

SAUDI ARABIAN CHEVRON INC. - KUWAIT GULF OIL COMPANY (K.S.C.)

ePTW level 1 permit training

March 2025



Welcome to ePTW level 1 permit training

Level 1
Permits

For all ePTW users



Level 2 Isolations

For ePTW users involved in isolation management



Level 3 BCPs

For ePTW users involved in bypassing critical protections



Level 4
User Admin

For ePTW tool user administrators



Level 5
Region Admin

For ePTW tool regional administrators

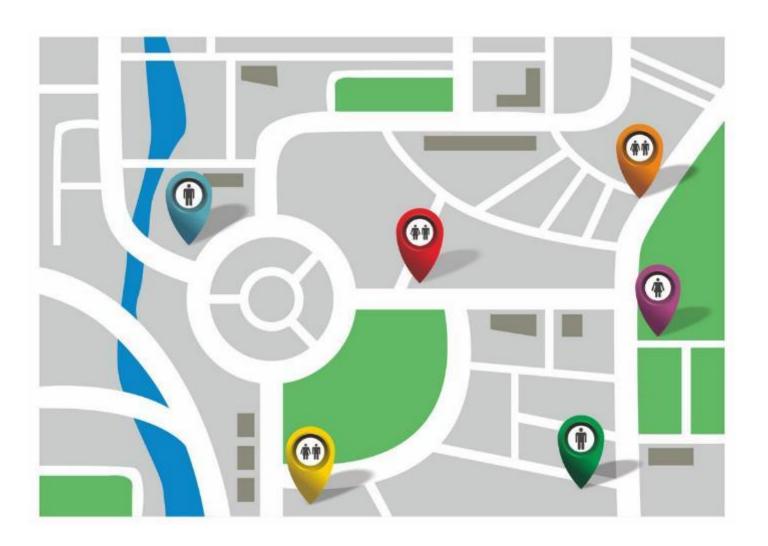




Facility map and guidance

For this site:

- Safety
 - -Alarms
 - Escape routes
 - Muster points
- Restrooms
- Break rooms
- Other important site information





Introductions



- What is your name?
- What is your role at this site?
- Are you an employee or contractor?
- What experience do you have with electronic permit systems?
- What is your role in permitting (i.e., write, review, issue, accept)?



Making training a success



Demonstration

Showing how the system looks and works



Interaction

2-way discussion



Structure

Following workflow to walk through each step of the tool



Practice

Trying it out yourself



Knowledge Checks

Checking understanding and reinforcing learning



© 2022 Chevron

Ground rules

- Stay for the full training
- Don't be distracted by other things on your computer or phone
- Stay on track with the exercises and avoid working ahead
- Ask questions and seek clarification where needed
- Be open to the move to electronic permitting

If connected virtually:

- Keep phone on mute unless asking question
- Ask questions by raising hand or adding to chat
- If possible, show your video when speaking





Level 1 course objectives

- Understand why we are moving to electronic permit-towork (ePTW)
- Obtain introduction to the Permit Vision ePTW tool
- Become familiar with the user interface and tool navigation
- ☐ Gain awareness on system workflow roles
- Become familiar with permit types and icons
- ☐ Understand permit and hazard analysis requirements
- ☐ Learn permit workflow from creation through close
- ☐ Learn how to search, copy and edit permits
- Understand how to create and use permit templates
- Learn additional permit options (e.g., SWC, Toolbox talk, BCP)
- ☐ Understand where to go for support using the tool







Chevron JOINT OPERATIONS-WAFRA

العمليات المشتركة الوفرة



Leadership message

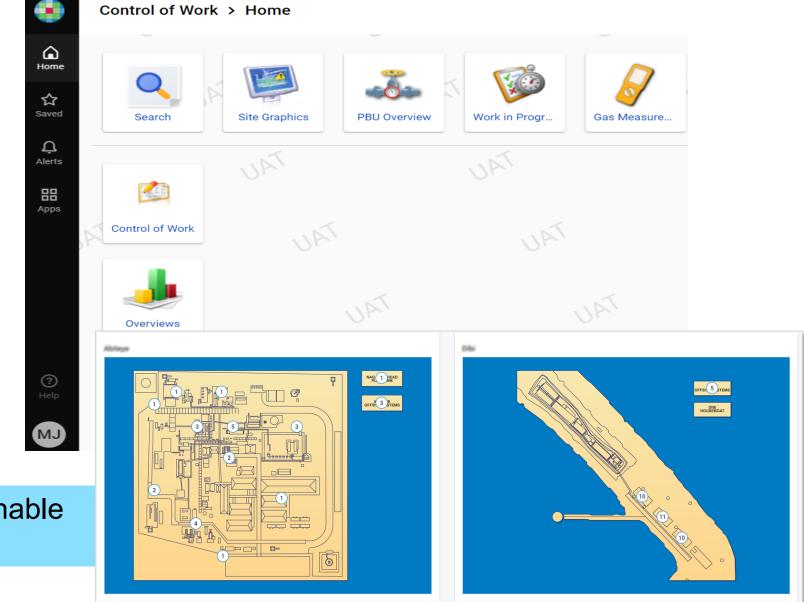
ePTW tool

Introduction to electronic permit-to-work



What is electronic permit to work?

- Electronic permit-to-work is a digital permitting system that replaces paperbased permitting to enable control of work
- Electronic permit-to-work:
 - Minimizes risk
 - Maximizes safety
 - Increases operational efficiency
 - Increases effectiveness



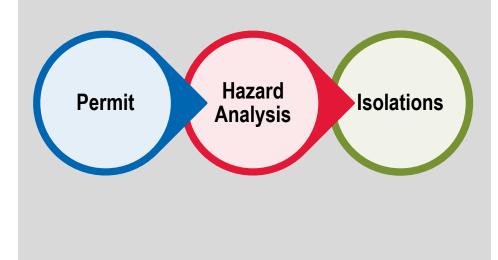
We are utilizing the **Permit Vision** tool to enable electronic permit-to-work within Chevron.



© 2022 Chevron 10

What does electronic permit to work enable?

- Single integrated permit, hazard analysis and isolation process
- Important information required on permits
- Rigor in enforcing business rules
- Visible linkage to associated records (e.g., toolbox talk, BCP)
- 'System locks' for isolations, permits and dependencies

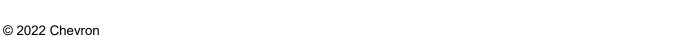




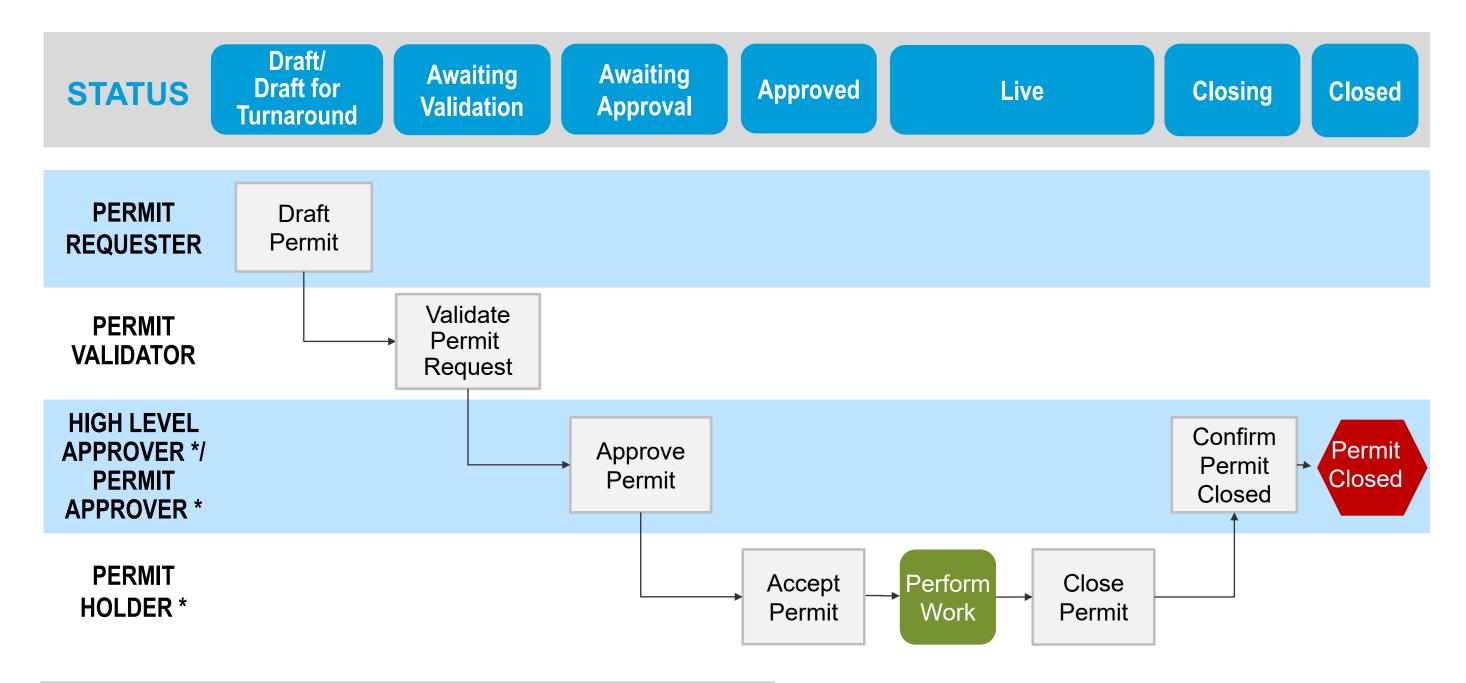
- Graphical view of current and planned work on site
- Quick understanding of type/ state of work based on icons
- Identification and prevention of potential conflicts of work
- Immediate access to current and completed permits

- Visibility to actions that need to be taken
- Involvement of appropriate people
- Traceability (i.e., who has signed for what and when)
- Pertinent information for decision making
- Near-real time analytics on permit-to-work performance





Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



ePTW tool Permit workflow, roles and icons



Permit roles

- The following are the system roles that support execution of the permit workflow
- An individual's role will dictate the actions they can take on a permit











We'll learn more about each role's responsibilities as we walk through the permit workflow



Permit types and icons

- Each activity type has its own symbol and color
- The symbol and color never change during permit lifetime

PERMIT TYPE	LIFETIME	ICON	PERMIT TYPE	LIFETIME	ICON
General Work	30 days	*	Excavation	30 days	
Open Flame	30 days	*	Radiography	30 days	
Non-Open Flame	30 days	<u>*</u>	Commercial Diving	30 days	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Confined Space Entry	30 days	1	Energized Electrical	30 days	4
Breaking Containment	30 days	*	Permit Not Required	30 days	N. Control of the con



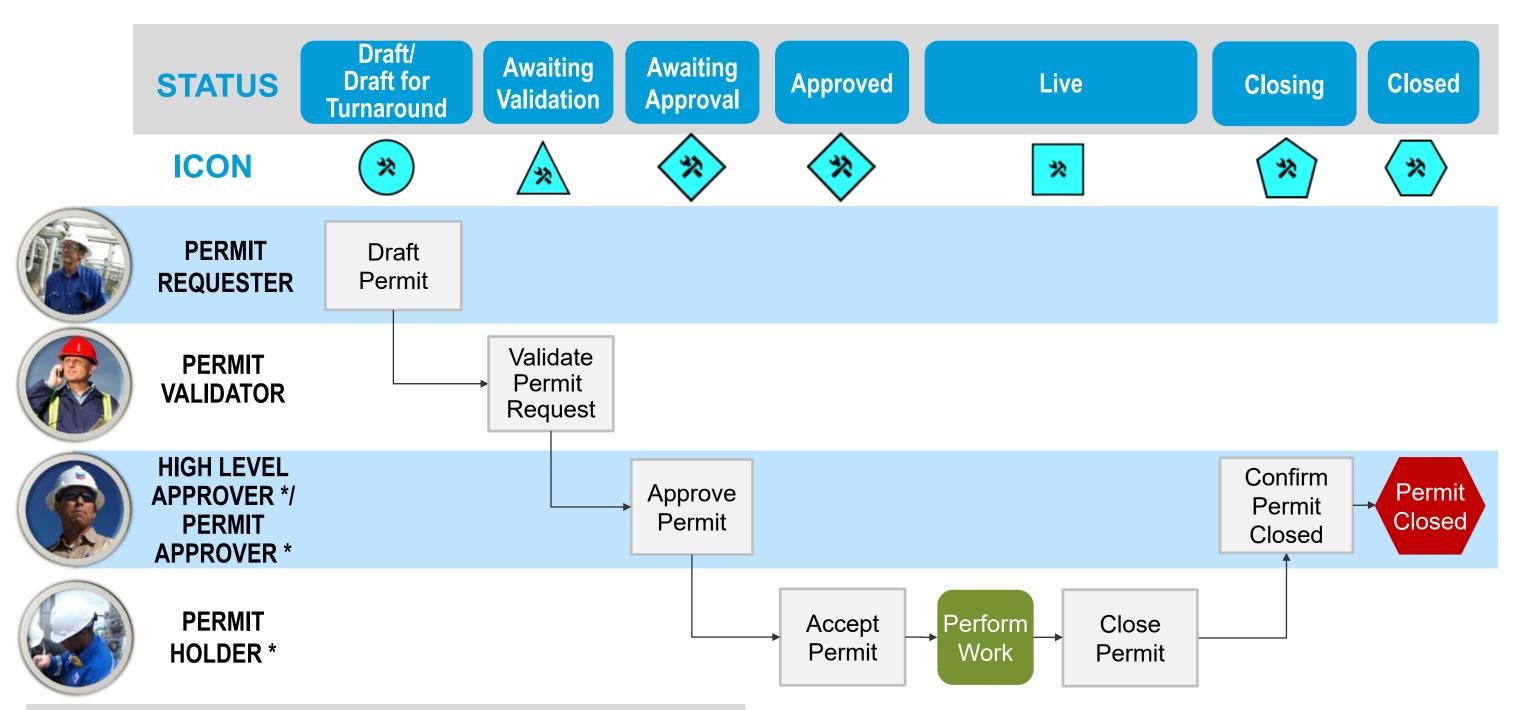
Permit workflow icons

- Each workflow status has a different icon shape
- Icon changes as permit moves through workflow
- Helps users to visualize progress of permit
- Displayed on the site graphics and the electronic and printed copies of the permit
- Status is a filter in the Search functionality

WORKFLOW STATUS	ICON	WORKFLOW STATUS	ICON
Draft / Draft for Turnaround	*	Suspended	S
Awaiting Validation	*	Suspended for Test	
Awaiting Approval	\$	Overdue	*
Approved	*	Closing	*
Live	*	Closed	*
Live for Test	*	Expired	



Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder Chevron



Knowledge check

What are the statuses that a permit goes through in a typical workflow?

What are the system roles associated with the permit workflow?

What is the maximum lifetime of a permit?

True or False?
The color of a permit icon changes as it progresses through the workflow.



Introduction to Permit Vision

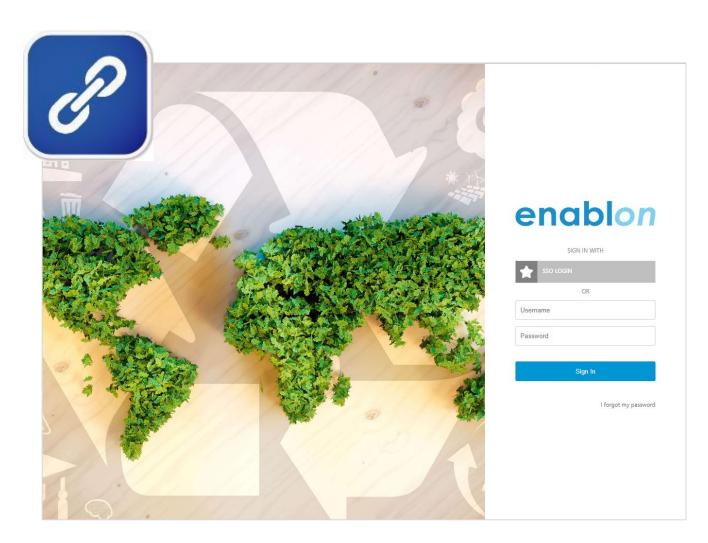
video demo



ePTW tool Tool access and settings



Tool link



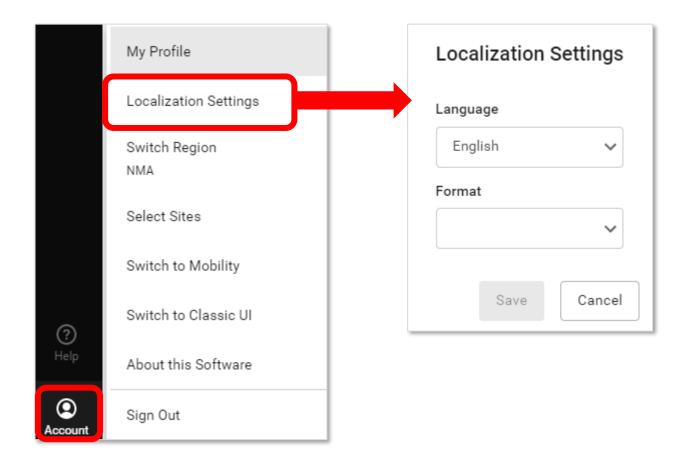
Production: https://chevron.us.enablon.io/permitvision/
Training: https://chevron.training.us.enablon.io/permitvision/

- All ePTW users access the ePTW tool via the same link
- The SSO (single sign on) login option can be used by Chevron users on Chevron devices
- The username and password option can be used in the following scenarios:
 - Chevron user on personal computer
 - -Chevron kiosk
 - External user/company computer
 - Mobile devices not containing Chevron authentication
- Username + password must initially be assigned by a User Administrator for the site
 - Users can self-reset passwords after initial setup



Selecting language preferences

Language Preferences are set from the Home Account within Localization Settings





Note: Users may also change the **Format** to display alternate date/time formats in specific areas of the tool

22

Signing options

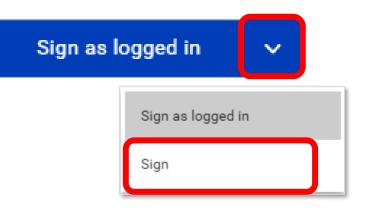
"Signing" advances a permit through steps of the workflow.



Sign as logged in

Used by the individual who is *logged into* the computer/device

Because the individual is already logged in, they will not have to enter a password.



Used by an individual who is *not logged into* the computer (e.g., overthe-shoulder signing)



Requires entry of username (email) and password.

