this area by contractors onsite will include a permit
- Work on Piles
- Roof Travel
- Fire Protection/Suppression System
- Control Reliable System
- Safety Shower/Eyewash Station
- Guard Removal
- Non-Destructive Testing
- Excavation/Ground Disturbance
- Temp Change/Bypass
- Removal of Grating/Floorplate/Guardrail
- Work Requiring Fall Protection
- Special Event
- Hydro-blasting
- Connecting/Disconnecting Steam for Temporary Use
- Critical Lift
- Lifts over Hazardous Piping/Vessels



Putting What You Know Into Practice: The activities below will give you an opportunity to practice using the information you have just learned.

Drag the listed tasks to correct box to indicate if a Permit is required or not.











Issue Permit

Permit issuers issue the authorized work permits to the execution team and are responsible to ensure all the relevant documentation is in place prior to issuing the permit



Authorize Permit

Permits are authorized by production area leaders in the areas where the work is planned



Request Permit

Permits are requested (raised) by site operations personnel and planners that have access to the P2W system

Upper Tier Permit Offices





Refinery Permit Office

Refinery Permit Office – 1st floor of 226 annex Responsible for all Refinery Permits Areas 224, 226, 227, and 231) Phone 758–8944



Neutralization Permit Office

Neutralization Permit Office – 1st floor of the 223 annex Responsible for all Neutralization Permits Area 223 Phone: 228–3684



Utilities/POL Permit Office

Utilities/POL Permit Office – 1st floor of the 221 annex

POL Responsible for all POL Permits Areas 221 and 221 Phone: 228-3833

Utilities Responsible for all Utilities permits Areas 228, 242, and 243 Phone: 228–3537

Port Operations Permit Office





Port Operations Permit Office

Port Operations Permit Office – 1st floor of 212 annex Responsible for all Port Operations Permits Areas 211, 212, 213, and 214 Phone: 228-3920

Permit to Work System



00:22



P2W CONTROL OF WORK

Log In	
P2WS61	
Password	
Remember this username	
LOG IN	
Forgotten your password?	
Activate New Account	
<image/> <caption></caption>	

Permit to Work log in screen

Permit to Work (P2W)

P2W is a web-based system and can be accessed by anyone with access to the internet, a user name, and a password. Password is case-sensitive. Three failed login attempts will freeze your account for 10 minutes. The first time you login you will be prompted to change your password. You can change your own password any time.

Training Site address:

https://training.ep2w.net/VLH-5.7/Login.aspx?ReturnUrl=%2fVLH-5.7%2fIndex.aspx

Production Site Address:

https://vale-lh.ep2w.net/P2W/Login.aspx?ReturnUrl=%2fP2W%2fIndex.aspx

Note: Any permit office can provide access to Permit to Work

Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact information.

CLICK HERE!

CONTINUE

Lesson 7 of 11

Zero Energy and Zero Motion

In this section, you will be presented with an overview of:



Click on the tabs below to learn more about Zero Energy and Zero Motion, as well as Lock boxes and the Lock Removal process.



ZERO ENERGY	
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LOCK BOXES

Lock boxes are used to secure isolation boundaries on equipment that require repair/maintenance. Equipment may be isolated in the following ways:

- Multi point isolation these isolations require more than 1 lock and must be applied by an authorized isolator and witness. These isolations are secured in lock boxes. All members of the work party are required to apply their personal lock to the appropriate lock box.
- Single point isolation these isolations can be applied using 1 lock, controlled by the person completing the task. All members of the work party are required to apply their personal lock to the source of energy, even for single point isolations. These isolations are controlled in the field and will not have an associated lock box.

All permits that require isolations will have associated lock boxes. These lock boxes are located at the permit office locations, with portable lock boxes being used at times for remote isolations. Never lock onto a lock box that does not have a GOLD Lock and Danger Tag. The gold lock and danger tag represent a completed isolation boundary and is required to ensure the equipment is at zero energy.

