

# STATE OF MISSISSIPPI

## GALVANIC (SACRIFICIAL ANODE) CATHODIC PROTECTION SYSTEM EVALUATION

- This form must be utilized to evaluate underground storage tank (UST) cathodic protection systems in the State of Mississippi.
- Access to the soil directly over the cathodically protected structure that is being evaluated must be provided.
- A site drawing depicting the UST cathodic protection system and all reference electrode placements must be completed.

I. UST OWNER		II. UST FACILITY	
NAME:		NAME:	ID #
ADDRESS:		ADDRESS:	
CITY:	STATE:	CITY:	COUNTY:

III. CP TESTER		IV. CP TESTER'S QUALIFICATIONS	
TESTER'S NAME:		NACE INTERNATIONAL CERTIFICATION NUMBER:	
COMPANY NAME:		MDEQ UST INSTALLER CERTIFICATION NUMBER:	
ADDRESS:		OTHER (EXPLAIN): _____	
CITY:	STATE:		

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

Routine - 3 year    
  Routine – within 6 months of installation    
  90-day 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 & every 3 years thereafter).

**VI. 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 criteria applicable by completion of Section VIII).

**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 IX).

**INCONCLUSIVE** Because a “pass” could not be achieved on both the local and the remote structure to soil potential measurements, the survey must be evaluated and/or conducted by a corrosion expert (complete Section VII).

CP TESTER'S SIGNATURE:	DATE CP SURVEY PERFORMED:
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**VII. CORROSION EXPERT'S EVALUATION (mark only one)**

The survey must be conducted and/or evaluated by a corrosion expert when: a) either the remote or the local structure to soil potential does not meet one of the accepted criteria; b) repairs to galvanized/bare steel piping is conducted or c) supplemental anodes are added without following an accepted industry code.

**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 VIII).

**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 what action is necessary by completion of Section IX).

CORROSION EXPERT'S NAME:	COMPANY NAME:
NACE INTERNATIONAL CERTIFICATION:	NACE INTERNATIONAL CERTIFICATION NUMBER:
CORROSION EXPERT'S SIGNATURE:	DATE:

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

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 (“850 on”). {This criterion is applicable to any galvanically protected structure}.

Structure-to-soil potential more negative than –850 mV with respect to a Cu/CuSO<sub>4</sub> reference electrode with protective current momentarily interrupted (“instant-off”).{This criterion is applicable only to those galvanic systems where the anodes can be temporarily disconnected}.

Structure tested exhibits at least 100 mV of cathodic polarization (“100-mV polarization”). {This criterion applies to galvanic systems where the anodes can be temporarily disconnected. It should be utilized only when the “instant off” potential of –850 mV or more negative criterion cannot be met}.

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

**NONE** Cathodic protection has been judged adequate. No further action is necessary at this time. Test again by no later than (see Section V).

**RETEST** Cathodic protection has been judged inadequate. Retest during the next 90 days to determine if “passing” results can be achieved.

**REPAIR & RETEST** Cathodic protection has been judged inadequate. Repair/modification of the cathodic protection system is necessary.

**X. DESCRIPTION OF UST SYSTEM**

TANK #	PRODUCT	CAPACITY	TANKS	PIPING	FLEX CONNECTORS
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

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

Complete if any repairs or modifications to the cathodic protection system are made or are necessary. Certain repairs/modifications as explained in the text of the MDEQ cathodic protection guidance document are required to be designed and/or evaluated by a corrosion expert (completion of Section VII 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: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**XIV. UST FACILITY SITE DRAWING**

Attach detailed drawing or use the space provided to draw a sketch of the UST and cathodic protection systems. Sufficient detail must be given in order to clearly indicate where the reference cell was placed for each structure-to-soil potential that is recorded on the survey forms. Any pertinent data must also be included. At a minimum you should 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 number (1,2,3...etc.) corresponding with the appropriate line number in Section XVI of this form.

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



