DATA ITEM DESCRIPTION

Form Approved
CMB No. 0704-0188

Corrosion Control Data for Buried Utility Systems

D1-FACR-80977

2 IDENTIFICATION NUMBER

3. DESCRIPTION / PURPOSE

3.1 The Corrosion Control Data For Buried Utility Systems enables the government to monitor, evaluate, and coordinate a contractor's corrosion control techniques and to justify buried utility system repair projects.

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4 APPROVAL DATE (YYMMOD) 5 OFFICE OF PRIMARY RESPONSIBILITY (OPR) 64 DTIC APPLICABLE 66 GIDEP APPLICABLE (YYMMOD) A./AMXEN-B

7. APPLICATION/INTERRELATIONSHIP

- 7.1 This Data Item Description (DID) contains the former and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.
- 7.2 This DID should be applied to contracts at government-owned/contractor-operated (GOCO) plants.

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3/ APPLICABLE FORMS

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PREPARATION INSTRUCTION .

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- 10.1 Format. The Corrosion Control Data For Buried Utility Systems format shall be contractor selected. Unless effective presentation would be degraded, the initially used format arrangement shall be used for all subsequent submissions.
- 10.2 <u>Content</u>. The Correction Control Data For Eurica Utility Systems shall contain the following:
- 16.2.1 Maps of buried utilities indicating the type of construction material (steel, cast iron, ashestos-cement, copper, stainless steel), type of joints in pipelines (welded, mechanical, bell and spigot), and whether dissimilar metal, such as copper and steel are electrically isolated from each other. Mats. Any data missing shall be recorded as it becomes available by observation during repairs and inspections.
- 19.2.2 Inventory showing approximate number of linear feet of buried pipe or conduit of each type for each utility. If known, include the size and approximate age of the pipe.

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11 DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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Block 3, Description/Purpose (Continued)

3.2 This data is used to document successful corrosion control design techniques for use in future construction and repair projects.

Block 7, Application/Interrelationship (Continued)

7.3 This DID supersedes DI-L-1422.

Block 10, Preparation Instructions (Continued)

- 10.2.3 Corrosion control log book (computer application is acceptable), keyed to the utility maps including location and date of leak; depth of burial pipe; cause of leak (corrosion, joint failure, mechanical break); condition and description of protective coating, if any; method of repair (clamp-on patch, weld patch, replacement, protective coating applied to replacement, etc.); approximate age of pipe that failed; and condition of visible portion of pipe adjacent to the section repaired or replaced.
- 10.2.4 Cathodic Protective Systems Data.
- 10.2.4.1 Drawings of cathodic protection systems for underground structures, including location of isolation fittings, and for interior surfaces of ferrous water tanks.
- 10.2.4.2 Log book or computer listing containing results of potential tests and other observations, indicating degree of protection; current density on the ferrous metal receiving cathodic current; current output from typical sacrificial anodes, if used; current output and voltage of rectifiers, if used; and problems experienced with cathodic systems and corrections made.
- 10.2.5 Inventory listing showing the number, size, exterior protection, and approximate location of buried ferrous storage tanks. Include data on type (copper, steel, plastic) of connecting lines, whether dielectric isolation and cathodic protection are provided. Include remarks on compliance or noncompliance with current environmental regulations.
- 16.2.6 Record of boiler water treatment for corrosion control, including the boiler plant building number for boilers over 15 PSI; deaeration temperature and pressure; pH of condensate returned; neutralizing amine added (type, lbs/year); hardness of condensate (ppm as CaCO3); annual average make (%); boiler inspection reports; annual number of corrosion leaks in condensate pipe; internal boiler water treatment and test data log.
- 19.2.7 Utility corrosion maps. Type of electrical system (Delta, Wye, combination), and location of extensive copper grounds shall be noted on the maps.