Checking your login



PERMIT VISION LOG IN

https://chevron.training.us.enablon.io/permitvision

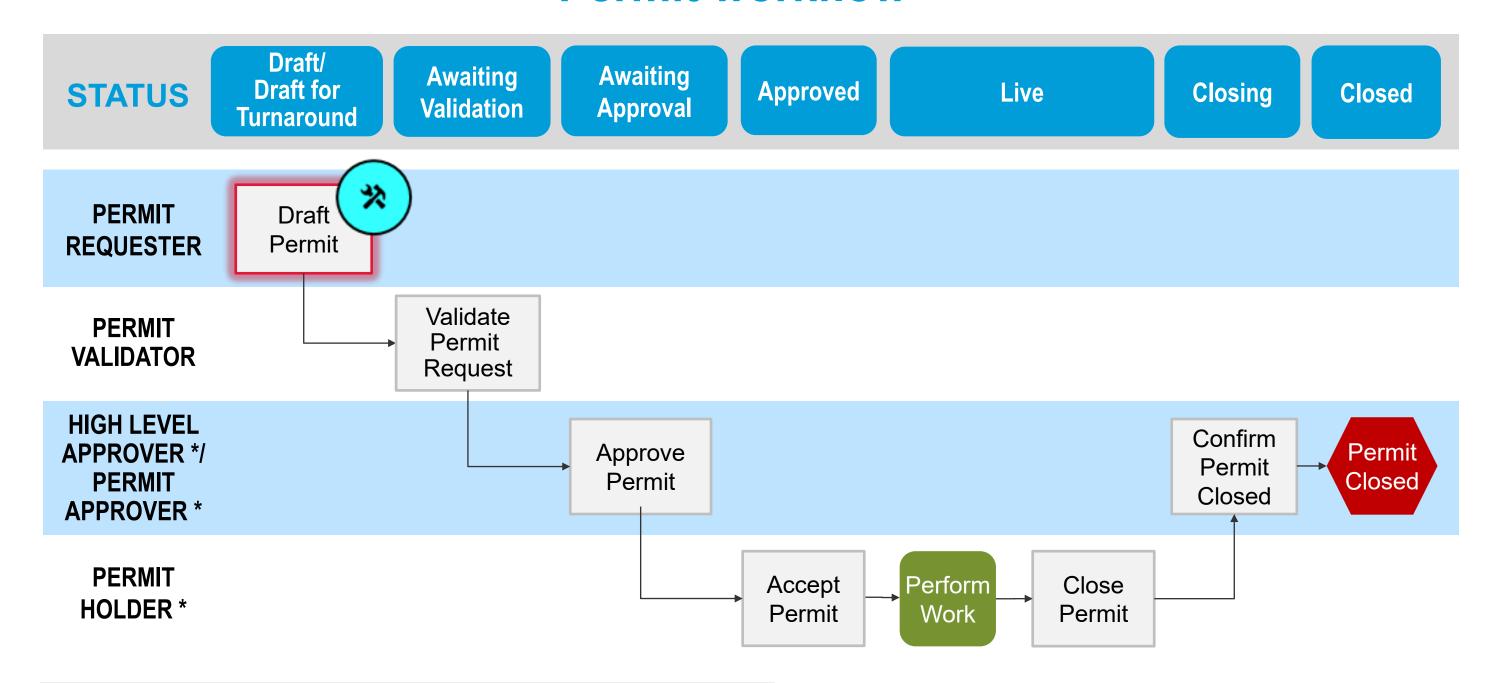
Refer to the email you received for login instructions.



ePTW Tool Drafting a permit



Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Initiating a permit

- Via Permit to Work icon, all information added manually
- Via **Permit template** icon, most information already exists in template
- Via Work order icon, some information added based on selected work order
- Via Questionnaire icon, some information added based on activity or activities selected in questionnaire
- Via the Copy function, all information is copied from the original permit but is editable



+ Permit to Work
Create new Permit to Work

+ Permit template
Create new Permit from Template

+ Work order
Create a new permit based on a work order

Questionnaire

+ Questionnaire which determines which type of permit to select



© 2022 Chevron 27

Permit information





The permit requester drafts the permit including key information about the work to be executed, such as:

- Permit type
- Planned start and end dates
- Description of the work
- Tools and equipment to be used
- Work location and affected locations
- Equipment
- Isolation requirements, if any
- BCP requirements, if any
- Required measurements
- SWC(s)
- Hazard analysis

SWC - 13 IOGP

The 13 IOGP SWCs have been configured into the ePTW tool. Each SWC can be added to any permit type.

- SWCs can be added to a permit, by any user, during the draft, awaiting validation, awaiting approval, live, and suspended states. Multiple copies of each type of SWC may be added to a permit
- SWCs added to a permit before it is initially made "Live" must be set to "Prerequisite" or "Subsequent".
- For SWCs identified as "Prerequisite", the user must select if the SWC will be required at revalidation states. The SWC maybe de-selected for revalidation when the permit is being suspended, when applicable.
- There is an "Offline" option for SWCs to be printed and filled out by hand.

13 IOGP SWCs

- Confined Space Entry (CSE)
- De-Isolation and Re-Energizing
- Driving
- Energy Isolation
- Excavation
- Hot Work (Open Flame)
- Energized Electrical Systems
- Man Riding
- Mechanical Lifting (L&R)
- Rig Floor Tubular Handling
- Work Near Water
- Work Around Mobile Equipment
- Working at Height



Attachments



30

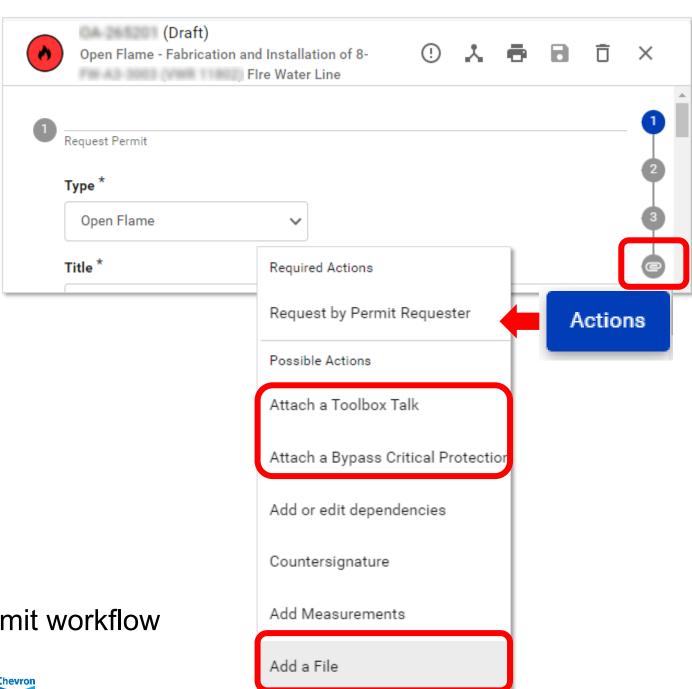
Required attachments

- Isolation Certificate when *Isolation Requirement* is marked 'Yes'
- External Hazard Analysis/L2HA when External Hazard Analysis/Consequence plan is marked 'Yes' (attachment required to progress workflow)

Possible (optional) attachments

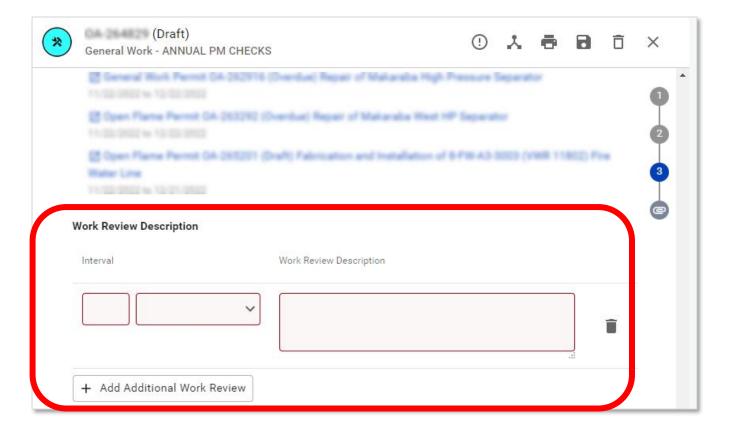
- SWC(s)
- Toolbox Talk
- Bypass Critical Protection
- Other file (e.g., rescue plan, equipment inspections, lift plans, fire watch checklist, start work check, operating or maintenance procedures, etc.)

Permit attachments an be added throughout the permit workflow until the permit is "Closed".



Work review tasks

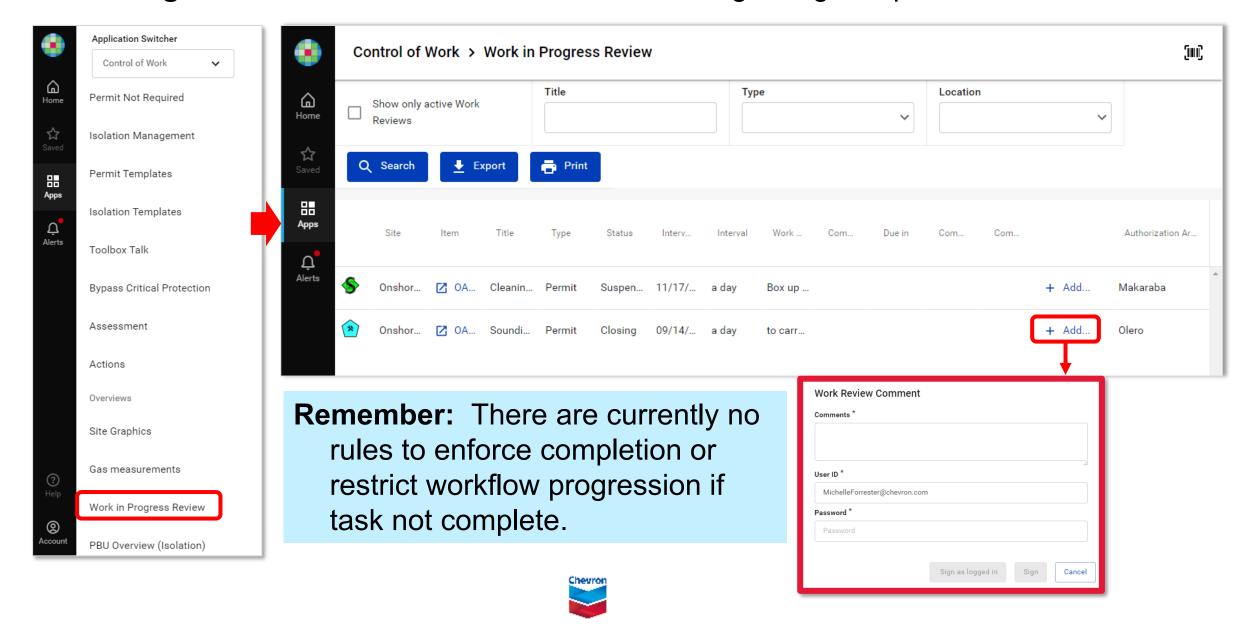
- "Work Review" can be added to identify verification or other activities to be monitored before work is complete
 - Can be added in all states except Closing/
 Closed
- Alert will appear when a permit with a task is in Live state
- No business rules assigned
 - Won't enforce completion or restrict workflow progression
 - Cannot assign users to task





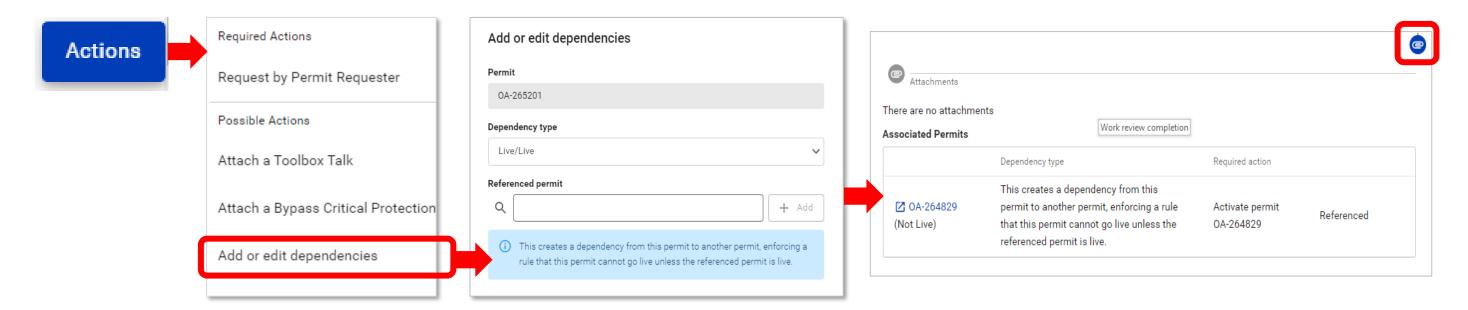
Work review completion

If work review tasks were added, indicating verifications to be completed during the shift, user must go to "Work in Progress Review" module to add comments regarding completion.



Permit dependencies

- Dependencies between permit records may be set up from the **Actions** of a permit
- Dependency options include:
 - Live/Live permit cannot go live unless the referenced permit is live
 - Live/Not Live permit cannot go live unless the referenced permit is not live
 - -Start/Finish permit cannot start until the referenced permit is finished







Drafting a Permit

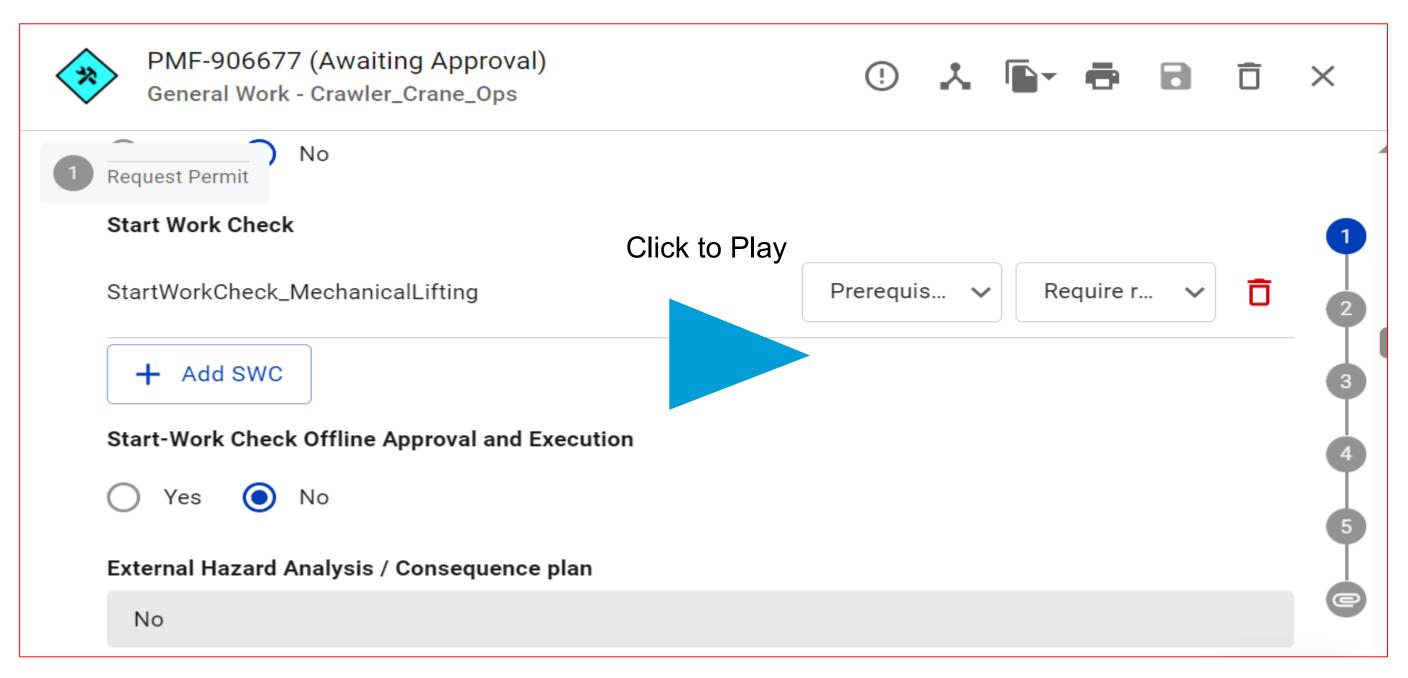
video demo



© 2022 Chevron

Adding a SWC to a permit







Hazard analysis options

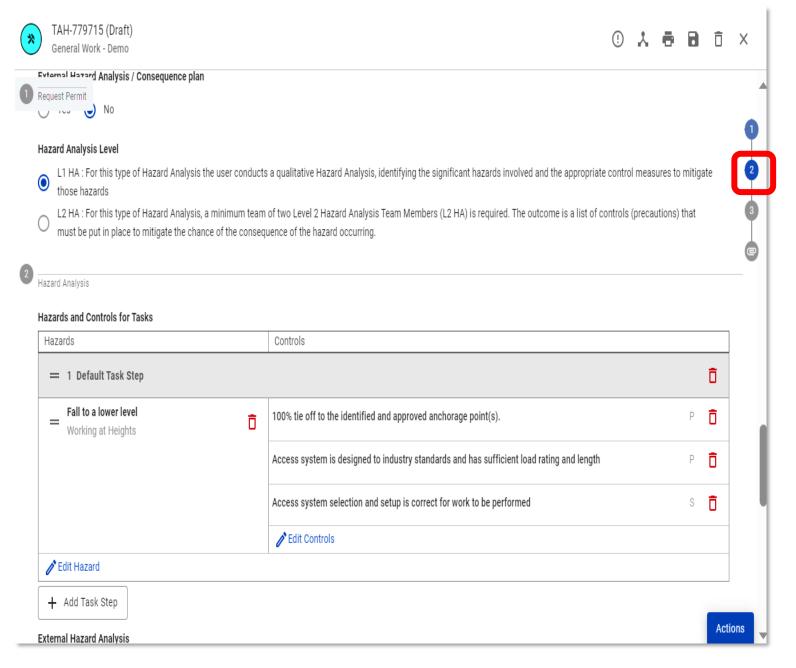
Hazard analysis can either be completed within the tool or completed external to the tool and attached to the permit record.

Hazard analysis completed within the tool (L1 HA or L2 HA) are step-based hazard analysis, listing hazards and controls against each step.

- L1 HA is typically created by one person and then communicated to the work crew; stepbased approach optional for HA
- L2 HA is created by a team with minimum 2 persons and must be signed off in tool before permit validation

Q

Energized Electrical and Commercial Diving permit types will always require an L2HA

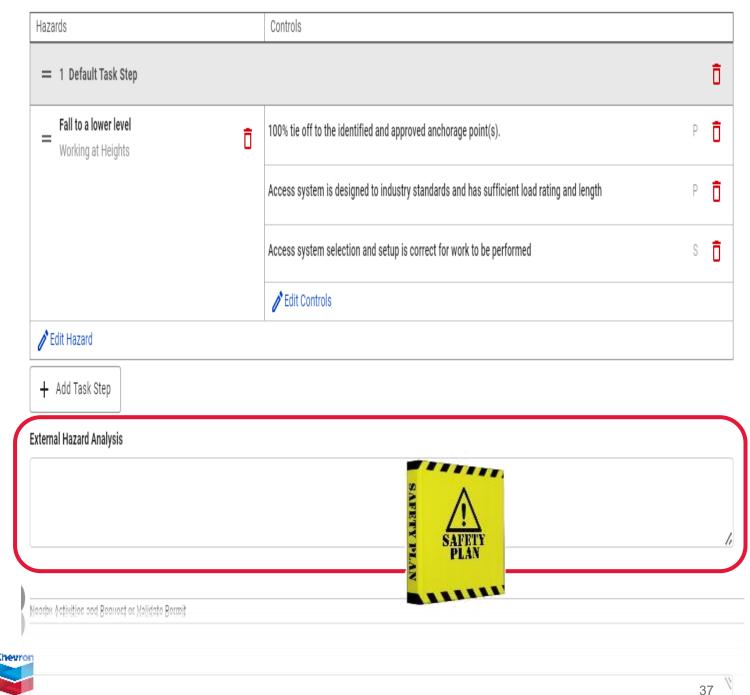




Safety plan integration

Hazards and Controls for Tasks

- ePTW is integrated with Maximo to bring in hazard/safety plans created in Maximo CMMS
- External Hazard Analysis field shown under Hazards and Controls in Step 2 of Details will show safety plan information for BUs using Maximo
 - External hazard analysis field will appear on the Permit printout
- BUs not using Maximo will see a blank External Hazard Analysis field





L1HA vs L2HA

video demo

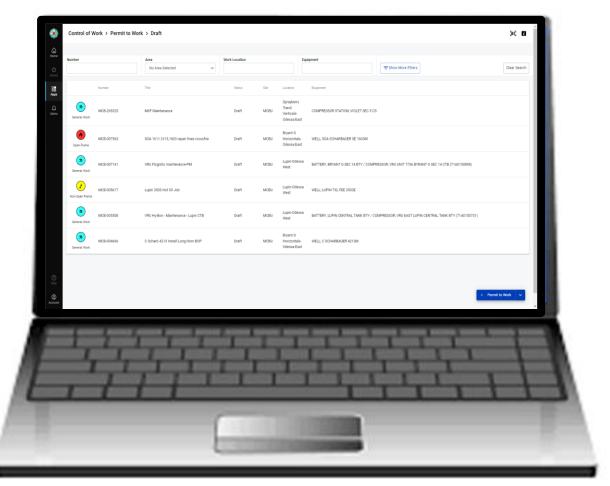


Exercise 1: Drafting a permit (Breakout group)



Create a permit with hazard analysis (HA)

- Select a permit activity
- Enter title (add your own name at the start)
- Complete all mandatory fields (*) and any optional fields
- Note as least one required gas measurement
- In step 2 'complete' the Hazard Analysis
- Add 1 SWC and set as Prerequisite and Required for Revalidation
- Select two hazards from the hazard groups
- Add an additional hazard
- Add two controls for each hazard, with at least one being a prerequisite
- Click 'Save' and write down your permit number
- Sign as a requester in step 3





Questions or comments on the exercise





Knowledge check

What 'tool role' drafts a permit?

