



IDAHO PIPELINE CORPORATION

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June 20, 2024

Dustin B. Hubbard
Director, Western Region PHMSA
12300 W. Dakota Ave., Suite 110
Lakewood CO 80226

Ref: Idaho Pipeline NOPV, PCP, and PCO (CPF 5-2024-003-NOPV)

Dear Director Hubbard,

On May 22, 2024, Idaho Pipeline Corporation received a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order, CPF No. 5-2024-003-NOPV, concerning our pipeline in Idaho. The NOPV alleged eight potential violations of the Pipeline and Hazardous Materials Safety Administration regulation 49 CFR Part 195.

With respect to items 4, 5, and 8 of the Proposed Compliance Order, Idaho Pipeline provides the following questions and or corrective actions.

PCO Item 4: Implement Cathodic Protection on Breakout Tanks 1, 2, and 9 (49 CFR 195.563(d))

Item 4 of the NOPV states that: IDPC failed to demonstrate the implementation of cathodic protection on breakout tanks (BOTs). Specifically, IDPC is not cathodically protecting jurisdictional BOTs 1, 2, and 9. Additionally, IDPC failed to conduct electrical inspections to monitor, identify, and correct possible stray current corrosion issues pertaining to unprotected tank bottoms specified in ANSI/API RP 651.⁵

Footnote #5 States: *See ANSI/API RP 651 Section 5.2.1.3 Inspection/Corrosion History (a.-g.)*

PCO Item 4: Clarification is Required on this Item

CFR 49 CFR 195.563(d) states, "Bare pipelines, breakout tank areas, and buried pumping station piping must have cathodic protection in places where regulations in effect before January 28, 2002, required cathodic protection as a result of electrical inspections. See previous editions of this part in [49 CFR](#), parts 186 to 199."

IDPC's O&M manual section 5.16.3 already addresses these cathodic protection requirements. "IDPC's rectifier protects the 4" line from the yard to the Idaho Air National Guard Facility and the 8" line from the IDPC facility to the Marathon Tie-in Facility. The underground piping in the yard is a

separate district protected by 4- 32lb hi output magnesium anodes.” The question arises is how “breakout tank area” is interpreted. IDPC interprets this to be the piping in and around the breakout tanks, not the tanks themselves.

IDPC’s O&M manual section 5.21.12 addresses cathodic protection on our breakout tanks. *“Currently there is no cathodic protection system installed on IDPC breakout tanks 1 & 2 because they are built on an asphalt base. Tank 9 is completely off the ground on steel saddles mounted to a concrete base, If in the future a cathodic protection system is warranted and installed each system will be inspected to ensure that operation and maintenance of the system are IAW API Recommended Practice 651”*. This section complies with CFR 195.573(d) which states *“Breakout tanks. You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API RP 651 (incorporated by reference, see [§ 195.3](#)). However, this inspection is not required if you note in the corrosion control procedures established under [§ 195.402\(c\)\(3\)](#) why complying with all or certain operation and maintenance provisions of API RP 651 is not necessary for the safety of the tank.* Section 5.3.3 of API 651 indicates that “cathodic protection is ineffective on tanks on a continuous asphalt cushion”.

We have consulted with our cathodic protection specialist, Corrosion Solutions, in trying to interpret this violation. Their response was “ There is no way to cathodically protect a tank bottom that is not in direct contact with the soil”. Tanks 1 and 2 are on asphalt and cannot be cathodically protected. The entire surface of tank 9 is above ground and is only subject to atmospheric corrosion.

As it pertains to testing for external corrosion of tank bottoms on tanks 1 and 2 this is performed with the out of service 653 inspections (ultrasonic testing of floor bottom). IDPC’s O&M manual section 5.21.1 states. *“Note: Tanks 1 & 2 were inspected IAW API 653 in May 2010. Inspection reports for tanks 1 and 2 states, “The tanks are suitable for a 20-year service run until the next required internal inspection”*. IDPC believes that we comply with CFR 49 194.563(d) and .573(d) and require additional information explaining why our process is not in compliance with this requirement.

PCO Item 5: Cathodic Protection required must comply with NACE SP0169

IDPC cathodic protection system did not comply with one or more of the applicable criteria and other considerations for cathodic protection contained in paragraphs 6.2.2 in NACE SP 0169.

IDPC failed to provide records or demonstrate its cathodic protection system met all § 195.571 requirements. Specifically, IDPC’s August 31, 2022, cathodic protection (CP) survey revealed Test Point 8 (yard galvanic district) had a measurement value of -579 mV and, during the field inspection performed on October 14, 2023, IDPC Test Point 8 had an observed CP measurement of -525 mV which does not meet the -850 mV or the 100mV shift criteria specified in NACE SP 0169 paragraph 6.2.2.

Accordingly, the IDPC cathodic protection system did not comply with one or more of the applicable criteria and other considerations for cathodic protection contained paragraphs 6.2.2 in NACE SP 0169 as is required by § 195.571.

