

**Pennsylvania Department of Environmental Protection**  
**Division of Storage Tanks**  
December 8, 2022

**IMPORTANT NOTICE**

**Depleted or Failing Galvanic Sacrificial CP Systems  
Between Double-Bottomed Tank Bottoms**

When a cathodic protection (CP) system is required to protect an aboveground storage tank (AST) from corrosion, 25 Pa. Code, §245.532(b) requires the CP system to be designed by a corrosion expert and maintained to provide protection against external corrosion for the operational life of the tank system.

If a galvanic sacrificial CP system, situated between bottoms of a double-bottomed AST, no longer produces adequate potential readings to pass periodic surveys, a facility has a few options to address the violation of § 245.532(b) for failure maintain the CP system.

1. The CP system may be repaired by an appropriate DEP-certified installer so that the CP system functions as originally designed by the corrosion expert and receives passing CP survey results. If the CP system repair is conducted on a large or field constructed AST and it constitutes a major modification, a DEP-certified inspector is also required to conduct a modification inspection of the CP system repair work.
2. If it is determined by a corrosion expert that CP is not necessary between the tank bottoms, the CP system may be properly disconnected and decommissioned. This is a Major Modification requiring use of an appropriate DEP-certified installer. A DEP-certified inspector is also required to inspect major modifications to large ASTs and field-constructed ASTs.
  - The facility should provide DEP with a signed statement from the corrosion expert after the disconnection and decommissioning work. The statement should include:
    - Written certification that, based upon conditions between the tank bottoms, CP was not necessary in that space, and it is acceptable to continue to operate that tank with a non-functional or depleted CP system between the tank bottoms.
    - The corrosion expert's signature.
    - The corrosion expert's credentials (e.g. P.E. seal or NACE certification).

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3. If disconnecting and decommissioning the CP system is impossible because there is no external access to that CP system, the facility may do the following:

A. Retain the services of a corrosion expert to evaluate the space between the tank bottoms to determine if CP is necessary, as stated in § 245.531(b).

- If the corrosion expert determines that CP is not necessary in the space between the tank bottoms, the facility should provide DEP with a signed statement from the corrosion expert. The statement should include:
  - Written certification that, based upon conditions between the tank bottoms, CP is not necessary in that space, and it is acceptable to continue to operate that tank with a non-functional or depleted CP system between the tank bottoms.
  - The corrosion expert's signature.
  - The corrosion expert's credentials (e.g. P.E. seal or NACE certification).

**AND**

B. Retain the services of a DEP-certified IAF or IAM (inspector), as appropriate, to determine the next Out-of-Service Inspection due date for the aboveground storage tank.

- In collaboration with the corrosion expert, a DEP-certified inspector, as appropriate, should provide DEP with a signed letter setting the next required Out-of-Service Inspection due date. The letter should include:
  - Recalculated remaining service life of the tank bottom based upon API 653 (or other applicable industry standard).
  - Due date for the next Out-of-Service Inspection, based upon the recalculated remaining service life. The next Out-of-Service Inspection due date should not exceed 10 years from that date of a failed CP survey or an already-established Out-of-Service Inspection due date (whichever occurs first).
  - DEP-certified inspector's signature and certification number.
  - The corrosion expert's signature.
  - The corrosion expert's credentials (e.g. P.E. seal or NACE certification).

Following DEP's receipt of the documentation referenced in A and B, DEP will review the documentation and may approve the facility to "abandon" the galvanic CP system between the bottoms of the double-bottomed tank.

In order to prevent contamination of environmental media by releases from aboveground storage tanks, correct interpretation of the regulations and proper maintenance and modification of CP systems is important. If you have questions or desire clarification of the above, please contact the Division of Storage Tanks at (717) 772-5599 and ask to speak with a member of the Aboveground Storage Tank Technical Unit.