What types of information are entered in a permit draft?

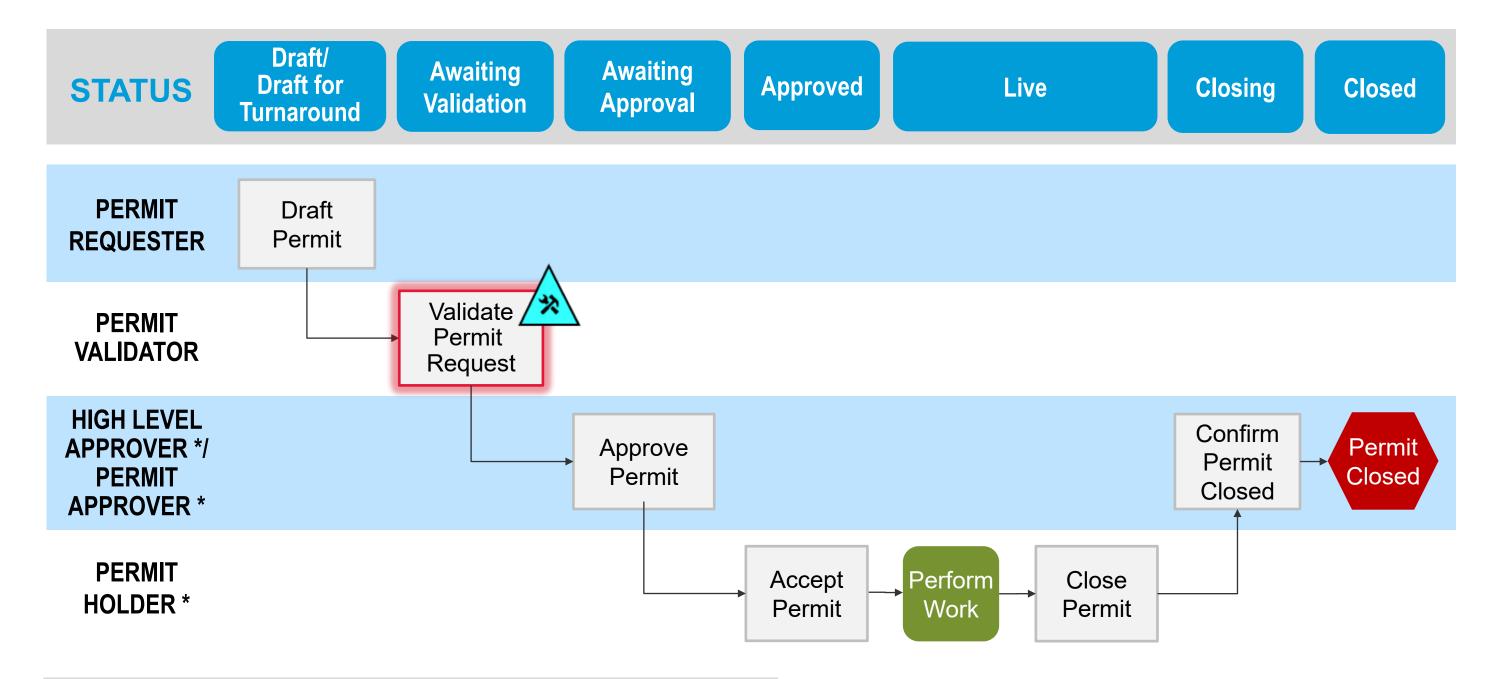
What are the 5 ways you can initiate a permit draft?



ePTW Tool Validating a permit



Permit workflow

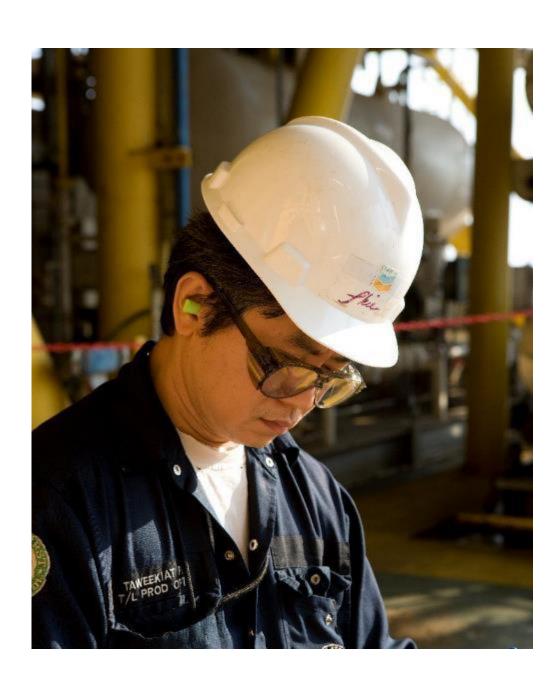


^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Validating a permit





- Permit validation is a key step to ensure:
 - Accuracy and completeness of permit details
 - Appropriate identification of hazards and controls
 - Potential work conflicts considered
 - Gas testing requirements met
 - Applicable SWC(s) attached
- For many sites, permit validation often occurs in daily planning/permit review meetings

Permit validator has 2 options after review:

- 1. Validate permit to progress for approval
- 2. Revert permit back to permit requester for additional information or rework



Validating a Permit

video demo



Exercise 2: Validating a permit

Permit validator

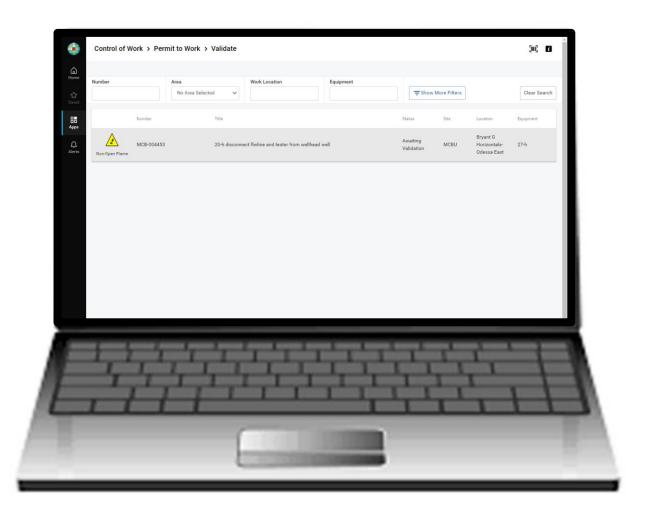
 Revert the permit back to the permit requester to add an attachment that was missing

Permit requester

- Refine permit as requested
 - Add an attachment
 - Sign to submit permit for validation

Permit validator

- Validate permit
 - Sign to submit permit for approval





Questions or comments on the exercise





Knowledge check

What 'tool role' validates a permit?

What are 2 actions a permit validator can take after reviewing permit?

Name a few things the validator is checking for in their review.

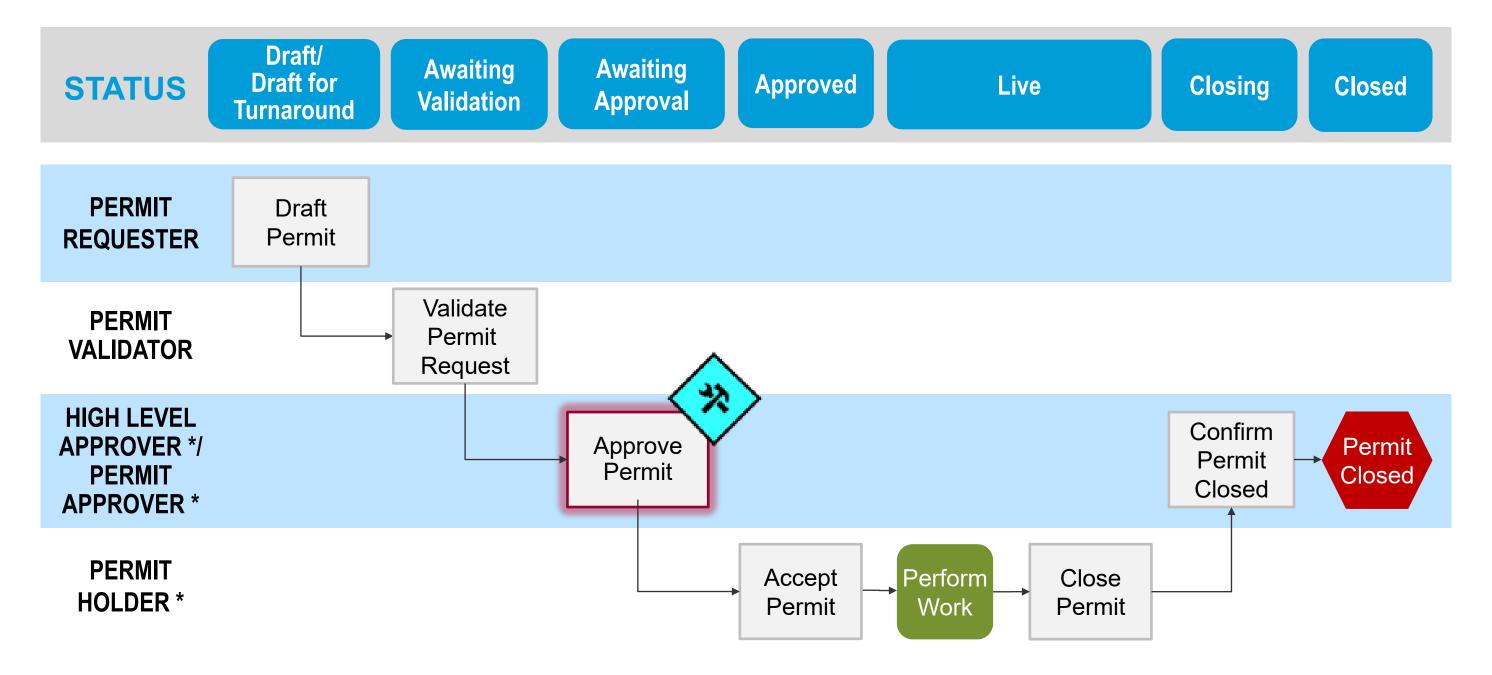
Describe the symbol used to indicate a permit that is awaiting validation.



ePTW Tool Approving a permit



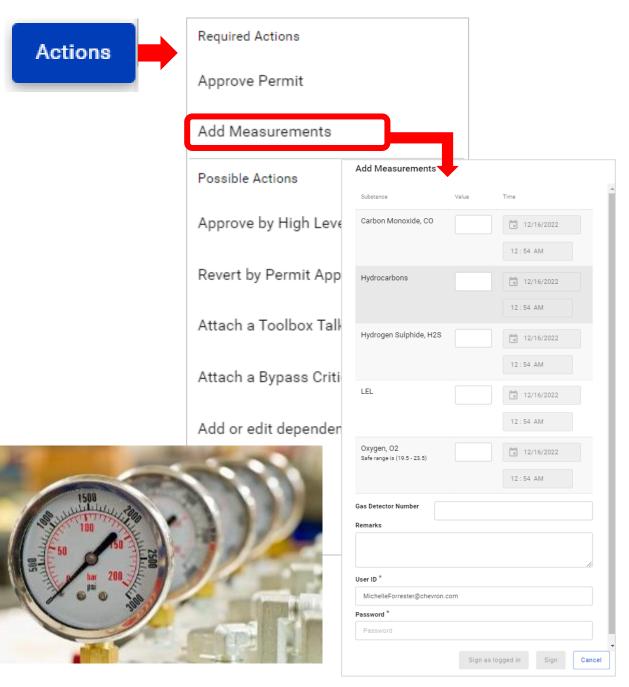
Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Entering gas measurements



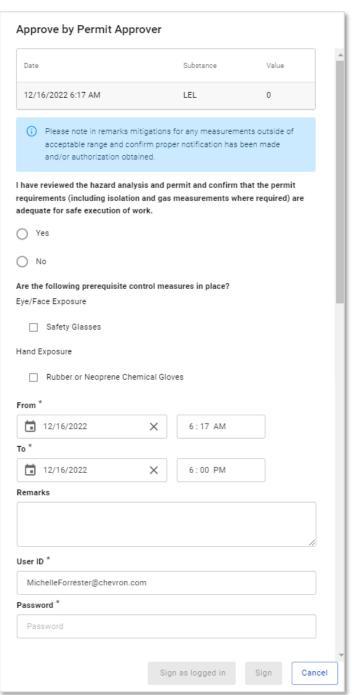
- Required Gas Measurements must be entered within 1 hour of permit approval and acceptance
- LEL, O2, H2S and CO measurements are required for confined space entry permits and at least 1 measurement is required for Open Flame and Breaking Containment.
- Gas measurements must be entered
 - Before a permit can be approved, if "Required"
 - At intervals defined in the permit
 - Anytime the permit is revalidated
- Measurements are entered via permit's Action page.
 - Measurements will be under the "Required Actions" when they are required or identified as "Required" (i.e., Confined Space Entry, Open Flame Hot Work)
 - When measurements are not identified as "Required", but instead "Subsequent", it will appear under "Possible Actions" and measurements can entered any time the permit is "Live".



Approving a permit







- Permit approval is required to begin work.
- Before approval:
 - Prerequisites must be confirmed
 - Required gas measurements must be recorded
 - Measurements outside of range must be mitigated
 - Prerequisite SWC(s) must be completed
 - Discussion must be held with permit holder to ensure understanding of scope, hazards and controls
 - Indication must be noted as to whether Permit
 Approver is required for revalidation if needed

Permit approver has 2 options after review:

- 1. Approve permit to progress for acceptance
- 2. Revert permit back to permit validator

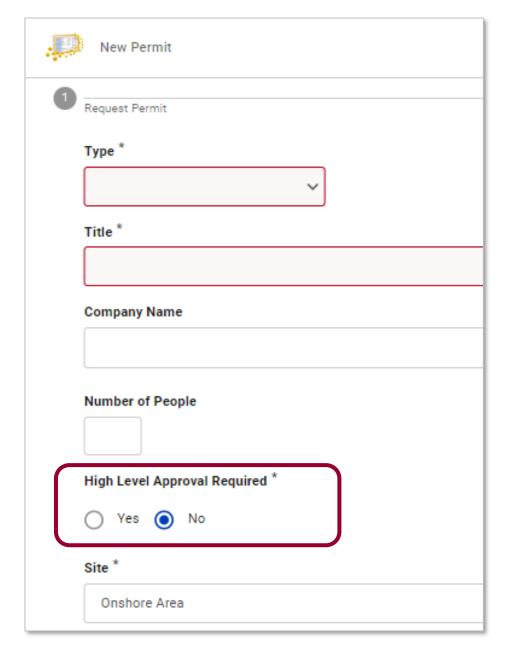
NOTE: Once permit is 'Live', it can't be edited or reverted.



High level permit approval

- High level permit approval will be required for certain work activities
- High Level Approval is noted when drafting a permit
- If high level approval required:
 - High Level Permit Approver will approve
 - *Then*, Permit Approver will approve

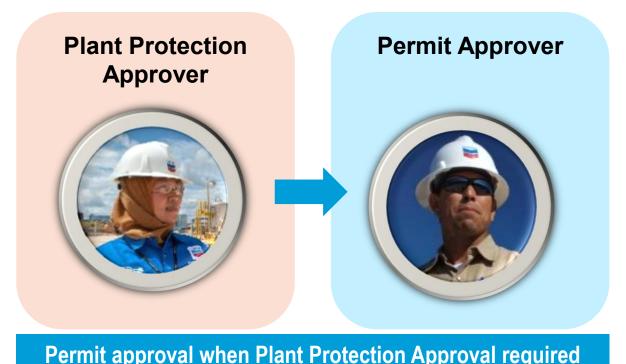




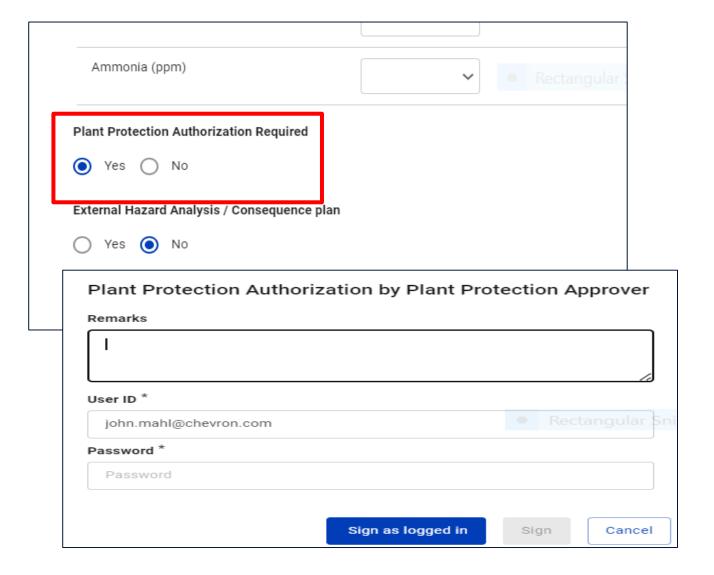


Plant Protection Approver

- Plant Protection approval may be required for certain work activities and Plant Protection Approval is noted when drafting a permit in step 1
- If Plant Protection approval is required, they must sign before the Permit Approver can approve
- The Plant Protection approver only signs at the initial approval of the permit, not at revalidation states

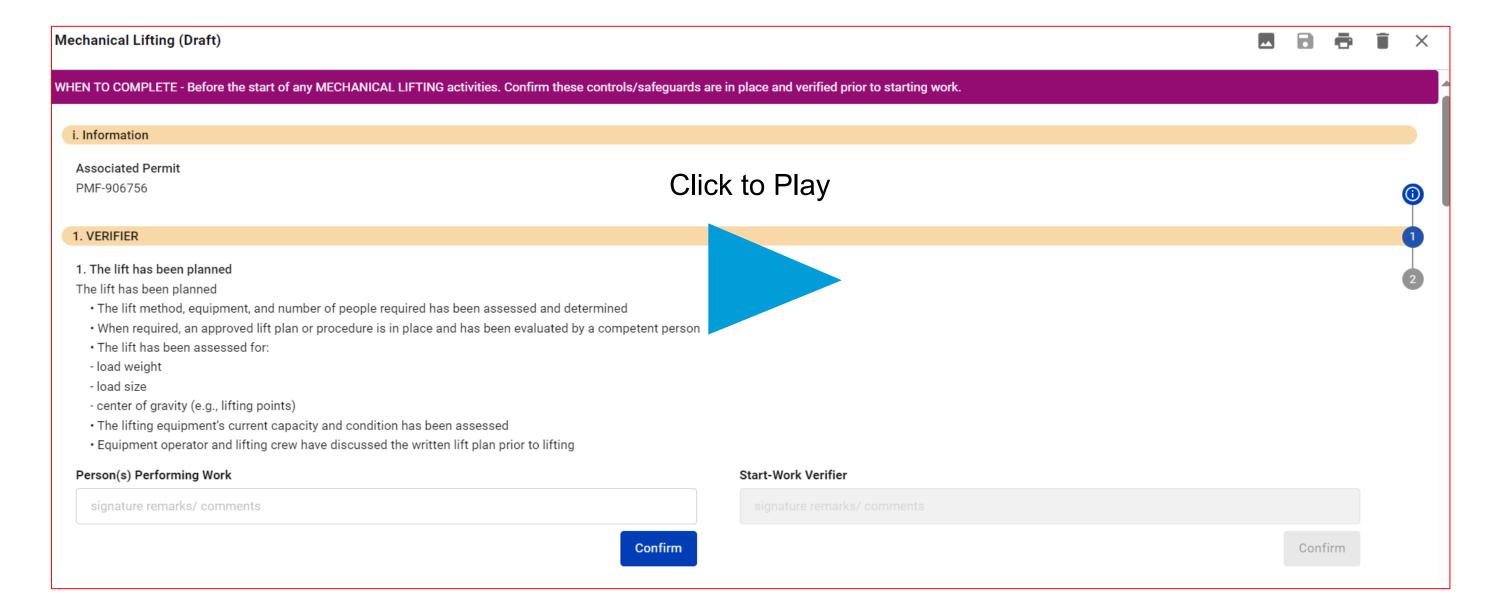


Plant Protection Approver can sign in the "Validate" and "Awaiting Approval" states. Remarks are optional in the signature window.





