

**Purpose/Application**

Cold cutting pipe is a procedure of cutting piping where introducing heat (i.e., through a cutting torch or a grinder) isn't an option. Where operational lines are being cut, no work may proceed until the line operator/owner has demonstrated that the system has been isolated and proven zero energy in accordance with CPES's COP 05 – Lock Out Tag Out. Note\* cathodic systems are often overlooked during the Lock Out process, where cathartic systems are installed, verify zero energy before proceeding with work.

\*Note: Before any work may proceed on existing systems, the potential presence of hazardous substances (e.g., NORMs, Benzene, Iron Oxide, H<sub>2</sub>S) must be addressed with the site Owner/Prime Contractor. If the presence of hazardous substances cannot be ruled out then mitigation (e.g., monitoring, training, specialized PPE, etc.) must be implemented before starting the task (see SWP/COP relevant to the substance for more information).

**PPE**

- Strike Minimum PPE

**TRAINING**

- Strike New Worker Orientation

**TOOLS/EQUIPMENT**

- Pipe-cutters
- Air compressor or generator (where required)
- Mechanical Lifting device
- Chain grip pliers
- Bonding cables

#	Job Steps	Hazards	Control Measures
1	Prepare the cutting equipment	❖ Motion – Pinch points around equipment, lifting, moving material	<ul style="list-style-type: none"> <li>▪ Pre-use inspections on all equipment</li> <li>▪ Use spotters when moving equipment into location</li> <li>▪ Utilize mechanical lifting or team lifting to move tools and equipment</li> </ul>
2	Cut pipe	<ul style="list-style-type: none"> <li>❖ Motion – Pinch points around equipment, lifting, rotating equipment</li> <li>❖ Motion – Energy in the pipe that may be released when the pipe is cut causing the pipe to move</li> <li>❖ Electrical - Stored energy (e.g., cathodic, static)</li> <li>❖ Toxic - Release of fumes or hazardous substances</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure the pipe is securely supported during the cut</li> <li>▪ Ensure all workers are out of the line of fire when completing the cut</li> <li>▪ Spill tray in place under the cut</li> <li>▪ Only experienced personnel are to operate the equipment</li> <li>▪ Monitor cords and lines during the cut to keep them from becoming cut</li> <li>▪ Monitor for hazardous substances as per job-hazardous assessment</li> <li>▪ Ensure the pipe on either side of the cut is bonded using booster cables and chain grip pliers.</li> <li>▪ Do not remove bonding cables until atmosphere is proven safe</li> </ul>
3	Remove the cold cutter from the Pipe	❖ Motion - Existing stored energy (tension) causing pipe to spring	<ul style="list-style-type: none"> <li>▪ Proper body positioning</li> <li>▪ If cutters do not rotate freely on pipe. Step back and reassess.</li> </ul>

#	Job Steps	Hazards	Control Measures
		❖ Motion - Pinch Points, Cutter's binding against pipe	Control pipe tension with mechanical aids so cutters can rotate freely and be removed safely. <ul style="list-style-type: none"> <li>▪ Use of proper tools</li> <li>▪ Once it is confirmed there is zero stored energy place pipe cones/skids under pipe for support the pipe that was cut.</li> </ul>
4	Remove pipe section	❖ Motion - Pinch points around equipment, lifting, rotating equipment, swinging load ❖ Gravity – Falling pipe	<ul style="list-style-type: none"> <li>▪ Keep the work area free of all debris</li> <li>▪ Pre-inspect all rigging and lifting equipment</li> <li>▪ Use taglines to control load</li> <li>▪ Keep all workers clear of the area under the pipe</li> <li>▪ Follow all safe work permit conditions</li> </ul>
5	Cap exposed pipe ends	❖ Motion – Sharp edges ❖ Chemical – Spills or leaks	<ul style="list-style-type: none"> <li>▪ Have spill kit available</li> <li>▪ Use approved end caps</li> </ul>
6	Cleanup	❖ Motion – Tripping on material, pinch points around equipment ❖ Gravity - Heavy lifting, dropping material	<ul style="list-style-type: none"> <li>▪ Maintain housekeeping in the work area</li> <li>▪ Use mechanical lifting systems, lift in teams, as required</li> </ul>

**REFERENCE/REGULATIONS**

- COP 01 Hydrogen Sulphide
- COP 05 Lock Out – Tag Out
- COP 09 Safe Work Permit System
- SWP 11 Compressed Air
- SWP 18 Tools / Equipment / Machinery
- SWP 33 Hazardous Materials / Products /Substance
- SWP 34 Cranes Hoists and Lifting Devices
- SWP 48 Pipe Handling

---

Developed by:	1. <u>Dave McLeod</u>	_____	Date:	<u>November, 2006</u>
Revised by:	1. <u>Angie Anton</u>	_____	Date:	<u>December 30, 2008</u>
Review by:	1. <u>Rory Jordan</u>	2. <u>Chad Palazeti</u>	Date:	<u>February 28, 2024</u>
	3. <u>Trevor Shelton</u>	4. <u>Brian McConnell</u>		_____
	5. <u>Vladimir Kopaev</u>	6. <u>Dylan Dressler</u>		_____
Approved by:	1. <u>HSE Committee</u>	_____	Date:	<u>May 14, 2024</u>

---