

*Gas Operations and Maintenance Manual* 

**Remedial Action to Correct Deficiencies** 

Description	To document corrective actions taken when Cathodic deficiencies are discovered
Regulatory Applicability	<ul> <li>All Cathodically Protected Pipe</li> <li>☑ Regulated Transmission Pipelines</li> <li>☑ All Gathering Pipelines</li> <li>☑ All Distribution Pipelines</li> </ul>
Frequency	Within a timely manner after the discovery of a Cathodic deficiency
Reference	49 CFR 192.465 External Corrosion Control: Monitoring
Forms / Record Retention	F-192.465(d) CP Remediation Log / Life of Pipeline System
Related Specifications	None
OQ Covered Task	<ul><li>0061 Inspect or Test Cathodic Protection Bonds</li><li>0101 Inspect Rectifier and Obtain Readings</li></ul>

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## **Remedial Action to Correct Deficiencies**

## **Procedure Steps**

- 1. Upon the discovery of a cathodic deficiency that cannot be corrected onsite, immediately contact the District / Division Manager.
- 2. Remedial action will be developed and (pending approval) started. This process will be documented using F-192.465(d).
- 3. WTG must promptly correct any deficiencies indicated by the inspection and testing required by paragraphs (a) through (c) of CFR 192.465. For WTG transmission pipelines, we must develop a remedial action plan and apply for any necessary permits within 6 months of completing the inspection or testing that identified the deficiency. Remedial action must be completed promptly, but no later than the earliest of the following: prior to the next inspection or test interval required by this section; within 1 year, not to exceed 15 months of the inspection or test that identified the deficiency; or as soon as practicable, not to exceed 6 months, after obtaining any necessary permits.
- 4. In the event that traditional remediation techniques do not correct deficiencies, the corrosion SME will determine the extent of the area with inadequate cathodic protection for gas transmission pipelines where any annual test station reading (pipe-to-soil potential measurement) indicates cathodic protection levels below the required levels in CFR 192 appendix D and implement the following.
  - a. WTG must investigate and mitigate any non-systemic(location-specific) inadequate cathodic protection causes on all transmission pipelines.
  - b. If the deficiencies affect entire geographical area/segment the issue is deemed to be systemic. To address systemic causes, WTG must
    - i. Conduct close interval surveys in both directions from the test station with a low cathodic protection reading at a maximum interval of approximately 5 feet or less. WTG must complete close interval surveys required by this section with the protective current interrupted unless it is impractical to do so for technical or safety reasons.
    - ii. Remediate areas with insufficient cathodic protection levels, or areas where protective current is found to be leaving the pipeline, in accordance with paragraph (d) of CFR 192.465.
    - iii. Confirm the restoration of adequate cathodic protection following the implementation of remedial actions undertaken to mitigate systemic causes of external corrosion.

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