Completing a SWC







Approving a Permit

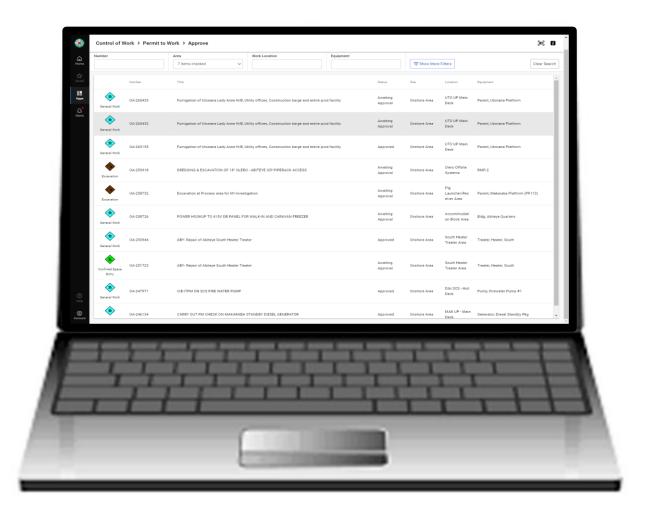
video demo



Exercise 3: Approving a permit

Permit Approver

- Approve the permit from previous exercise
 - Review permit
 - Sign to approve permit
 - Confirm prerequisite controls in place
 - See note that gas measurements must be entered and SWC must be completed to sign
 - Enter gas measurements
 - Complete the SWC
 - Sign to approve permit





Questions or comments on the exercise





Knowledge check

True or False?

A permit can still be edited after it is 'Live'.

True or False?

A permit approver is required to revalidate a suspended permit, if needed.

True or False?

If gas measurements are "required", they must be entered before permit approval.

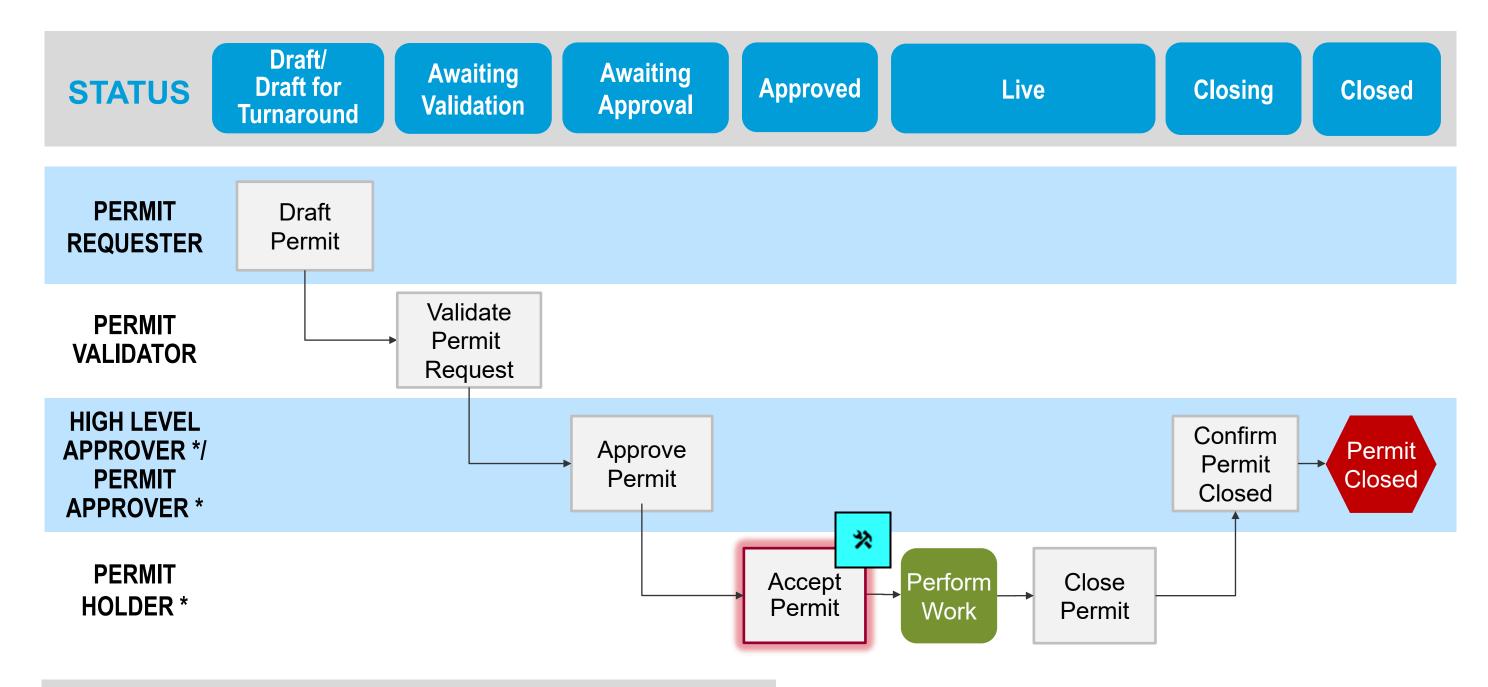
Describe the symbol used to indicate a permit that is awaiting approval.



ePTW Tool Accepting a permit



Permit workflow

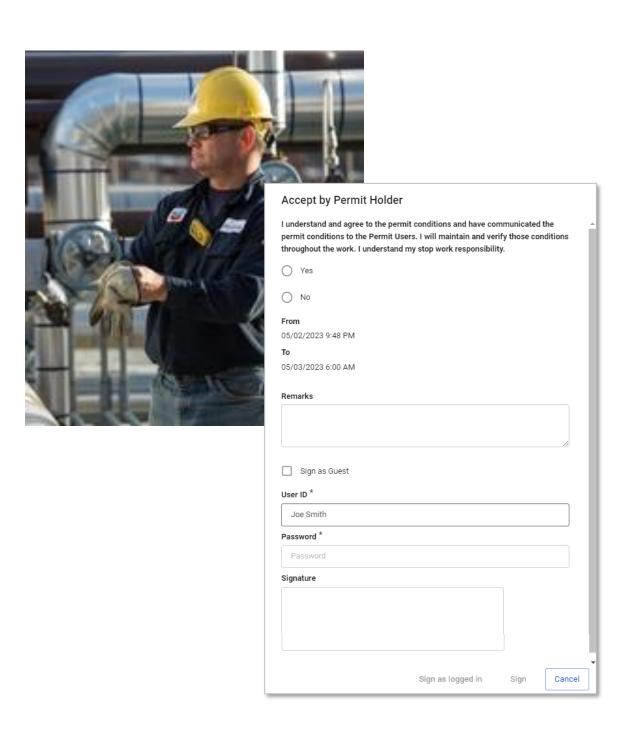


^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Accepting a permit





- Permit holder cannot be the same person as the permit approver
- Permit holder must:
 - Confirm understanding to permit conditions and stop work authority
 - Accept the permit before it can go live
- "Guest" signing is available for those without an ePTW login, along with "stylus" signing for all Permit Holders
- If the permit time period has not yet started, the permit will temporarily be in state of "Live (Awaiting Activation)"

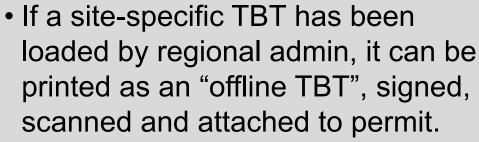
Permit holder has 2 options after review:

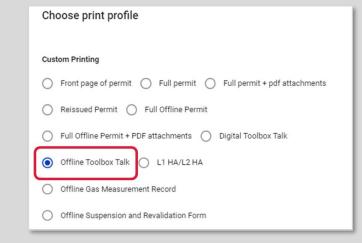
- 1. Accept permit to make it Live
- 2. Revert permit back to permit approver

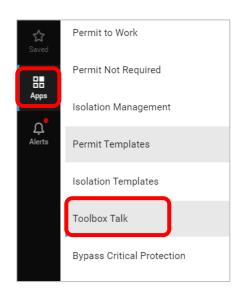


Toolbox talk

- A toolbox talk (TBT) can be attached to a permit to document acknowledgement of work scope, hazards and controls by work crew members
- Potential environmental or human and organizational performance (HOP) factors associated with the job site or work crew can be identified and controls added to address

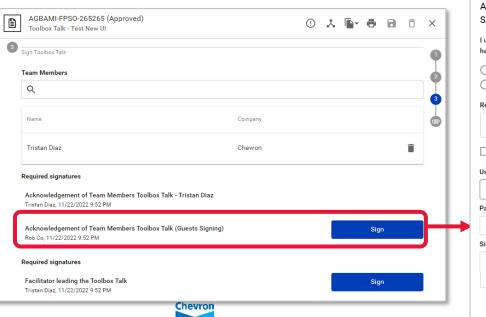


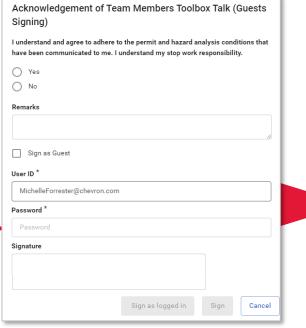






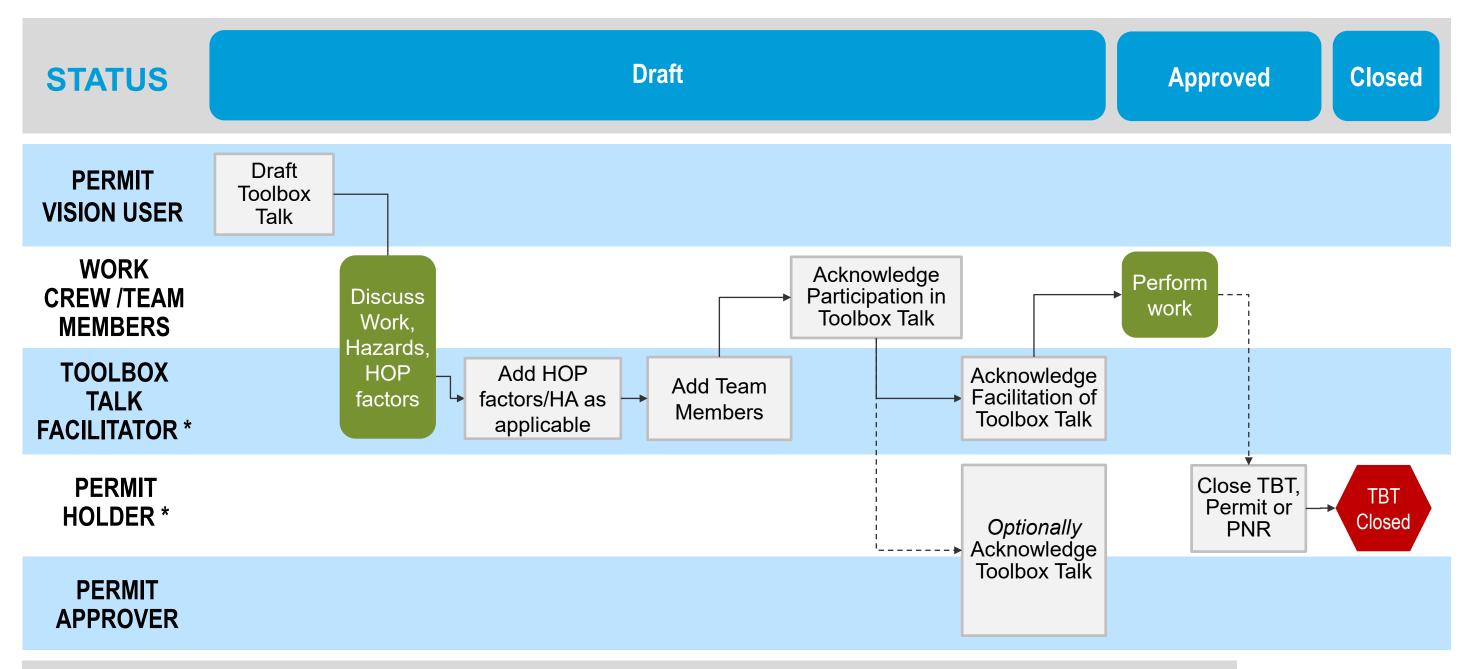
TBT must be signed by all work crew members before starting work and any persons entering controlled work area





Guest
signing
feature
enables
use of
digital "wet
signature"

Toolbox talk (TBT) workflow



^{*} Any ePTW user with Permit Holder permissions may facilitate and/or close a Toolbox Talk. In addition, the "Guest" signature may be used to complete these activities.





Accepting a Permit

video demo





Utilizing toolbox talk (TBT)

video demo



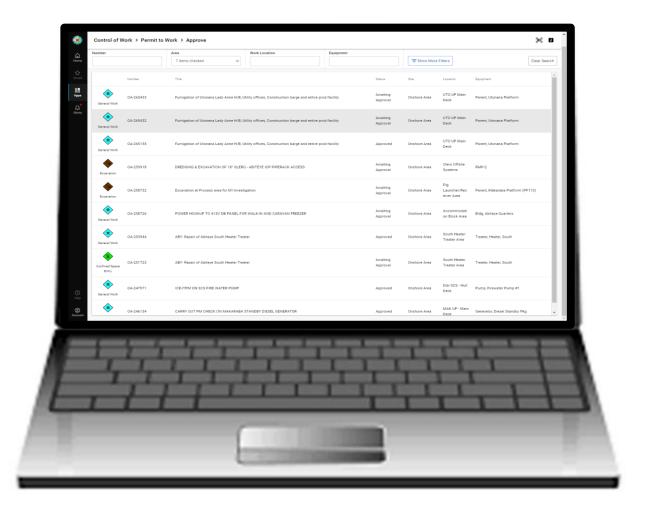
Exercise 4: Accepting a permit (Breakout group)

Permit Holder

- Accept the permit from previous exercise
 - Review permit
 - Sign to accept the permit
 - Review message saying that the permit approver can't accept the permit
- Accept a permit from another class participant per guidance from instructor
 - Access the permit you are instructed to accept
 - Accept the permit
 - Review the permit print

Test User 2

Chevron01!





Questions or comments on the exercise





Knowledge check

True or False?

A permit holder can accept a permit they approved.

What must a permit holder do before they accept a permit?

What status will a permit move to if the permit period has not yet started?



ePTW Tool

Taking over permit responsibilities

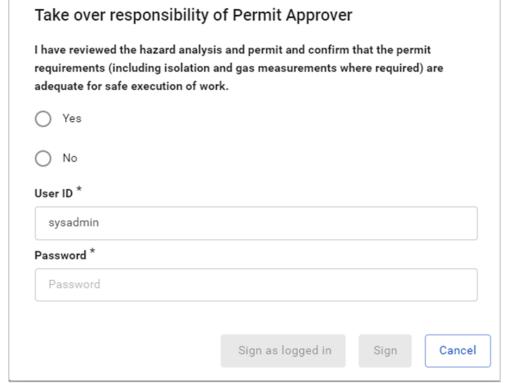


Taking over permit responsibilities



- In certain circumstances, a new Permit Approver or Permit Holder may need to take over responsibilities of the current Permit Approver or Permit Holder on a given permit
- A person must "Take over Responsibilities" if they want to "Suspend" a permit that they were not the last Permit Holder to accept the permit
- Take over of responsibilities could be needed if an individual is absent and/or workload needs to be reassigned
- Take over of responsibilities occurs in **Step 5** of the permit record









Taking over permit responsibilities video demo



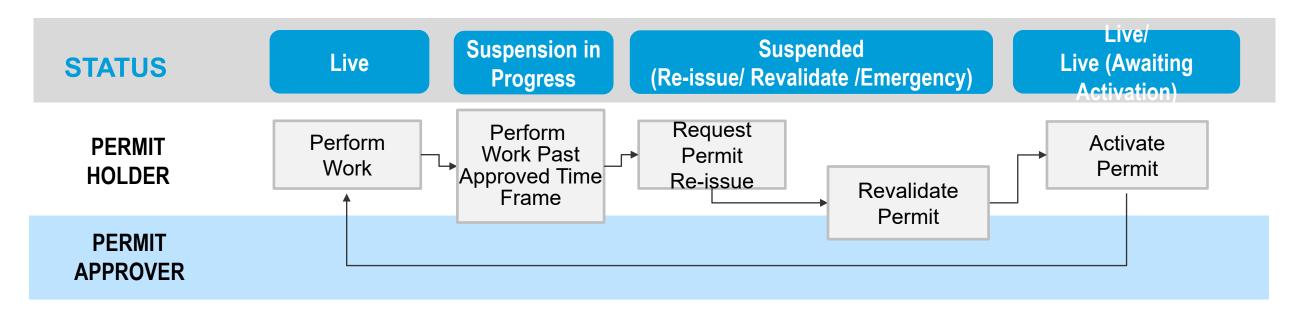
ePTW Tool

Permit suspension, revalidation, lifetime extension, and expiration



Suspending and revalidating a permit

- Only the last Permit Holder on record can suspend the permit. If a different Permit Holder need to suspend the permit, they must first "Take Over Responsivities" of the permit.
- When permit is suspended for revalidation, an expected revalidation date must be provided
- Permit will automatically move to "overdue" if not suspended or closed when approved working time frame passes.
- Permit can be also be moved to suspended in the case of emergency
- At time of initial permit approval, permit approver can indicate whether the permit holder is authorized to revalidate the permit during its normal lifecycle





Revalidating a SWC



75

During the act of suspending a permit, by the Permit Approver or the Permit Holer, which has SWC(s) selected as "Require revalidation at every re-issue" in the permit development, the user will have the option to select which SWCs remain as "Prerequisites".

The system will automatically move the "Active" SWCs to "Closed" and the new "Draft" SWCs must be completed before the permit approver can sign to revalidate.

Suspend by Permit Approver							
Select the reason for suspending th	is permit. *						
Revalidation							
Emergency							
Following SWC requires revalidation when re-issuing the permit: *							
☐ BGF-906722 StartWorkCheck_HotWork							
BGF-906721 StartWorkCheck WorkNe	ar.Water						
Remarks							
User ID *							
john.mahl@chevron.com							
Password *							
Password							
	Sign as logged in Sign Cancel						

Note: There is a system bug that will be fixed soon. The Permit Approver must select which SWCs remain as "Prerequisites". The Permit Holder must "De-Select" the SWCs that do not need to remain as "Prerequisites".

