



DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF UNDERGROUND STORAGE TANKS  
4th Floor, L & C Tower  
401 Church Street  
Nashville, TN 37243

**GALVANIC CATHODIC PROTECTION TESTING SURVEY**

- This form must be utilized to evaluate underground storage tank (UST) cathodic protection systems in the State of Tennessee.  
➤ Access to the soil directly over the cathodically protected structure that is being evaluated must be provided.

**I. UST FACILITY**

**II. UST OWNER**

NAME:		NAME:	
FACILITY ID NUMBER:		COMPANY:	
ADDRESS:		ADDRESS:	
CITY:	COUNTY:	CITY:	STATE:

**III. CP TESTER**

TESTER'S NAME:		COMPANY:	
ADDRESS:		LIST CERTIFICATION, IF ANY:	
CITY:	STATE:	PHONE NUMBER:	

**IV. REASON SURVEY WAS CONDUCTED (mark only one)**

- Routine - 3 year     Routine – within 6 months of installation     Re-survey after fail     Re-survey after repair/modification

Date next cathodic protection survey must be conducted by: \_\_\_\_\_ (required within 6 months of installation/repair, or every 3 years).

**V. CATHODIC PROTECTION TESTER'S EVALUATION (mark only one)**

- PASS**    All protected structures at this facility pass the cathodic protection survey and it is judged that adequate cathodic protection has been provided to the UST system (indicate all applicable criteria by completion of Section VII).
- FAIL**    One or more protected structures at this facility fail the cathodic protection survey and it is judged that adequate cathodic protection has not been provided to the UST system (complete Section VIII).
- INCONCLUSIVE**    If the remote and the local do not both indicate the same test result on all protected structures (i.e., both pass or both fail), then the result is inconclusive, and further evaluation by a corrosion expert is necessary (complete Section VI).

My signature below is affirmation that I have sufficient education and/or experience to meet the definition of cathodic protection tester in Tennessee Rule 1200-1-15-.01(4) [40 CFR 280.12], that I am competent to perform the tests indicated above, that test results on this form are a complete and truthful record of all testing at this location on the date shown, and that I am responsible for conclusions contained therein.

CP TESTER'S SIGNATURE: \_\_\_\_\_ DATE CP SURVEY PERFORMED: \_\_\_\_\_

**VI. CORROSION EXPERT'S EVALUATION (mark only one)**

The survey must be conducted and/or evaluated by a corrosion expert when: a) an inconclusive is indicated for any protected structure since both the local and the remote structure-to-soil potentials do not result in the same outcome (both pass or both fail); b) repairs to galvanized or uncoated steel piping are conducted or c) supplemental anodes are added to the tanks and/or piping.

- PASS**    All protected structures at this facility pass the cathodic protection survey and it is judged that adequate cathodic protection has been provided to the UST system (indicate all criteria applicable by completion of Section VII).
- FAIL**    One or more protected structures at this facility fail the cathodic protection survey and it is judged that adequate cathodic protection has not been provided to the UST system (indicate required action by completion of Section VIII).

CORROSION EXPERT'S NAME: \_\_\_\_\_ COMPANY NAME: \_\_\_\_\_

NACE INTERNATIONAL CERTIFICATION?     Yes     No    NACE INTERNATIONAL CERTIFICATION NUMBER: \_\_\_\_\_

My signature below is affirmation that I have sufficient education and/or experience to meet the definition of corrosion expert in Tennessee Rule 1200-1-15-.01(4) [40 CFR 280.12], that I am competent to perform the evaluation indicated above, and that I am responsible for its conclusions.

CORROSION EXPERT'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**VII. CRITERIA APPLICABLE TO EVALUATION (mark all that apply)**

- 850 ON**    Structure-to-soil potential more negative than -850 mV with respect to a Cu/CuSO<sub>4</sub> reference electrode with the protective current applied (applicable to any galvanically protected structure).
- 850 OFF**    Structure-to-soil potential more negative than -850 mV with respect to a Cu/CuSO<sub>4</sub> reference electrode with protective current temporarily interrupted (applicable only to galvanic systems where the anodes can be disconnected).
- 100 mV Polarization**    Structure tested exhibits at least 100 mV of cathodic polarization (applicable to galvanic systems where the anodes can be temporarily disconnected).

**VIII. ACTION REQUIRED AS A RESULT OF THIS EVALUATION (mark only one)**

- NONE**    Cathodic protection is adequate. No further action is necessary at this time. Test again by no later than the date specified in Section IV.
- REPAIR & RETEST**    Cathodic protection is not adequate. Repair/modification is necessary as soon as practical.

**IX. DESCRIPTION OF UST SYSTEM**

FACILITY NAME:			FACILITY ID NUMBER:		
TANK #	PRODUCT	CAPACITY	TANK MATERIAL	PIPING MATERIAL	FLEX CONNECTORS / LOCATION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

If metal flex connectors are present, are they corrosion protected?	<input type="checkbox"/> YES	Method:	<input type="checkbox"/> Isolation (booted)	<input type="checkbox"/> Isolation (contained in sump or no soil contact)
	<input type="checkbox"/> NO	Action taken:	<input type="checkbox"/> Attached Anode <sup>1</sup>	

<sup>1</sup> If the flex connectors are protected by sacrificial anodes, test accordingly and include the data with this form.

**X. DESCRIPTION OF CATHODIC PROTECTION SYSTEM REPAIRS AND/OR MODIFICATION**

Complete if repairs or modifications to the cathodic protection system are made or are necessary. Certain repairs/modifications as explained in the text of the TDEC cathodic protection guidance document (CGD-109) are required to be designed and/or evaluated by a corrosion expert (completion of Section VI required).

- Supplemental anodes for a sti-P<sub>3</sub><sup>®</sup> tank (attach corrosion expert's design or documentation industry standard was followed).
- Supplemental anodes for metallic pipe (attach corrosion expert's design or documentation industry standard was followed).
- Galvanically protected tanks/piping not electrically isolated (explain in "Remarks/Other" below).

Remarks/Other: \_\_\_\_\_  
 \_\_\_\_\_

## XI. UST FACILITY SITE DRAWING

### **AN EVALUATION OF THE CATHODIC PROTECTION SYSTEM IS NOT COMPLETE WITHOUT AN ACCEPTABLE SITE DRAWING.**

Attach detailed drawing or use the space provided to draw a sketch of the UST and cathodic protection systems. At a minimum, indicate the following: all tanks, piping and dispensers, all buildings and streets, all anodes and wires: location of CP test stations, Each reference electrode placement must be indicated by a code (1, 2, T-1, corresponding with the appropriate line number in Section XIII. of this form.



