

June 28, 2021

Pipe Coating Application

PURPOSE

To provide guidance in safe pipe and structural coating application. This safe work practice applies to all Canadian Plains Energy Services (CPES) employees and contractors.

Due to the various coating material and systems, it is important to have clear communication with the client/owner regarding the coating requirements.

** The nature of coating application can often present its own hazards including such work in trenches, work at heights, use of propane torches, etc. this SWP is intended to be used in conjunction with the following additional procedures (where required):

- SWP 46 Trenches and Excavations
- SWP 35 Propane Cylinders and Torches
- SWP 56 Scaffolds and Temporary Platforms
- SWP 17 Chemical. Biological Hazards and Harmful Substances
- SWP 82 Trench Boxes
- COP 03 Confined Space
- COP 06 Fall Protection
- SJP 03 Jeeping or Holiday Detection

Responsibilities

To provide guidance in safe installation and use. This safe work practice applies to all CPES employees and contractors.

Supervisor

- Ensure the approved type and quantity of coating material is available as per the client requirements while being stored and handled correctly
- Ensure application instructions/requirements are available to the workers
- Ensure all required PPE is available to the workers.
- Confirm the application system (epoxy or tape, etc.) required and application method (brush, roller, etc.)
- Ensure all tools associated to coating is available (heat probe, dew point meter (DPM) tool(s), depth gauge, etc.)
- Confirm worker coating qualification certificate for the applied coating system is current
- Verify the voltage of Jeeper is available (where required)
- Ensure workers are fit tested for half mask respirators (where required)
- Supervise all coating, jeep calibrations and jeeping activities
- Ensure the SDS for the coating material is available and current

Worker

- Confirm the required type of coating material is on site
- Verify the application material is clean and ready to use
- Follow Manufacturer's Qualified Application Procedure (MQAP) instructions for application and storage (some coating material is temperature sensitive)
- Confirm the coating material has not expired if an expiration date is on the material
- Confirm current calibration certificates for jeepers and Jeep meters
- Confirm Jeeper Voltage(s)
- Review the SDS for the coating material prior to use



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PPE

- CPES minimum requirements
- Respiration protection (as required by product SDS)
- Disposable gloves and suits (as required by product SDS)

Training

- CPES WHMIS 2015 training
- Coating application from the manufacture (as required)
- Fit test for half mask respirators (where required)
- Use of Jeeper and Jeeper calibrator (as required)

Hazards & Concerns

Work outdoors

Chemical Exposure

Work in Excavations

- Exposure to weather conditions
- Ground and surface condition
- Falls on same level/from heights
- Use of propane torches
- Work in excavations
- Environmental



Note: Verify client/site coating material requirements and classifications

GENERAL Coating Material - PRECAUTIONS

THE DO's

- DO HIAC vour work task.
- DO Complete a pre-job safety meeting to review the manufactures application steps.
- DO Review the coating material SDS with crew.
- DO Ensure all PPE required is available as per SDS and is in good condition to be used safely.
- DO Assess whether the area will be or may become a confined space entry (CF-S-28).
- DO Verify the coating system required to use (tape, two part poxy).
- DO Confirm heat requirements for the pipe.
- DO Properly prepare the area prior to beginning coating:
 - 1. Confirm the pipe or structure to be coated has been blasted properly
 - 2. Set up plywood/spill containment under the piping in place
 - 3. Have any required hoarding set up (ensure proper ventilation)
 - 4. Inspect the propane torch, hose, and bottle prior to use (follow CPES Tiger torch use SWP)
 - 5. Confirm required documents to be completed are available
- DO Follow ladder use SWP 25 (if required).
- DO Verify Adequate ventilation can be maintained.
- DO Choose the appropriate tools (brush, roller or other) for application.
- DO Confirm coating material thickness during application with a Wet Film Thickness Gauge (WFT).
- DO Store/dispose of used brushes and rollers according to the SDS requirements.



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 DO Maintain appropriate body position when applying material on the bottom of the piping, take breaks and stretch between applications.

- DO Confirm proper locations of egress and exit points (attachable ladders, stairs, etc.) for any work in excavations.
- DO Utilize tag lines when lifting components of the trench box for assembly or when placing the trench box, all trench box installation should be done in accordance with SWP 82 Trench Boxes.
- DO Clear the work area of all workers not required for the assembly.
- **DO** Store the coating material as per the manufacture's specifications.
- DO Use spill trays to contain potential spills when working on below ground coating.
- DO Verify fire extinguishers are available in the work area.
- DO Use mixing drill/equipment to mix thick products as required.
- DO Remove all contaminated clothing be careful not to touch bare skin with epoxy exposed gloves.
- DO Wash off any contaminated bare skin immediately with soap and water.
- DO Review the first aid requirements for the product before use.
- DO Be aware of the Pot Life for your coating system in reference to the environment conditions and material temperature.

THE DON'TS

- DO NOT Eat, drink, or smoke when apply or mixing any coating material.
- DO NOT Prepare the two-part epoxy material too early allowing the material to set up in the container.
- DO NOT Hold the container of two part poxy with bare hands as the container will be worm/hot.
- **DO NOT** Use the Jeeper without properly calibrating the Jeeper.
- DO NOT Touch the end of the Jeeper brush or coil (high or low voltage).
- DO NOT Use expired or contaminated coating material.
- DO NOT Get coating material on the skin, in vehicles or other equipment.
- DO NOT Set brushes or rollers on any vehicles or piping and allow to dry.
- DO NOT Dispose of contaminated brushes or tools unless product is mixed, fully dry and permitted for disposal by product SDS.
- DO NOT Use brittle or thin mixing sticks for product.

ADDITIONAL INFORMATION:

SWP 46 Trenches and Excavations

SWP 35 Propane Cylinders and Torches

SWP 56 Scaffolds and Temporary Platforms

SWP 17 Chemical. Biological Hazards and Harmful Substances

SWP 82 Trench Boxes

COP 03 Confined Space

COP 06 Fall Protection

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REFERENCES:

Alberta OHS Code:

Part 32: Excavating and Tunnelling

Part 5: Confined Space

Part 4: Chemical Hazards, Biological Hazards and Harmful Substances

British Columbia Occupational Regulation:

Part 20: Construction, Excavation and Demolition

Part 9: Confined Spaces

Part 5: Chemical Agents and Biological Agents

Saskatchewan Occupational health and Safety Regulations:

Part 17: Excavations, Trenches, Tunnels and Excavated Shafts

Part 18: Confined Space Entry

PART 24: Silica Processes and Abrasive Blasting

Manitoba WSH Regulations

Part 26: Excavations and Tunnels

Part 15: Confined Space

Part 36: Chemical and Biological Substances

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