PCO Item 5: Request Extension to Complete Requirement

At the time of this inspection IDPC Personnel informed inspectors that when rectifier was installed in Feb 2022. It was discovered that there was a depression in the system caused by electrical equipment grounded to the Idaho Power grounding system. Investigations led to the belief that 2 motorized valves were the cause. IDPC ordered and had the Isolation gaskets installed in Jul 22. There was still a depression in the system. The rectifier connections changed to go to just the 8" line to only the Marathon and 4' lines to the guard. The 8/31/22 Survey showed just the yard deficiency. Corrosion Solutions recommends a galvanic anode system to cover piping in the yard. Anodes were on order at time of Inspection.

Galvanic Anodes were installed on November 11, 2022. The December 22 survey still showed depression. January 23 trouble shooting began. The metal shed in the back of the yard was in contact with conduit and piping. Rubber material was purchased to provide isolation of the building the piping. One motorized valve was not in operation and removed. Parts were ordered for the other motorized valve and converted to a manual valve. Depression still existed.

May 23 it was determined that every flange or union on the system piping before it went into the ground would be needed. IDPC personnel spent the entire summer identifying locations that required isolation. It was determined 46 locations required an isolation gasket or dielectric union. September 23, IDPC Personnel forwarded isolation plan to Corrosion Contractor and Corporate office for review and approval to order parts. October 23 parts were ordered. Only 88% of the order was received. Ten dielectric couplers were on backorder. IDPC elected to wait until all parts were received before scheduling a contractor to install gaskets and unions. Even if one union or gasket was not in place the entire system would still be depressed.

The last 10 unions were received on Feb 24. At that time IDPC scheduled to install gaskets in mid-April.

April 19, 2024, all gaskets and unions installed. The rectifier was connected to yard underground piping.

April 26, 2024, Readings on yard piping were still low and rectifier amperage was increased to compensate for additional piping to polarize.

May 15, 2024, Underground piping in yard still depressed . Corrosion Solutions recommended removing the rectifier connection to the underground piping in the yard. This was done and the pipe to soil read was still deficient (-651 mV). IDPC is in process of going flange by flange and dielectric union trying to identify issues with isolation.

IDPC is working with Corrosion Solutions to improve the cathodic protection of the underground piping in the yard.

Due to the intensive process to inspect every isolation point we request PHMSA grant us an additional 180 days to get the proper protection on the line.

PCO Item 8: Failed to Demonstrate That Stray Currents Alleviated From Breakout Tanks

IDPC failed to demonstrate that stray interference currents have been alleviated on breakout tanks (BOTs), specifically for BOTs 1, 2, and 9.

IDPC installed a cathodic protection (CP) system on February 26, 2022, to protect buried line pipes. Currently, BOTs 1, 2, and 9 do not have cathodic protection. No actions were implemented to monitor, identify, and possibly correct any stray current corrosion issues pertaining to the unprotected tank bottoms as specified in ANSI/API RP 651.7

Accordingly, IDPC failed to implement a program to identify, test for, and minimize the detrimental effects of stray currents as required by § 195.577(a).

Footnote 7: See ANSI/API RP 651 Section 5.2.1.3 Inspection/Corrosion History (requiring stray current problems to be investigated and determined in the evaluation of inspection/corrosion history).

PCO Item 8: Corrective Action

CFR 49 part 195.577(a) states, "For pipelines exposed to stray currents, you must have a program to identify, test for, and minimize the detrimental effects of such currents."

This requirement refers to pipelines not breakout tanks.

API RP 651 section 7 is Design of Cathodic Protection Systems. As stated in item 4. Tanks 1 and 2 are on asphalt cushions and a cathodic protection system will not work. As for tank 9 it does not apply since the tank is completely above ground.

API RP 651 Section 5.2.1.3(e) does indicate that stray current problems should be investigated on tank bottoms. Section 5.3.3 indicates that cathodic protection is ineffective on tanks on a continuous asphalt cushion.

IDPC's breakout tanks 1 & 2 were built in 1987. The tanks were grounded when they were constructed. These tanks have always had a way to alleviate stray currents. Breakout tank 9's entire surface is above ground and not in contact with the soil and is only subject to atmospheric corrosion.

IDPC will include stray current readings on all future annual cathodic protection surveys.

Summary and Requested Relief

IDPC is seeking clarification of item 4 of the PCO. This item pertains to IDPC's failure to install cathodic protection on breakout tanks 1, 2 & 9. IDPC contends that since tanks 1 & 2 are on an asphalt cushion cathodic protection is not achievable. Regarding tank 9 the entire surface of the tank is not in contact with the ground and is only susceptible to atmospheric corrosion.

Regarding item 5 IDPC is seeking a 180 extension to bring the underground piping in the yard to meet the -850 mV criteria. Due to the number of isolation points in the system, IDPC needs the time to investigate each connection to determine if it is the cause of the depression in the system.

IDPC contends that we are following CFR 49 part 195.577(a) and API 651 section 5.2.1.3 and 7. However we have noted that it would be beneficial to have Stray current readings taken annually and will have them included in annual cathodic survey.

Sincerely,

A handwritten signature in blue ink that reads "Robert L. Rose". The signature is written in a cursive style with a large 'R' and a distinct 'L'.

Robert L. Rose
President

cc: E. Rose
E. Kidd
W. Adams