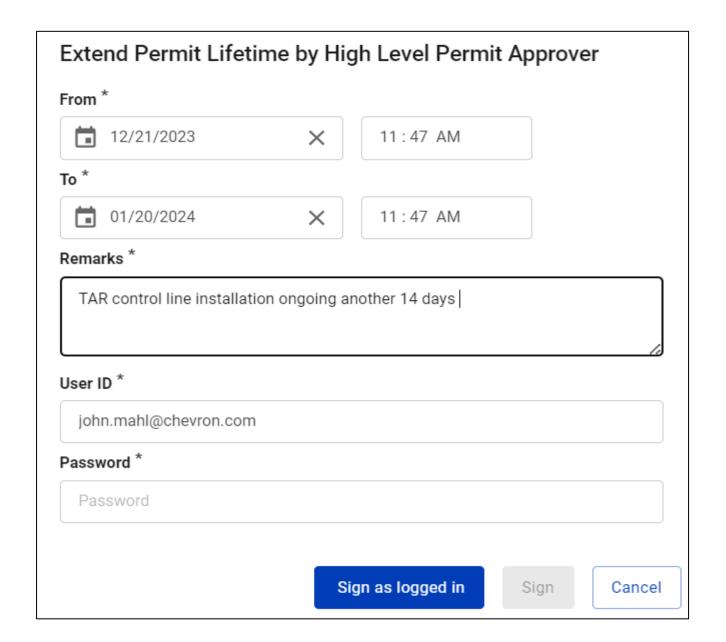
Permit Lifetime Extension



- A permit can be "Extended" one time for a maximum of 30 days in Step 7 of a permit
- The High-Level Permit Approver is the only role that can perform this action
- The tool will automatically default to extend 30 days, you can edit end date to less than 30 days
- "Remarks" for "Why" the permit is being extended are required
- The permit must be in the Suspended, Overdue, or Expired state

This is intended for TAR activities that the permitted scope of work may extend beyond 30 days

The extension workflow may be used as defined by your BU COW process



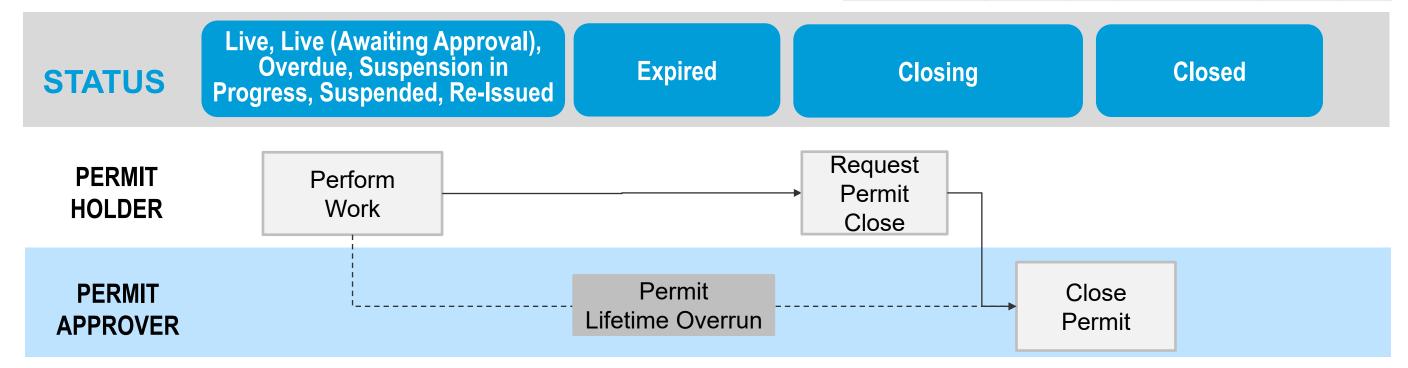


Permit expiration

- A permit that exceeds its permit lifetime
- At time of initial permit approval, permit approver can indicate whether the permit holder is authorized to revalidate the permit during its normal lifecycle

PERMIT TYPE	LIFETIME	ICON	PERMIT TYPE	LIFETIME	ICON
General Work	30 days	*	Excavation	30 days	S
Open Flame	30 days	•	Radiography	30 days	
Non-Open Flame	30 days		Commercial Diving	30 days	Age.
Confined Space Entry	30 days	(Energized Electrical	30 days	4
Breaking Containment	30 days	*	Permit Not Required	30 days	, s

77







Suspending and revalidating a permit video demo

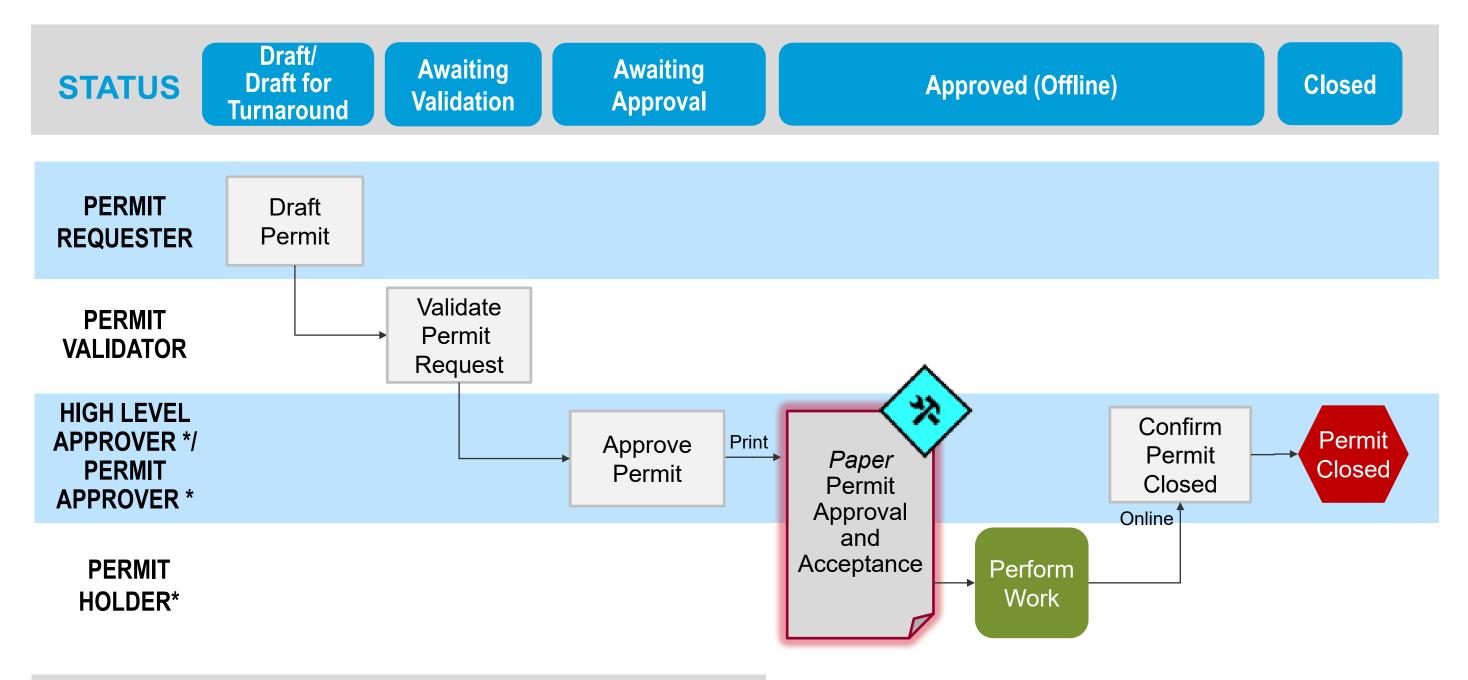


ePTW Tool

Offline approval and execution of permit



Permit workflow for offline work



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Preparing for offline approval and execution of work

When drafting a permit, Permit Requester can indicate "Offline Approval and Execution" of work.

This allows BU areas that are not fully digital to maintain control of work by following a standard workflow.

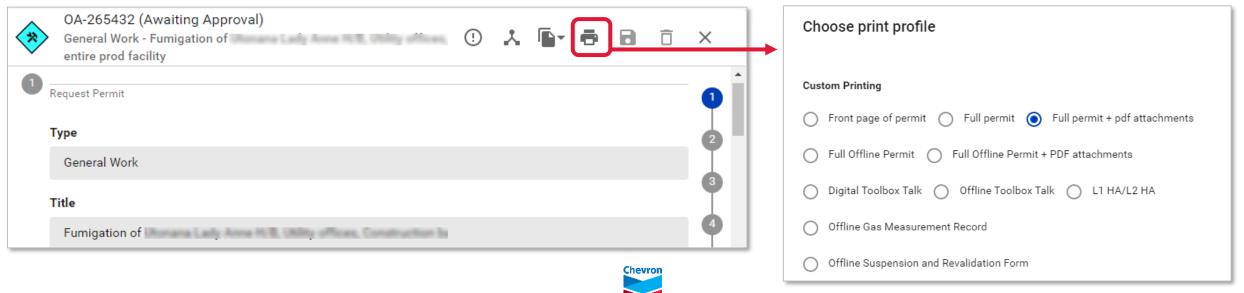


When would you use this?

- In sites that are not fully digital with workforce access to mobile devices
- In field with limited or no network/Wifi connectivity



Allows permit approval and acceptance via a paper copy of permit taken on site:



© 2022 Chevron 81

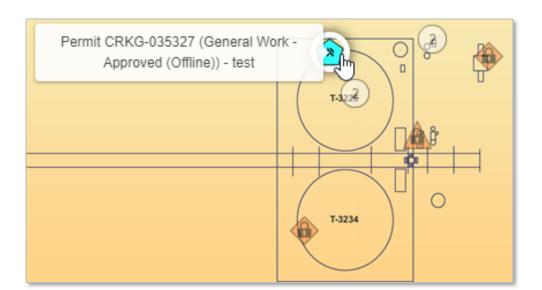
Permit and work execution on site

- Printed permit and all required supporting documents (i.e., SWC, SOP, ICC, P&ID, fall rescue plan, etc.) are taken to job site
- "Wet signatures" for acceptance by Permit Holder and Toolbox Talk are completed on site



© 2022 Chevron

Permits completed offline move directly to "Approved (Offline)" status after approval and appear on site dashboard

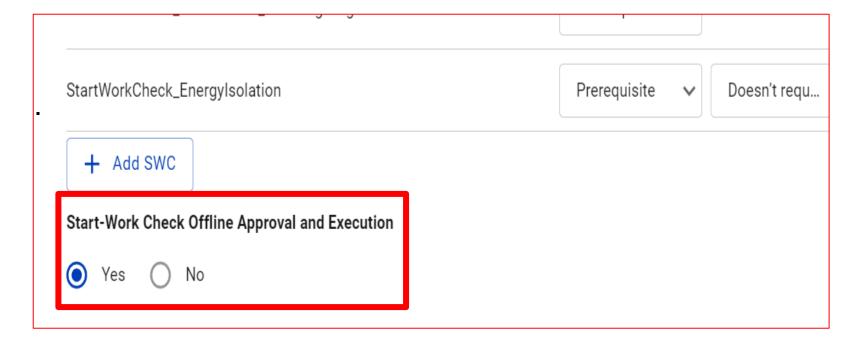




Offline SWC

The SWC(s) can be completed "Offline", outside of the ePTW tool when applicable.

When selecting "Yes" for offline, this will disable the business rules for SWC(s) identified as prerequisites in step 1 of the permit.



Offline SWC printout

StartWorkCheck_EnergyIsolation WHEN TO COMPLETE - Before the start of any ENERGY ISOLATION activities. Confirm these controls/safeguards are in place and verified prior to starting work. Person(s) Start-Work Perfoming Work | Verifier 1. The circuit, system, and/or . Tags or markings identify the circuit, system, and/or equipment indicated by the equipment to be worked on is identified in the isolation plan or isolation plan or drawing 2. All hazardous energy sources · Complete a task risk assessment specific to the scope of work . Discuss hazards with the work team prior to starting work · Inspect equipment for potential energy sources (e.g., electrical, pressure, hydraulic, mechanical, etc.) . Identify and mitigate hazards on any nearby energized circuit/systems/equipment 3. Isolation points are identified per • All isolations points are in place and tagged or marked (use an isolation the isolation plan and/or drawing diagram, equipment isolation procedure, P&IDs, or process flow diagram) 4. Isolation devices are set in the • Valves are open or closed per the diagram and/or plan identified position per isolation plan • Blinds, spades and skillets are: or drawing - stamped or certified for the pressure rating of the equipment - installed per the diagram and/or plan · Electrical isolation points are open/switched off or disconnected from power 5. The locks and tags are installed · All isolations are in place and tagged or marked (use an isolation diagram, equipment isolation procedure, P&IDs, or process flow diagram) · Lock out tagout devices are on isolation points Kevs are in a designated secure location Note: If a lock is unable to be placed, confirm hazardous energy source(s) points are isolated and secured per isolation plan 6. Zero energy state has been . Demonstrate powered equipment cannot be started . Systems (lines, gauges, etc.) have been tested for residual or stored energy: Check bleed and vent points are open to release stored energy Note: If zero energy is not possible, STOP and: Confirm controls/safeguards are in place, functioning, operated and maintained to manage the risk from residual energy Name and role Signature Person(s) Performing Work Verify Start Work Check



© 2022 Chevron

Knowledge check

How does a user indicate that approval and execution will be completed "offline"?

Under what circumstances would "Offline" permit approval and execution be needed?

True or False:
"Wet signatures" are only valid until digital signatures can be provided.

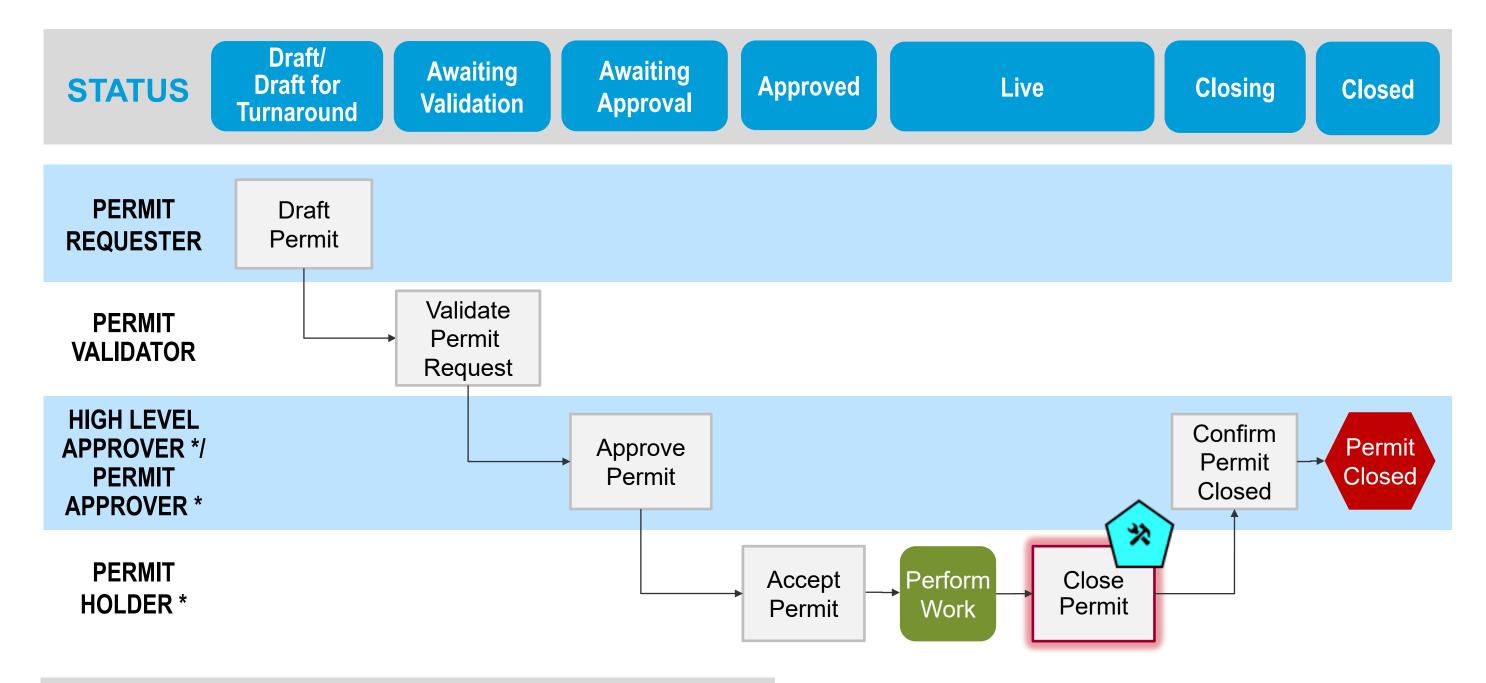
To what status will a permit move after approval if "offline approval and execution" is selected?



ePTW Tool Closing a permit



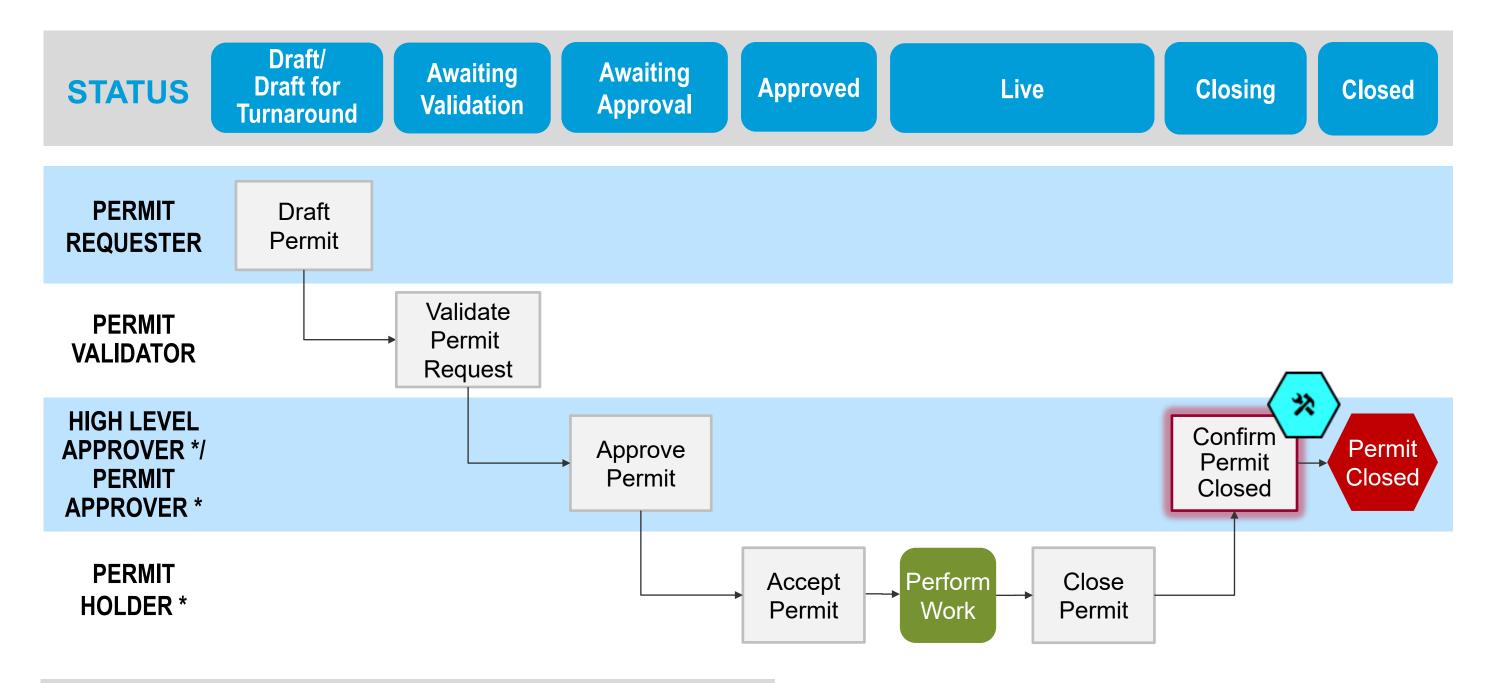
Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Closing a permit



- Once work is complete, there are 2 steps for closing a permit
 - Closing by permit holder which moves the permit to "Closing" status
 - Closing by permit approver which moves the permit to "Closed" status
- Before closing, the Permit Holder and/or Permit Approver can add Lessons Learned regarding the permit, equipment or location
- Permits will automatically be closed 40 days after moving to "Closing", "Expired" or "Overdue" status



Revert from Closing to Suspended

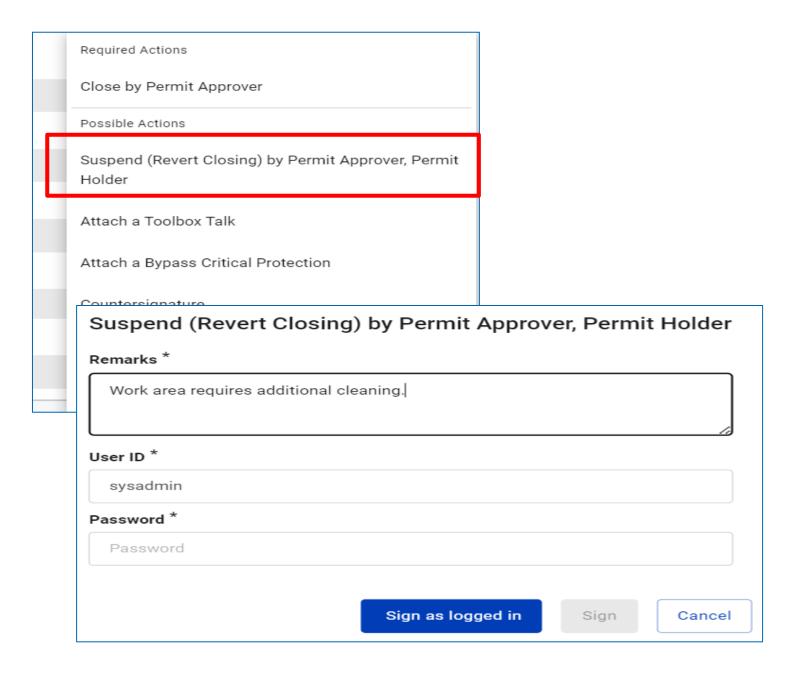
The Permit Holder or the Permit Approver can "Revert" a permit from the "Closing" state back to the "Suspended" state. This may be required due to:

- Inadvertent movement to the "Closing" state
- Work site identified by Permit Approver as not left in proper condition by work crew
- Work not complete

"Remarks" are required to "Revert" back to "Suspended state.