As a permit user you are required to place your personal lock and tag on the appropriate PCB for your work scope. If you are unsure, ask your PIC and/or the permit office to verify.



ZERO ENERGY	LOCK BOXES	LOCK REMOVAL	ZERO MOTION
The process to be follow	ved to remove an abandoned	lock.	

Emergency Personal Lock Removal Form
Date:
Initial Employee called at Home and could not be contacted (MANDATORY) Employee was contacted but is unable to return to the plant Check with Feliow Workers and could not be located on site (MANDATORY) Conducted thorough work site inspection to verify that the equipment locked out is clear of all personnel (MANDATORY) SIGNATURES
Employee's Department Supervision/Team Leader Signature:
Employee's Department Manager Signature (upon returning to work; if on back shift or weekend):
Employee's Signature, upon returning to work:

ZERO ENERGY	LOCK BOXES	LOCK REMOVAL	ZERO MOTION
Employs the use of safe	ty relays to allow an operato	r to enter a controlled area to	complete inspections

Employs the use of safety relays to allow an operator to enter a controlled area to complete inspections or troubleshooting. Zero motion only controls movement of equipment (motion), if maintenance is required on a piece of equipment the zero-energy protocol must then be followed.



Got a Question?

Submit your question here using Vale forms, be sure to include your first name last name and contact information.





Click on the flashcards below to learn more about the different coloured locks.



Green – Operations department lock, not to be used for personal protection and has to have a status tag attached. Not to be removed by any other department without consent of the owner's department.



Red – Electrical maintenance department, not to be used for personal protection and must have a status tag attached. Not to be removed by any other department without consent of the owner's department. This lock will always say E&I Dept



Purple – General maintenance department, not to be used for personal protection and must have a status tag attached. Not to be removed by any other department without consent of the owner's department. This lock will always say Mech Depart



Gold – Lock box lock, secures the group locks used in isolating a piece of equipment in the field. NEVER lock onto a lock box without this lock present, tagged and closed. Keys are controlled by the permit office. Gold Locks can also be used for a gate lock in the Mandrel Plant.



Light Blue – Group locks, secures the individual isolation points used to establish the isolation boundary for a point of work. These have 1 key and are key retaining. Key must be secured in a lock box when isolation is in place.



Orange – personal lock, required by every individual who is working under a permit. These are to be used for personal protection only and must be accompanied by a Danger tag that includes:

• Name, date, personal contact information

CONTINUE

00:49



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 (this course)

CONTINUE

Lesson 8 of 11

Restricted and Classified Areas

In this section you will learn the definition and entry procedures for:

▶●		00:07
•	Restricted Areas	
•	Classified Areas	

Click on the tabs below to learn more about restricted and classified areas.

RESTRICTED AREA ENTRY

CLASSIFIED AREA ENTRY

Generally, a permit is not required but can be used if desired when entering a restricted area for general inspection or observation. If a permit is not used, then a general protocol of entering a work area shall be set up between the production area and area visitor(s) so any area hazards can be communicated.

- Area 214 (Sulphuric Acid Storage) at Port is the only restricted area on site that requires a permit for entry. Do not enter this area without first reporting to the Port permit office to acquire a permit.
- If an inspection/observation is being performed while performing any permit required task (i.e. confined space, working at heights) a permit is required.



RESTRICTED AREA ENTRY

CLASSIFIED AREA ENTRY

Generally, a permit is not required but can be used if desired when entering a classified area for general inspection or observation.

Classified areas require specific entry protocols for work due to the potential for an explosive atmosphere.

Entry to classified areas will require a permit if any permitted task is being completed in the classified area.

Regardless of the type of activity being completed in a classified area, all sources of ignition are to be deposited at the permit office or other suitable location. These include:

- Non-intrinsically safe flashlights
- Non-intrinsically safe radios
- Cell phones
- Cameras
- Cigarette lighters
- Other non-intrinsically safe electrically powered devices (including corded and battery powered)

Classified Areas on our site include:

- Solvent Extraction (SX) area
- Sewage Treatment area
- Fuel Offload and Storage area
- Cadmium Removal area.



Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact information.





Lesson 9 of 11

Emergency Response

In this section of the module will learn about:

the Emergency Response process

A permit is not required for anyone performing emergency response activities.

A copy of any permit shall be provided to the ERT if requested.

If an area evacuation alarm is sounded and workers evacuate the building, all work crews must report back to the Permit Office to get clearance to return to work on their permit.

If the alarm is valid, all permits will be suspended by the Permit Office, and will need to be re-evaluated and walked down prior to re-issue.

Got a Question?

Submit your question here using Valeforms, be sure to include your first name last name and contact information.



CONTINUE

Lesson 10 of 11



You will now take an evaluative test regarding the content of this training. The test contains 12 questions about the the Permit to Work system in Long Harbour. You must obtain a score of 80% or greater to successfully complete this module.

Good luck.

Question

01/12

Work permits are?



Question

02/12

Which of the following is not considered a classified area on our site?

\bigcirc	Solvent Extraction (SX)
\bigcirc	Neutralization
\bigcirc	Sewage Treatment Plant
\bigcirc	Fuel offload area
03/12

The only restricted area on our site requiring an entry permit regardless of the activity is Building 214 – Sulphuric Acid Offload and Storage

\bigcirc	True			
\bigcirc	False			

04/12

Link the permit role to the correct definition

Permit Authorizer	A coach or lead technician in a production area where planned work will occur.
Permit Requestor	A person with P2W access and additional training/knowledge of the permit system.
Permit Issuer	The person in each area that reviews and issues permits to the work party.

05/12

A Person in charge (PIC) is responsible for:

Communicating hazards associated with the work scope
Ensuring other work in the area does not conflict with the work outlined on the permit
Communicating the full work scope to the work party
Performing a walk through with the work party

06/12

A permit user is anyone at Long Harbour Operations that is required to sign onto a permit

to complete or oversee work

\bigcirc	True		
\bigcirc	False		

07/12

It is ok to place your personal lock on a lock box that does not have a gold lock and tag installed

\bigcirc	True		
\bigcirc	False		

08/12

Match the correct lock colour to the purpose:

Blue	Operations group lock
Green	Electrical Maintenance group lock
Red	Isolation point locks, used to establish the isolation boundary
Orange	Personal protection lock
Purple	General Maintenance group lock

09/12

In order to remove an abandoned personal lock from a lock box you must:

Check with fellow workers to determine if the person can be located onsite.
Call the employee at home to determine their location and see if they can return to the plant to remove the personal lock.
Conduct a thorough inspection of the point of work to ensure all work is complete and that it is safe to remove the personal lock from the lock box.

Contact the Site Manager.

10/12

Match the word to the correct definition:

Restricted Area	the state where all hazardous energy has been isolated and de-energized
Zero motion	employs the use of safety relays to allow an operator to enter a controlled area
Classified Area	areas that have may require a specific entry protocol due to the nature of the contents
Zero Energy	areas that have the potential for an explosive atmosphere

11/12

Even if you are not clear on the scope of work, you should lock onto the appropriate lock box and proceed with the task.

\bigcirc	True			
\bigcirc	False			

12/12

Which of the following items would be permitted in a classified area?

\bigcirc	Cigarette lighters
\bigcirc	Cameras
\bigcirc	Cell phones
\bigcirc	Intrinsically safe flashlights

Lesson 11 of 11

Conclusion

Congratulations.

You have successfully completed the knowledge component of the Long Harbour Permit User course. You have learned how to;

Identify the roles within the permit system
Describe what is required to work under a Permit to Work (PTW)
Explain the process to issue and close a Permit
Explain the lock colors and their purpose when used in the plant
Explain the procedure for the removal of an abandoned personal lock
Outline the entry protocols for restricted and classified areas

Online Training Survey

Submit your evaluation here using Valeforms, all submissions are anonymous. Thankyou.



Thank you for completing the Vale Online Module Training.

Complete Your Module Validation

PLEASE CLICK HERE