



Pigging Procedures

- Go to the receiver.
- Create a new, "Site Specific" JSA and obtain any required signatures of personnel in work area if conditions warrant.
- Check to ensure that pressures are not abnormally high prior to pigging the line.
- Ready the receiver by ensuring that bypass is half closed to ensure pig enters receiver. Also ensure that all remaining valves on receiver are OPEN.
- Check for any leaking valves or any other hazards due to component failure.
- LOTO the bypass valve that was half closed on receiver.
- Check and record liquid levels in receiver tank
- Communicate with coworkers if working in a group.
- Go to launcher.
- Update your JSA with site specific hazards if conditions warrant.
- Prepare any needed tools.
- Upon arrival of the launcher check for any leaking valves or any other hazards due to component failure.
- Check pressure.
- Place 4 gas monitor by Pressure Alert Valve. Test the Pressure Alert Valve to ensure that it is in working condition and to check for H2S.
- Place bucket under cap and ground appropriately.
- Write on bottom of pig with sharpie (initials, date, launcher).
- Blow launcher barrel flat using designated blow down valve. Always be conscious of wind direction to ensure no sources of ignition or personnel are in close proximity.
- Close blow down valve.
- Open the Pressure Alert Valve.
- Test blow down by opening the head valve (the valve in line with the cap) slightly. Once you hear the Pressure Alert Valve hiss, you are certain that there is no obstruction in the chamber and you can close the head valve.
- Open blow down valve slowly.
- Carefully open cap.
- Load pig.
- Prior to closing the cap, clean and lubricate threading on cap.
- Launch pig by following these steps. Always be aware that the flow of gas must not be interrupted during normal launch procedures.
 - Open back valve to equalize the pressure throughout the equipment
 - Purge the oxygen from the launcher by slowly cracking the blow down. After a few seconds close the blow down.
 - Close the back valve to prevent an unintentional launch
 - Open head valve
 - Open the back valve
 - Close bypass
 - Listen for launch and watch gage for needle movement.

- Open bypass
- Isolate chamber.
- Communicate that launch was successful with coworkers if working in a group.
- Clean up any mess and pack up tools.
- Return to launcher, ensure that:
 - Bypass valve is OPEN
 - Chamber is isolated
 - Pressure Alert Valve is closed
 - Blow down is closed
- Document the Energy Isolation and pig launch.
- Go to receiver.

- Upon arrival of the receiver update JSA if anything has changed.
- Retrieve any needed tools including a water sample bottle.
- Place 4 gas monitor by Pressure Alert Valve. Test the Pressure Alert Valve to ensure that it is in working condition and to check for H₂S.
- Close bypass valve and wait a minute to see if pig was stuck in valve. If pig has not arrived, wait for pig to arrive and load into the receiver barrel.
- OPEN the bypass valve.
- Place bucket under cap and ground appropriately.
- Isolate the chamber.
- Blow launcher barrel flat using designated blow down valve. Always be conscious of wind direction to ensure no sources of ignition are in close proximity.
- Close blow down valve.
- Open the Pressure Alert Valve
- Test blow down by opening the head valve (the valve in line with the cap) slightly. Once you hear the Pressure Alert Valve hiss, you are certain that there is no obstruction in the chamber and you can close the head valve.
- Open blow down valve.
- Carefully open cap.
- If possible collect sample of water /condensate produced in line.
- Receive pig.
- Check the bottom of the pig to make sure it is the pig you just launched.
- Prior to closing the cap, clean and lubricate threading on cap.
- Close cap.
- Close the Pressure Alert Valve
- While blow down is open crack head valve to purge receiver of oxygen.
- Close blow down.
- Pick up tools and clean up mess.
- Label the water sample.
- Check and record liquid levels in receiver tank
- Communicate that you received the pig with coworkers if working in a group.
- Document the Energy Isolation and the pig retrieval.
- Clean up any mess and pack up tools.
- Return to launcher, ensure that:
 - Bypass valve is OPEN

- Chamber is isolated
- Pressure Alert Valve is closed
- Blow down is closed

When using the Buddy System, always ensure that clear communication is used via radio or telephone, or in person. **Never take any action** without alerting or notifying buddy as such could result in serious harm or accident to buddy. Always work in a calm orderly fashion as to not create an unsafe environment. Be conscious of happening events and use your STOP WORK AUTHORITY when necessary.

I _____ have read and understand the **E&B Methanol Procedures**

Updated: 01/16/13.

I understand that I am required to follow these procedures. I also understand that my failure to do so may result in disciplinary action, termination and or increased personal liability.

Employee Signature

Date

Supervisor Signature

Date