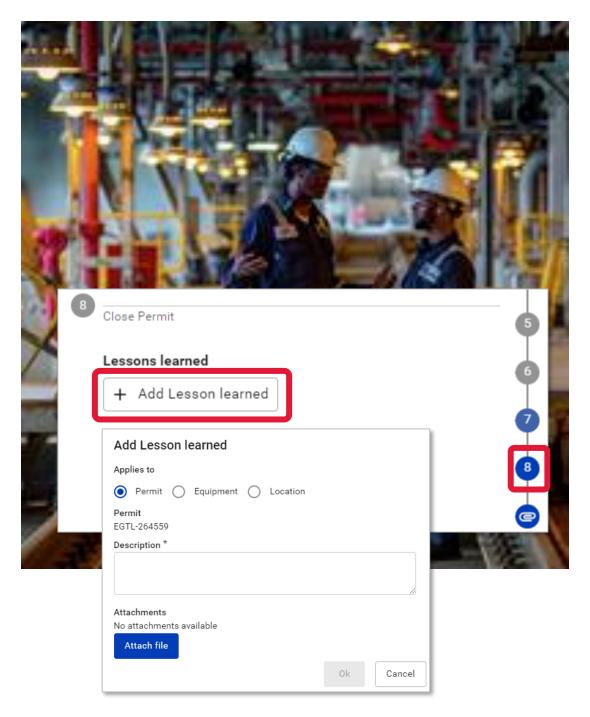
When "Reverted" to the "Suspended" state from "Closing", the regular revalidation workflow will apply.

If an ICC is attached to a permit and the ICC is not in the "Live" state, the "Revert" option will not be available.





Adding lessons learned



- Before completely closing permit, the Permit Holder and/or Permit Approver can add Lessons Learned regarding:
 - Permit
 - Equipment
 - Location
- Lessons learned can be added at any time while permit is "live" or in "closing" state
- Record any issues / experiences that would be useful for other people to know if they were do to do the same job in the future
- Any lessons linked will be displayed as a light bulb icon next to the location or equipment and will be visible if permit is copied



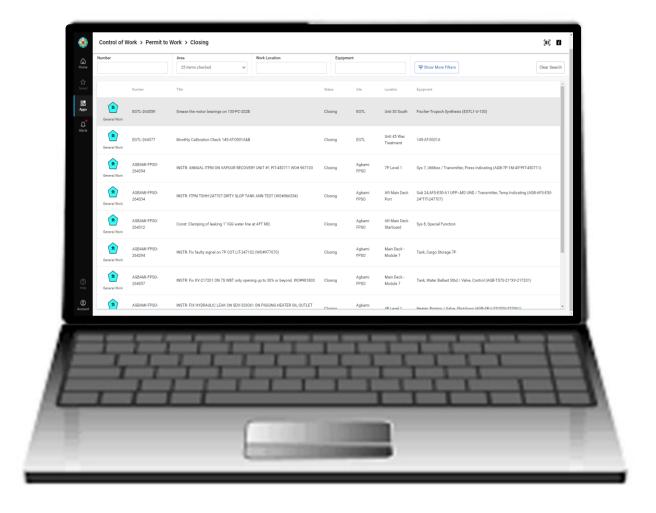
Closing a permit (by Permit Holder) video demo



Exercise 5: Closing a permit by permit holder

Permit Holder

- Close the permit from previous exercise
 - Access the permit
 - Add a lesson learned
 - Sign permit for closing





© 2022 Chevron 92

Closing a permit (by Permit Approver) video demo



Questions or comments on the exercise

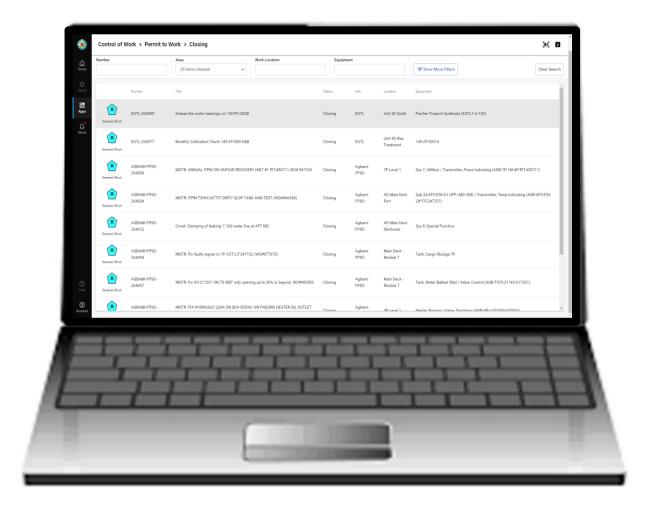




Exercise 6: Closing a permit by permit approver

Permit Approver

- Close the permit from previous exercise
 - Access the permit in "Closing" status
 - Sign permit to close
 - Add any closing remarks





© 2022 Chevron

Knowledge check

What are the steps for closing a permit?

What are the 3 things to which lessons learned could apply?

True or False?
Closing remarks can be added by both Permit Holder and Permit Approver.

True or False?
Lessons learned
can only be added when
permit is being closed.



ePTW Tool

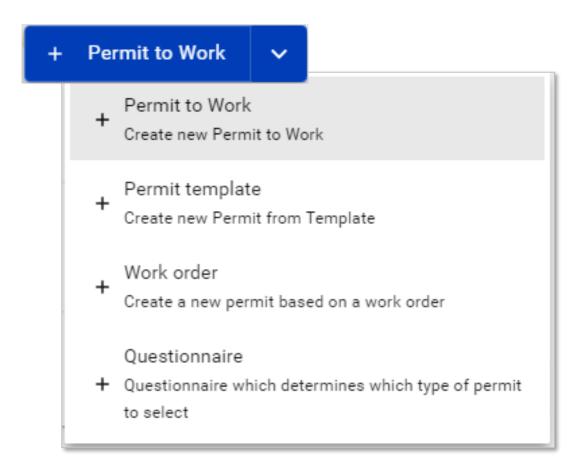
Other ways you can initiate a permit

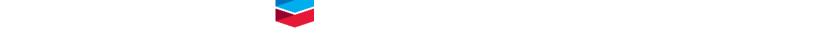


Initiating a permit

- Via + Permit to Work, all information added manually COVERED
- Via + Permit template, most information added from template
- Via + Work order, some information added based on selected work order
- Via + Questionnaire, some information added based on activity selected in questionnaire
- Via the Copy function, all information is copied from the original permit but is editable

© 2022 Chevron





Notes about using a permit template

- Only approved templates will be displayed for selection
- Limited details can be edited when permit created (e.g., start/end dates, location, work order number, etc.)
- Permit type, title etc. cannot be edited (these have been approved on the template)
- Once requested, the permit moves directly from 'Draft' to 'Awaiting Approval' unless the template specified that the permit requires validation





© 2022 Chevron 99

Notes about copying a permit



- A previously created permit may be copied at any stage except "Draft" and "Draft for Turnaround"
- Most information (including attachments) will be copied;
 copied information can be edited
- Some information will not be copied and must be repopulated (e.g., start and end dates)
- Originating permit number will appear on action page
- New copied permits should go through a comprehensive review to ensure details apply (e.g., validating that HA/isolations still applicable)
- If copied permit has lessons learned recorded, they will appear and should be evaluated for incorporation

5 ways to initiate a permit

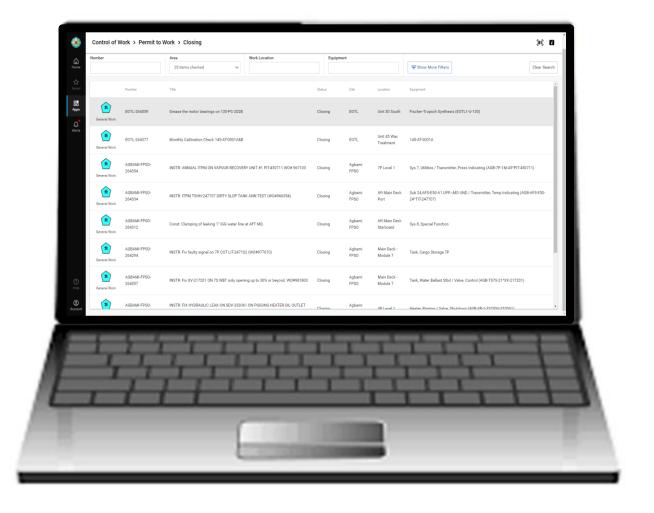
video demo



Exercise 7: Copying a permit

Permit Requester

- Copy the permit from previous exercise
 - Search for your 'Closed' permit from the previous exercise
 - Go to the Action Page to copy it
 - Edit copied permit
 - -Click on 'save'





© 2022 Chevron 102

Questions or comments on the exercise





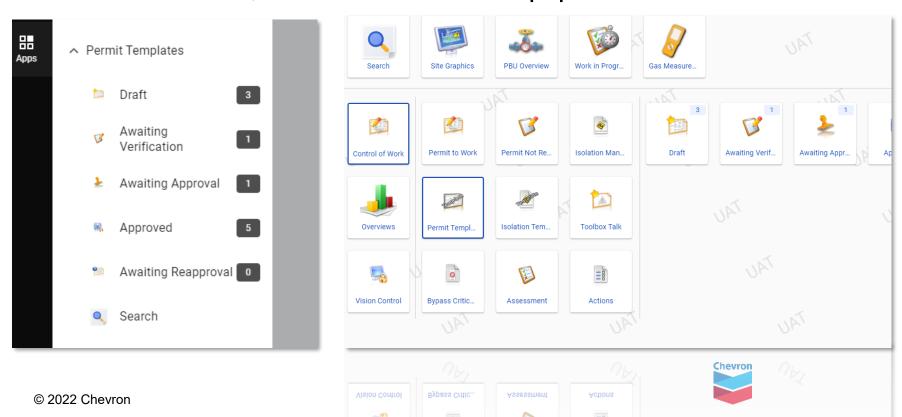
ePTW Tool Creating a permit template

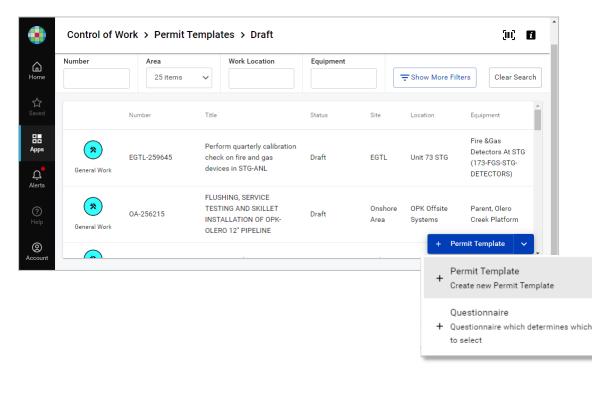


Permit templates

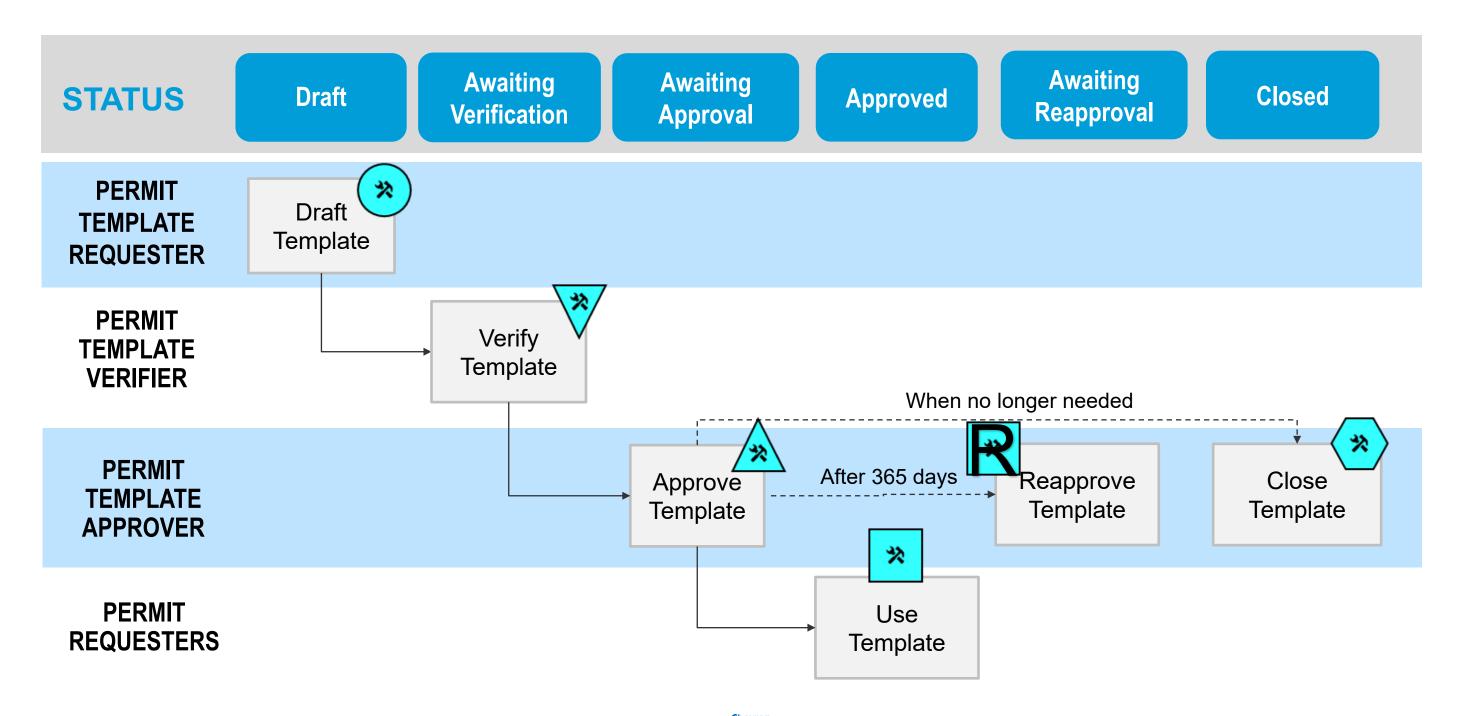
- Used for repetitive, regularly occurring, nonvariable activities
- Created via the 'Permit Templates' icon
- Available for all permit activities
- Follows a similar workflow to that of a permit
- Same fields as permit except for planned start/end dates, work location and equipment

- If a template has 'Full' isolation requirement, an Isolation Template must be attached
- Valid for up to 365 days
- Template is not the working document.
 - Permit created from the approved template will be the working document





Permit template creation workflow





Knowledge check

What are the 5 ways you can initiate a permit?

What information must you still enter even if using a permit template?

True or False?

When copying a permit, you don't have to worry about the hazards and controls.

What is the difference between copying a permit and using a permit template?



ePTW Tool Permit not required



Tracking work not requiring a permit

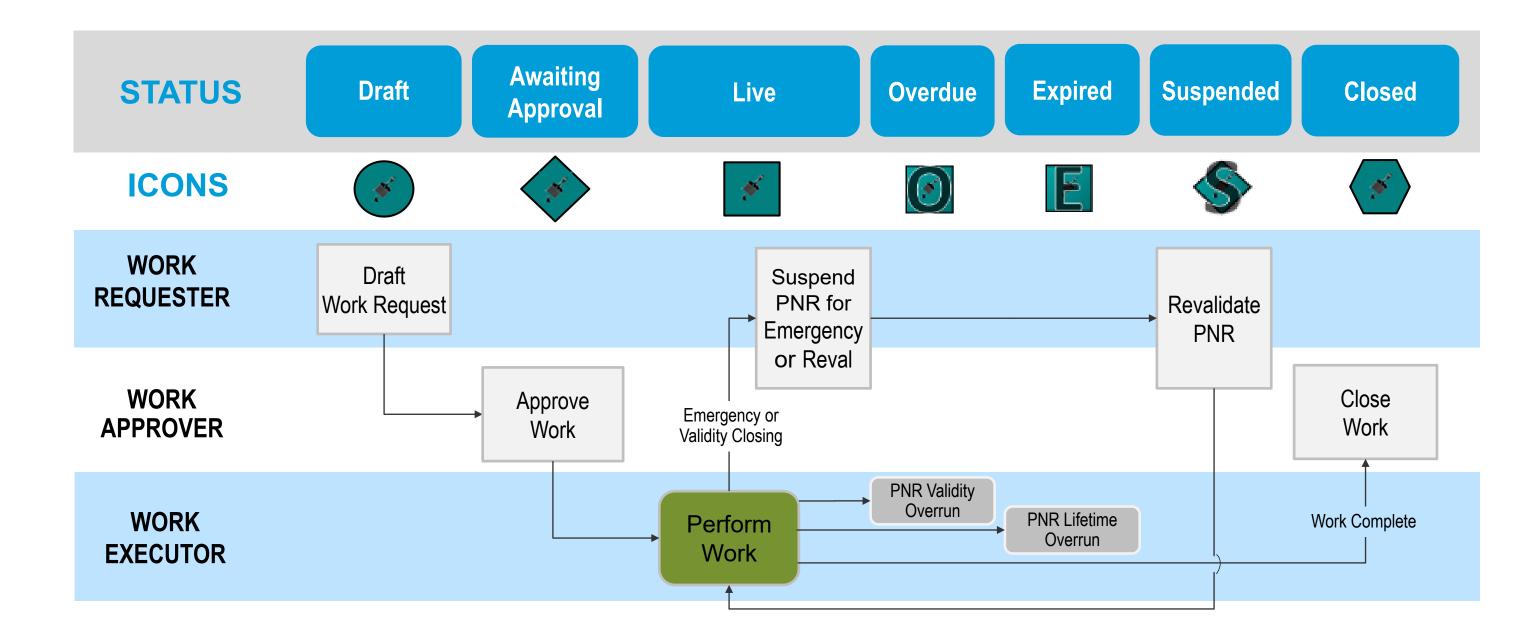
- Many sites want to have visibility to all work currently underway – even if a permit is not required
- Having visibility to all work enables control of work
- Workflow where "permit not required" is less rigid
 - No validation requirement
 - No "Mutual Exclusive" roles
 - A single user can execute the entire workflow if BU COW process allows
- Permit not required work will show up on site graphics







Permit not required workflow





Permit not required (PNR)

video demo



Questions or comments





Knowledge check

True or False?

A PNR work request must be approved by someone other than the requester.

True or False?

PNR work will show up on site graphics.

True or False?
A PNR is valid for 30 days, just like a regular permit.

True or False?

You are required to use PNR workflow for work that does not require a permit.



ePTW Tool

Bypassing critical protection

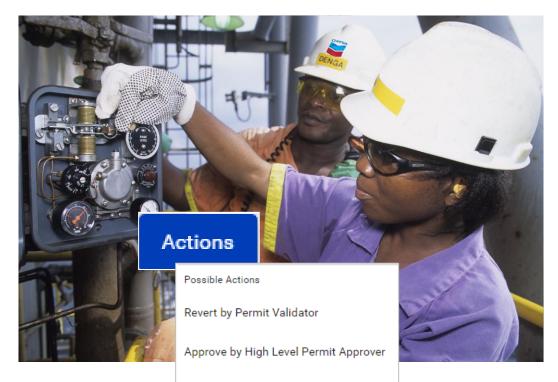


Bypass critical protection

A Bypass Critical Protection (BCP) can be created to ensure safe operations or execution of work when a critical protection system or device will not perform its designed function.

• A BCP:

- Must be identified as an electrical, mechanical, safety, or instrument/process type
- Has its own distinct workflow
- Has a maximum lifetime of 1 year
- Can be standalone or attached to a permit(s)
- A BCP can be added via the Action button of a permit(s) and after adding, will be visible in the Attachments section
- A BCP will be reflected on site graphics with an orange and white striped icon:



Add ICC

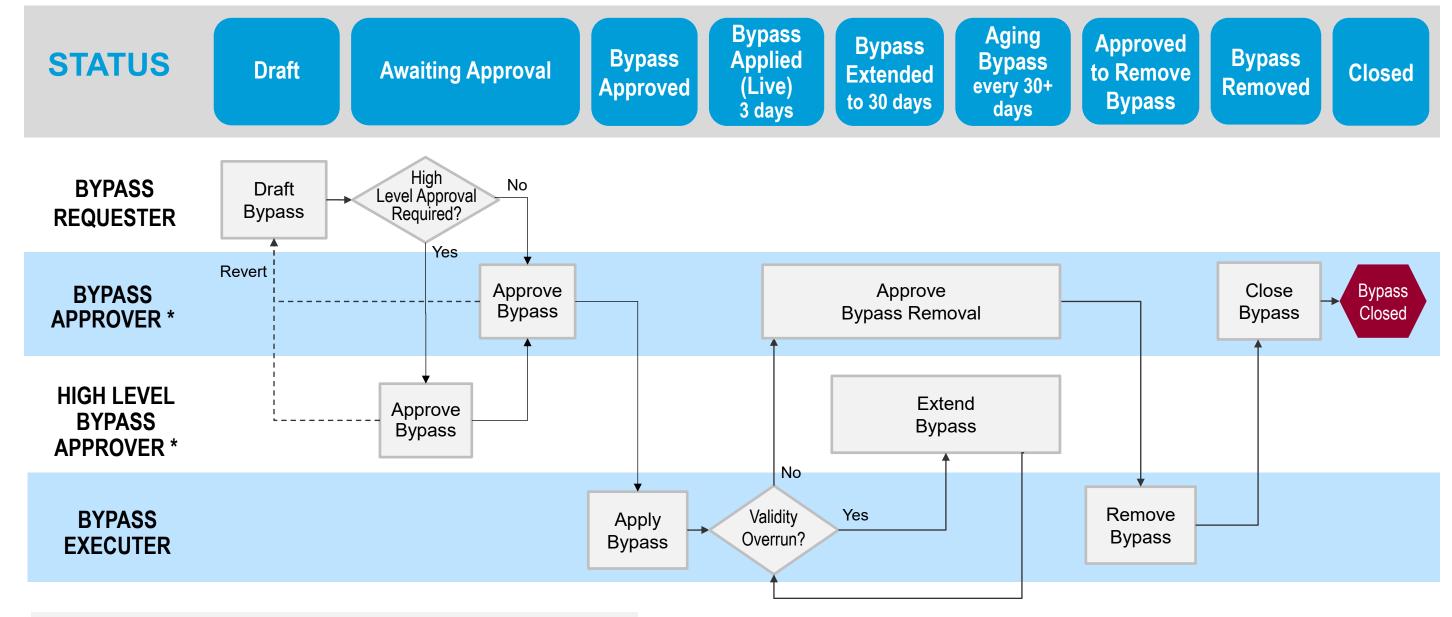
Attach a Toolbox Talk

Attach a Bypass Critical Protection

Add or edit dependencies



BCP workflow



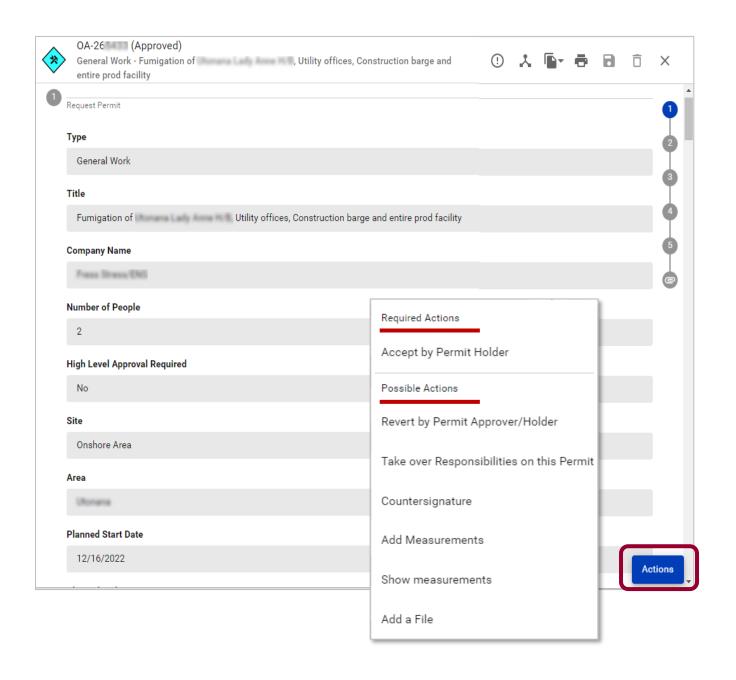
^{*} Bypass Approver and High Level Bypass Approver may not be the same person.



ePTW Tool Additional permit actions



Action button



© 2022 Chevron

- Action button appears on each permit
- Required Actions and Possible Actions will vary based on the status of the permit
 - Required Actions indicate an action required to move the permit forward
 - Possible Actions indicate other options available

Let's review some of the available actions you will see in various statuses





Possible actions

Add or edit dependencies

Creates a dependency from this permit to another permit, enforcing a rule about when the permit can go live or start

Add a countersignature

Allows adding an additional signature if deemed appropriate

Add a file

Link or upload files such as a rescue plan, external hazard analysis, or other supporting document(s)

Add ICC

Adds a link to an isolation that is associated with the permit

Add measurements

Allows user to add measurements for specific substances as indicated in the permit



Possible actions

Attach a Bypass Critical Protection	Adds a Bypass Critical Protection to the permit
Attach a Toolbox Talk	Adds a Toolbox Talk attachment to the permit to be signed by the work crew acknowledging work scope, hazards and controls before work starts
Copy permit	Creates a new permit, copying information from the existing permit such as type, title, site, description, work location, equipment, etc. to streamline permit creation
Create a template from this certificate	Saves populated information (except for dates, etc) as a template to be used in creating other permits – must be approved through template workflow
Delete permit	Deletes a permit ('Draft' or 'Awaiting Validation' status only)
Mark as not copyable	Restricts a permit from being copied to create a new permit



Possible actions

Revalidate by Permit Approver

Allows a Permit Approver to revalidate a suspended or overdue permit

Revert by Permit Approver/Holder

Allows a permit approver or a permit holder to revert a permit back to the previous status in the workflow for edits or additional evaluation

Show measurements

Shows a list of all measurements taken for the permit, including the date, time, substance, value, gas detector number, measurement signer and any remarks.

Suspend by Permit Approver/ Permit Holder

Allows a Permit Approver or a Permit Holder to suspend a permit for revalidation or in the case of an emergency

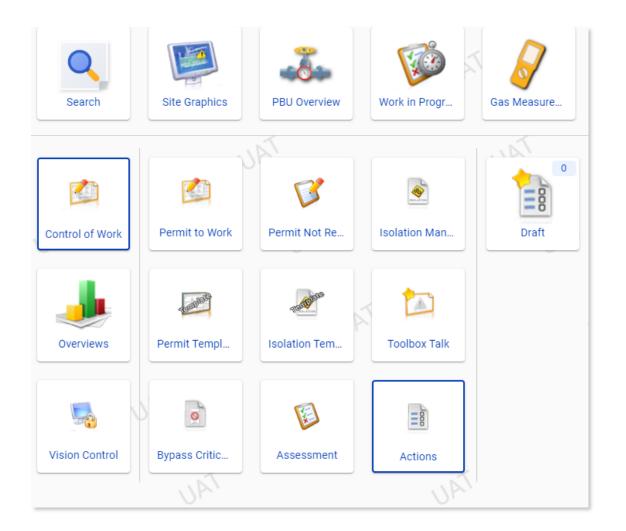
Take over responsibilities on this permit

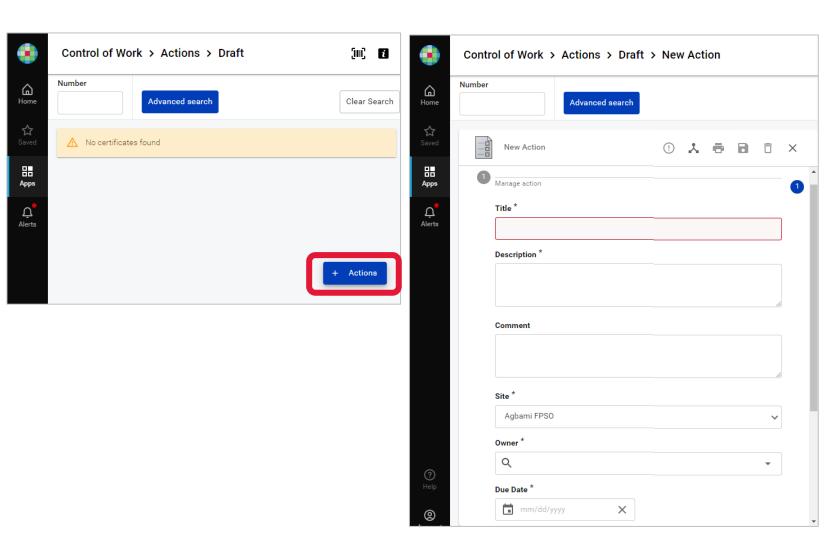
Allows a user to take over the responsibilities of either Permit Approver or Permit Holder on a permit



Stand-alone action items

- A stand-alone action item can be created, allowing assignment of a task to a specific "Owner"
- Action items are not associated with a specific permit or isolation

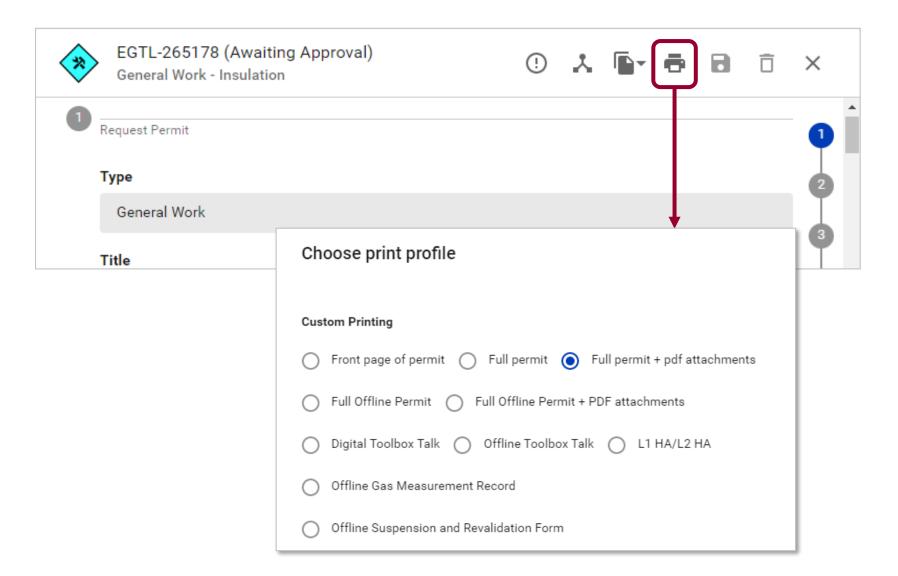


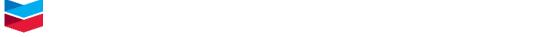




Printing

- ePTW users have the option to print from anywhere in the permit.
- There are many print options within the print profile, including printing a full permit with attachments or printing on specific permit parts
- "Offline" printed forms include signature boxes and spaces for entering information such as gas measurements or confined space entrant logs





123

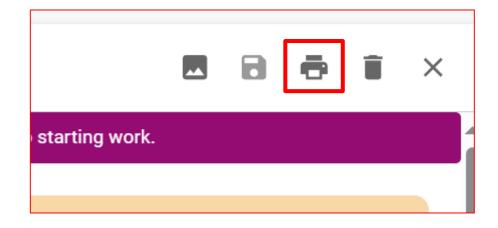
Printing SWC(s)

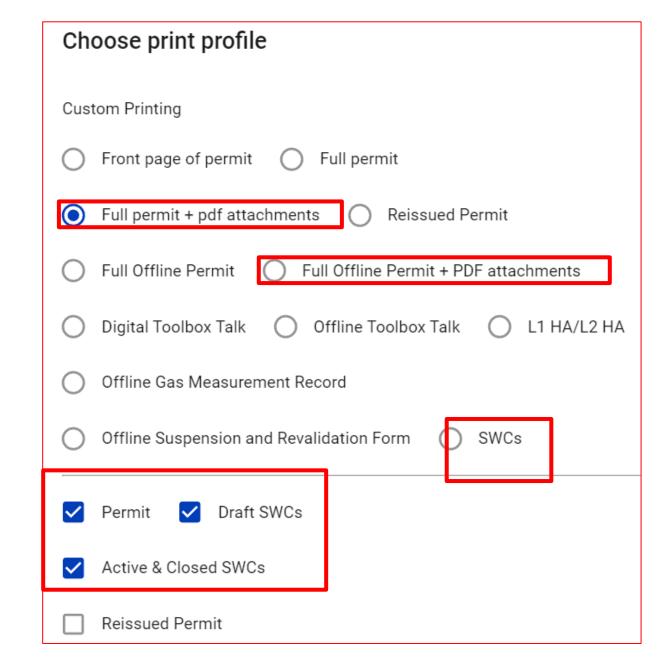


SWC(s) can be printed in several ways from the print profile window:

- Full permit + PDF attachments
- Full offline permit +PDF attachments
- SWC(s)
- Draft SWC's For offline SWCs
- Active & Closed SWCs

SWC(s) can also be printed out individually from the SWC attachment







ePTW Tool

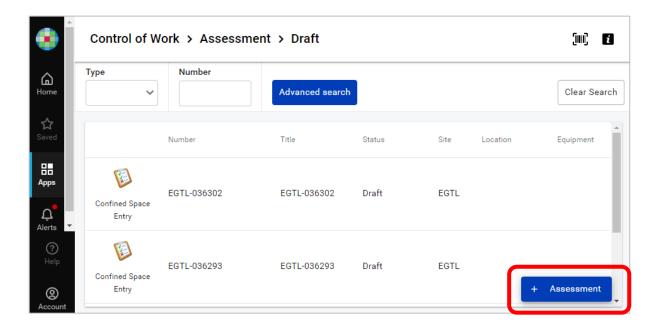
Assessments

(Follow BU guidance)



Assessment forms

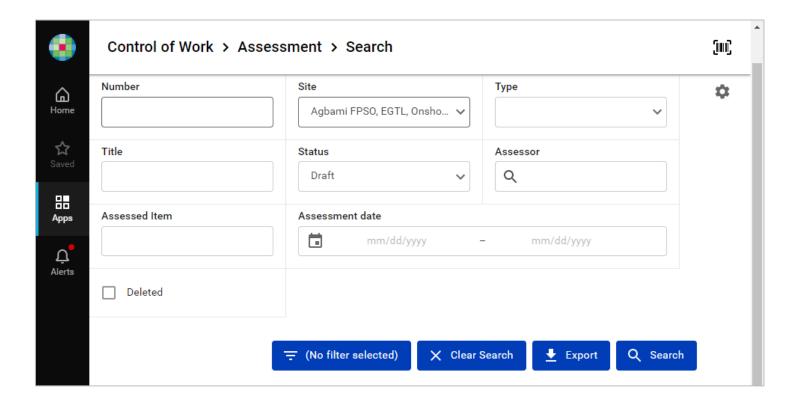
- A work assessment, aligned with corporate V&V standards may be completed directly in the tool
- The ePTW assessment form includes types and questions for:
 - Open Flame Hot Work
 - De-Energized Electrical Work
 - Excavation
 - Confined Space Entry
 - Lifting & Rigging
 - Working at Height
 - Isolation
 - De-isolation





Associating assessment to permit or isolation

- An Assessment can be associated to a specific permit or isolation
- A Search function is embedded in the assessment to help locate the associated permit or isolation
- Search filters include:
 - Area
 - Turnaround
 - Number
 - -Site
 - Equipment
 - Title





Assessment forms

Assessment form contains 2 sections and is aligned with Corporate V&V standards.

General Assessment
Same questions for all assessment types

1. There are NO Short Service Employees (SSE) on the crew.	
○ No ○ Yes ○ N/A	
+ Add action	
If there are SSEs on the crew, is their mentor on site?	
○ No ○ Yes ○ N/A	
+ Add action	
3. Were the Start Work Checks or Essentials Checklist used?	
○ No ○ Yes ○ N/A	

In-Field Assessment
Assessment type specific questions

Workforce is able to show the location of each energy isolation point
○ No ○ Yes ○ N/A
+ Add action
T Add action
Workforce knows that atmospheric conditions are safe for hot work
○ No ○ Yes ○ N/A
+ Add action
3 Qualified Gas Tester tested atmospheric conditions prior to starting work and
. is able to describe gas detector use including acceptable atmospheric limits
No Yes N/A
//

^{*} All "No" responses require comments.



ePTW Tool

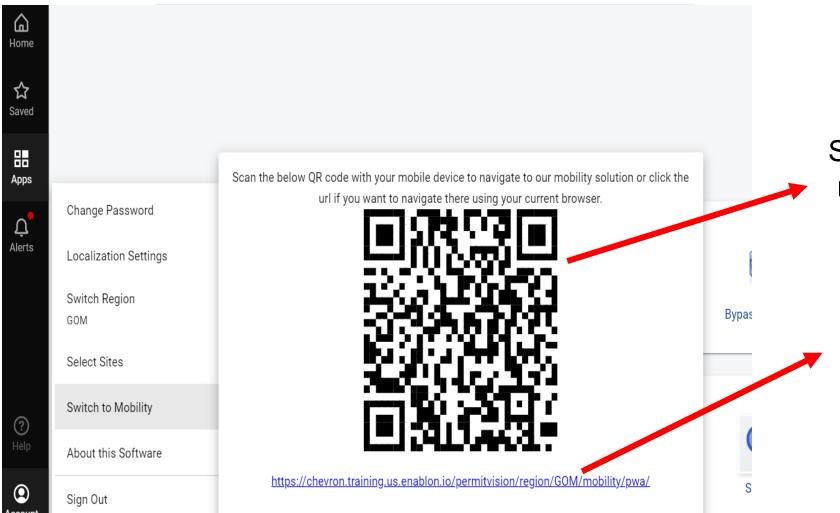
Progressive web app

(Follow BU guidance)



Progressive web app access

- The ePTW progressive web app (PWA) enables access from a mobile device
- The app can be accessed by clicking the "Accounts" icon on the bottom left of the page and then "Switch to Mobility"

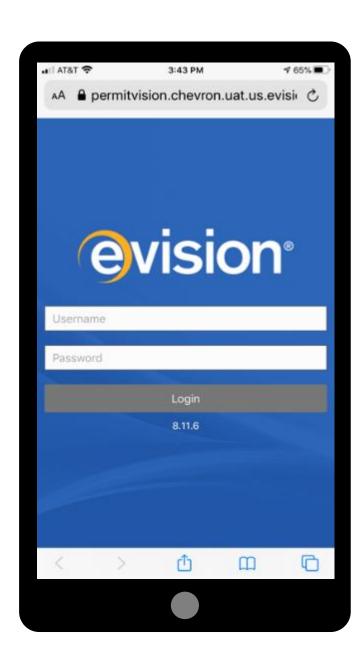


Scanning the QR code from the camera of a mobile device will allow access to the PWA app on the mobile device

Accessing the PWA link will bring up a Desktop version of the PWA app



Logging in to the app



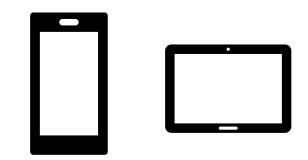
- Login to the app varies based on user/environment:
 - -Chevron users:
 - Utilize multi-factor authentication (MFA) via Chevron single signon environment and <u>Microsoft Authenticator</u> app.
 - MFA must be installed on devices accessing PWA app
 - Downloaded from Apple, Google App Stores
 - Enables single sign-on experience for Chevron users
- Third Party/Contractors:
 - Access PWA app via contractor environment
 - Requires a username and password (like over-the-shoulder signing) managed by ePTW User Administrator

Depending on the device and platform, PWA can be installed and/or saved to the users' home screen, run in the browser and/or retain saved passwords



App functionality

- Only limited functionality is available within the app.
 - o For example, you cannot create a permit from within the app
- User must log in to the app while connected to the internet
- Then, functionality differs depending on internet connectivity



Functionality available via app (with connectivity)



PERMITS

Permit Validator

Validate

Permit Approver

- Approve
- Suspend
- Re-validate
- Re-validate for test
- Close

High Level Permit Approver

Approve

Permit Holder

- Accept
- Suspend
- Re-accept
- Re-accept for test
- Closing

Functionality available via app (a) with or without connectivity (if already logged in)

PERMITS

Add work-in-progress review

ASSESSMENTS

Complete assessment

GAS MEASUREMENTS

Add measurements

PRESSURE BUILD UP

Add pressure buildup

ISOLATIONS

Isolation Authority

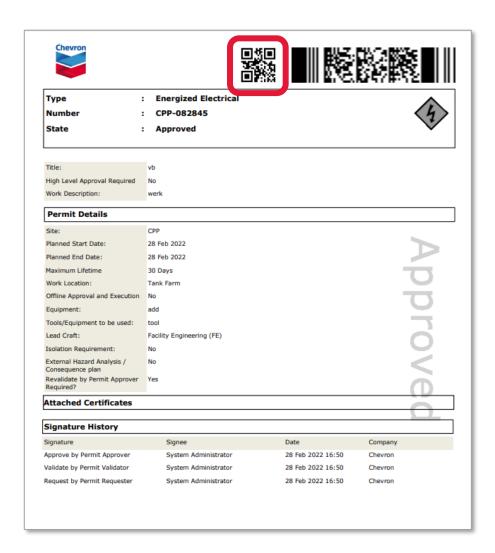
- Confirm isolation
- Confirm de-isolation
- Confirm de-isolation for test
- Confirm re-isolation

Isolation Verifier

- Verify isolations
- Verify de-isolations for test
- Verify re-isolations



Accessing a record within the app

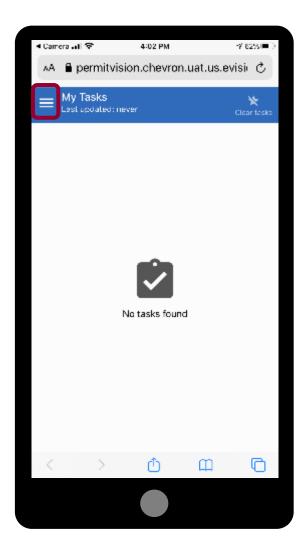


 When in the app, scanning QR code on permit printouts and isolation tags will take you directly to that record.

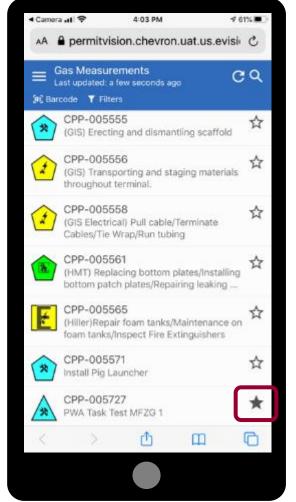


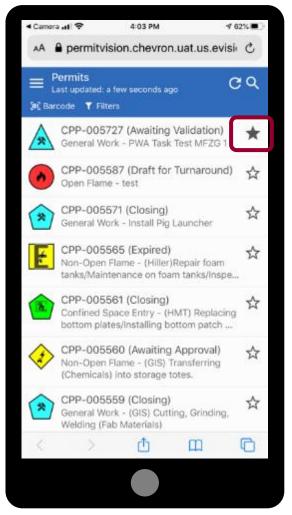
Assigning tasks

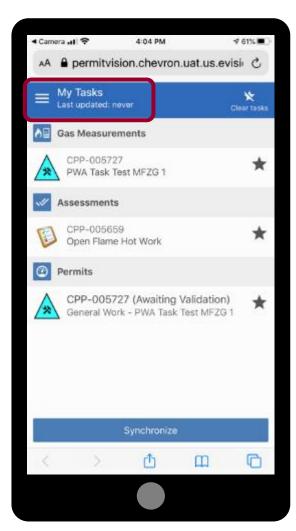
To complete activities in the app, "tasks" must be assigned while connected to the network (i.e., with internet connectivity).



4:02 PM MichelleForrester@chevr... My Tasks Last updated: never Add new task for offline Gas Measurements Last updated: never Assessments PBU Measurements Last updated: never Isolations Last updated: never Permits Last updated: a few seconds ago Log Out m







Click on **menu** next to left of **My Tasks**

Select module from list of mobility modules.

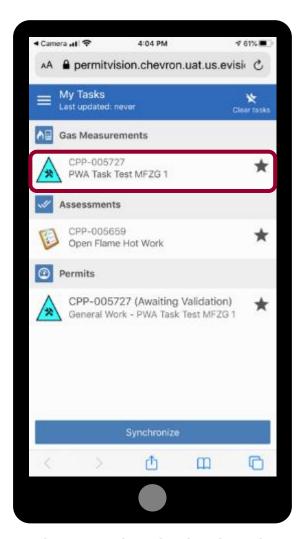
Select the **star** to assign records from applicable modules to your **My Tasks** list.

Selected records will display in your **My Tasks** list.

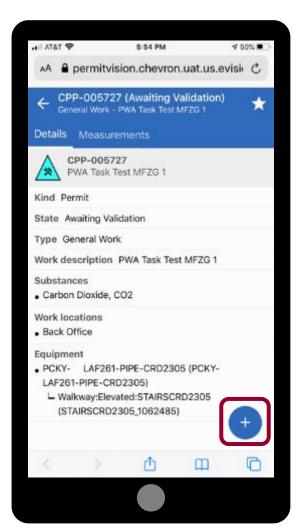


Completing assigned tasks

Tasks may be accessed and completed from the My Tasks list within the app.



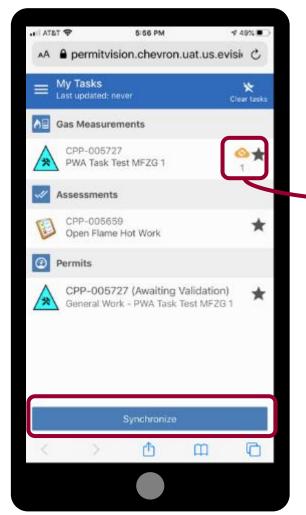
Access the desired task from **My Tasks** list.



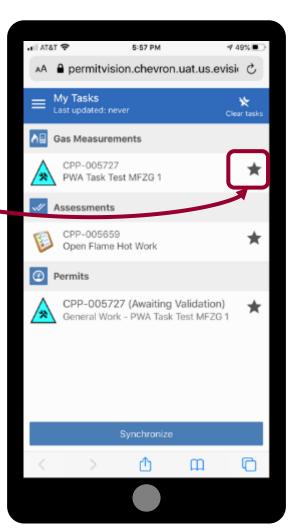
Click 'Add' (+) to add a gas measurement record.



Enter and save gas measurement information then select back arrow to return to My Tasks.



When connected, select **Synchronize** at bottom of page to send info to ePTW.

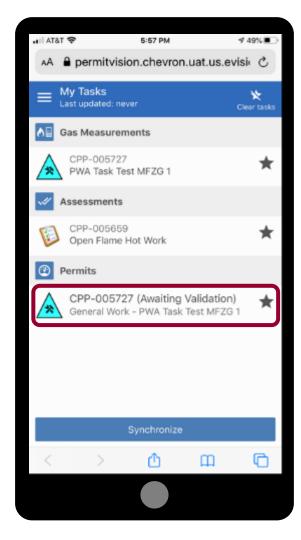


Web App will send results back to Permit Vision and **Sync icon will disappear**

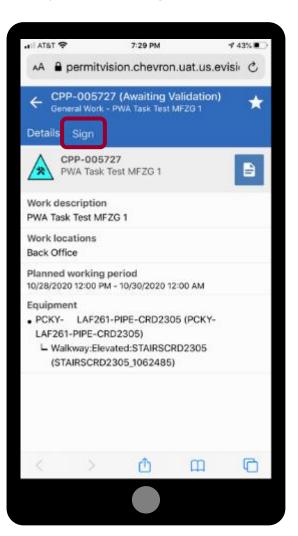


Completing assigned workflow tasks

Workflow may be progressed within the app by signing as logged in or as another user.



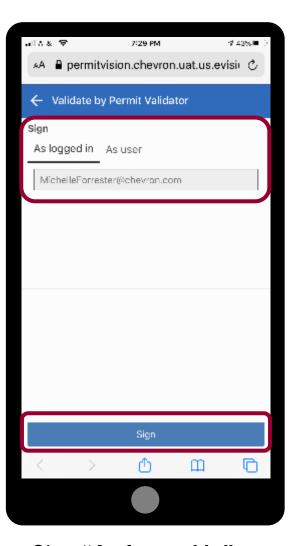
Access the **permit or isolation record**.



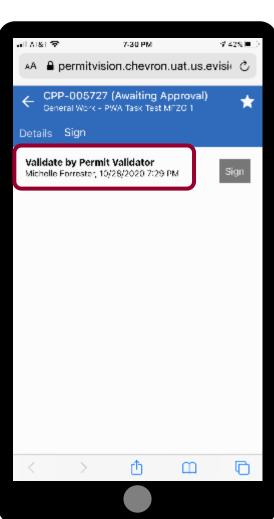
Access the **Sign** tab.



Click the **Sign** button.



Sign "As logged in" or "As user" and then click Sign.

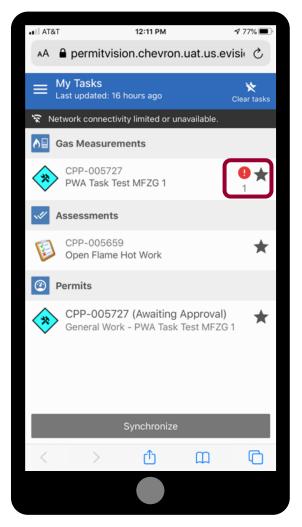


The signature will be logged in the record.

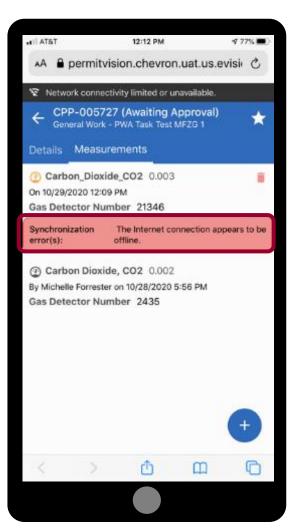


Synchronization errors

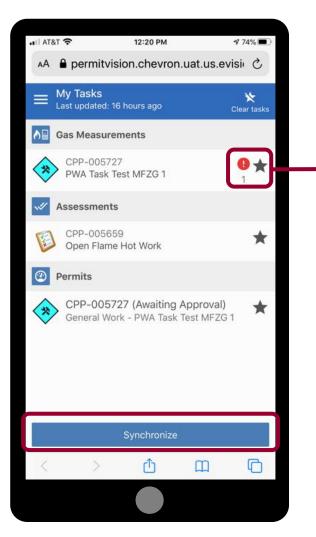
If synchronization is not successful, users will see an error.



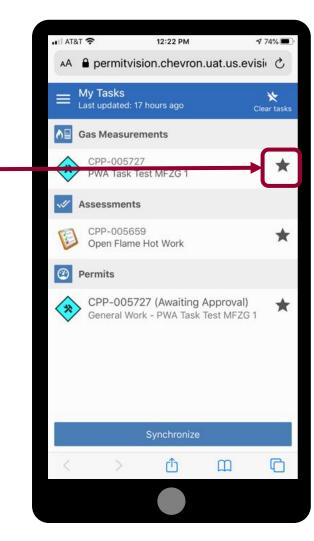
When there is a synchronization error, the Cloud symbol will be replaced by a red circle with an exclamation mark



Open task again and access the appropriate tab to **view error**.



When issue is resolved, **Synchronize** again to upload record.

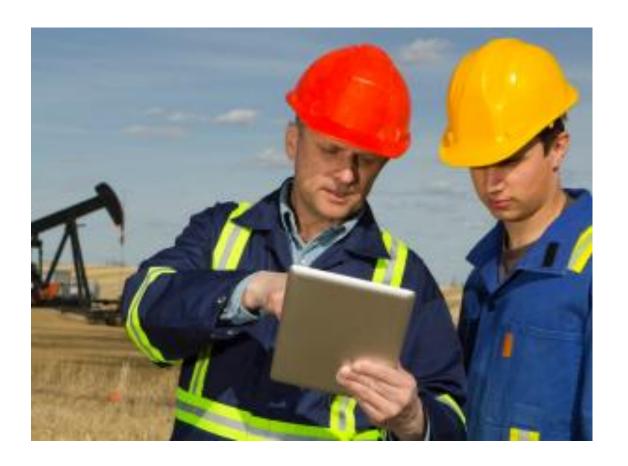


The error message will go away when successfully synchronized.



PWA wrap up

- The progressive web app can be a helpful tool for completing some tasks in the field
 - PWA does not completely replace the full web version of the application
- While some tasks can be completed when offline, internet connectivity is required for:
 - Logging into the app
 - Adding tasks to My Tasks list
 - Signing to progress permit workflow
- There is no automatic sign on with the app; all PWA users must have a username and password





ePTW Tool Support



Support options available to you

Help within ePTW Tool



 Help tab in left navigation of the tool that provides helpful tips for each step of a record



© 2022 Chevron

ePTW Tool Support Center



go.chevron.com/ePTWsupport

- Quick reference guides with step-by-step instructions for specific activities
- Videos showing how to complete activities
- Frequently asked questions
- · Advanced users for each site

Advanced Users in our Site



- People you can go to within our site for assistance and guidance with tool use:
 - Name
 - Name
 - Name



Tool administration

Local update



SYSTEM ADMINISTRATOR

For all regions and sites

Can manage items at region and site level, *plus*:

All database configuration

REGION ADMINISTRATOR

For assigned region and site(s) within region

Can manage items at site level, *plus*:

- Manage sites and areas within region
- Managing company names
- Manage lists
- Manage permit questionnaire
- Manage hazards and controls
- Manage lessons learned
- Manage equipment, site graphics and sitespecific toolbox talk uploads

USER ADMINISTRATOR

For assigned site(s)

Manage users for site

For user access issues, contact our site's User Administrator, [enter name]

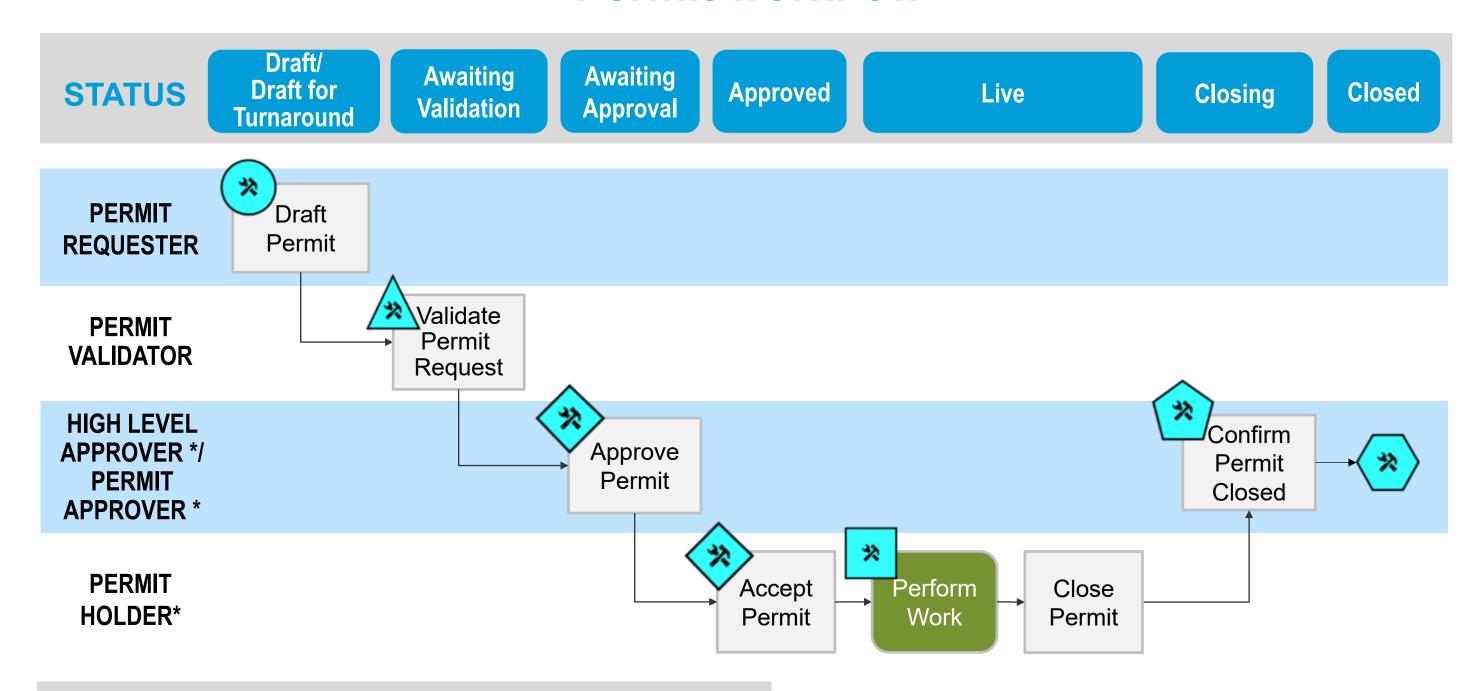


ePTW Tool Final review and wrap up



142

Permit workflow



^{*} Mutually exclusive – same person may not be Permit Approver, High Level Approver or Permit Holder



Permit roles and responsibilities

Permit Requester



Permit Validator



High Level Permit Approver



Permit Approver



Permit Holder



PRIMARY RESPONSIBILITIES

- Create permit draft
- Initiate hazard analysis
- Attach supporting documentation if required
- Sign permit draft moving to "Awaiting Validation" status
- Review permit information, including Hazard Analysis and attachments
- Add permit dependencies to aid in control of SIMOPS
- Sign permit moving to "Awaiting Approval" status
- Approve permits as required for highrisk work activities
- Review permit information and area conditions
- Set (re)approval period
- Discuss permit with Permit Holder
- Approve/re-approve permit
- Final close out of permit

- Accept or re-accept permit
- Add toolbox talk form and communicate scope to work party members
- Safely execute work scope
- Close out a permit noting work complete/incomplete

CAN ALSO...

- Edit or delete permit when in 'Draft'
- Edit permit information when applicable or revert to 'Draft'
- Delete permit/template when in 'Draft' or 'Awaiting Validation'

- Revert permit back to 'Awaiting Validation' if edits required
- Accept permit suspensions
- Suspend a permit before end of approved period if work carrying over



Transition to ePTW

Our site will be transitioning to the ePTW tool on

Month Day, Year



What does this mean for you?

- You will receive a communication at go live officially instructing you of our transition to the new tool
 and more information on access
- Paper permits in progress on go live date should be completed on paper
- Any new permits created on or after go live date should be drafted in ePTW tool
- If you need assistance with the tool on or after go live date, reach out to an advanced user
- If you have access issues, contact our tool admin



Did we meet our objectives?

- ☐ Understand why we are moving to electronic permitto-work (ePTW)
- ☐ Obtain introduction to the ePTW tool, Permit Vision
- Become familiar with the user interface and tool navigation
- ☐ Gain awareness on system workflow roles
- ☐ Become familiar with permit types and icons
- ☐ Understand permit and hazard analysis requirements
- ☐ Learn permit workflow from creation through close
- ☐ Learn how to search, copy and edit permits
- ☐ Understand how to create and use permit templates
- ☐ Understand how SWC, TBT, and BCP work with permits
- ☐ Understand where to go for support using the tool





Closing



Thank you for your participation today!

- We look forward to using the tool in our site to:
 - Minimize risk and maximize safety with enhanced control of work in our site
 - Increase operational efficiency in planning and issuance of permits
 - Increase effectiveness of processes, including workforce and asset utilization

In the spirit of continuous improvement, please complete the feedback form provided by your instructor

