"Attachment A"

January 17, 2002

Alternate Procedure for Corrosion Control in the Interstice of Double Bottom Aboveground Storage Tanks

History

In the interstitial space between floors on aboveground storage tanks designed with double steel floors, over time, the originally installed cathodic protection system eventually yields inadequate levels of cathodic protection to comply with industry accepted NACE protection criteria. This diminishing level of protection is usually due to depletion of anodes.

Since regulation currently requires that corrosion protection be maintained by adequate cathodic protection levels, it is often necessary to replace these systems. Due to design constraints, this is usually possible only by elevating the tank, removing the original floor, installing a new cathodic protection system, and reconstructing the bottom of the tank. Another method involves removal of the internal floor, retrofitting with new cathodic protection equipment, and re-installing the internal floor.

Either of these methods is extremely costly and, on large diameter storage tanks, is economically prohibitive.

Alternative Procedure

The procedure described herein involves installation of corrosion probes in existing radial monitor tubes extending under the primary floor from the perimeter into the space between the two floors.

These probes are devices which are place in close proximity to the surface which is subject to corrosion (i.e. bottom side of the primary tank floor). Attached monitoring equipment measures the precise corrosion rate of the probe which is in the same environment as the corroding surface of interest.
Note: The probes have been successfully used in the pipeline industry for years.

Data from the probe is transmitted to a data collection point where annual corrosion rate (mils per year) is calculated. The calculated corrosion rate is then used to determine the remaining safe operating life (RSOL) as required by API 653. The RSOL is utilized to

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determine the maximum operating interval until the next out of service inspection based on remaining floor thickness data acquired by the last API 653 floor inspection (Examples below):

Example No. 1 A floor with a corrosion rate of 5 mils per year as measured by the probe with a corrosion allowance determined by API 653 inspection of 100 mils would yield a remaining safe operating life of 20 years- 20 years/ 5 mils per year). In this case, the normally allowed API 653 maximum interval of 20 years can be used.

Example No. 2 A floor with a corrosion rate of 3 mils per year as measured by the probe with a corrosion allowance determined by API 653 of 50 mils would yield a remaining safe operating life of only 16.6 years. In this example, the next API 653 internal inspection would be less than the normal API 20 year interval. In this case, tank would be taken out of service earlier in order to protect the integrity of the asset and the environment.

Equivalent Protection of the Outside Environment as Required by State of Florida

The procedure described herein provides corrosion control through precise measurement of corrosion, if present, which enables safe inspection intervals. Accurate prediction of corrosion thresholds allows safe operation of the asset while preventing unexpected failures and resulting leaks and groundwater contamination. Also, the presence of the sealed interstice provides additional assurance of environmental protection.

The normally utilized cathodic protection approach, which is always used where feasible, provides theoretical protection as proposed by industry standards (NACE).

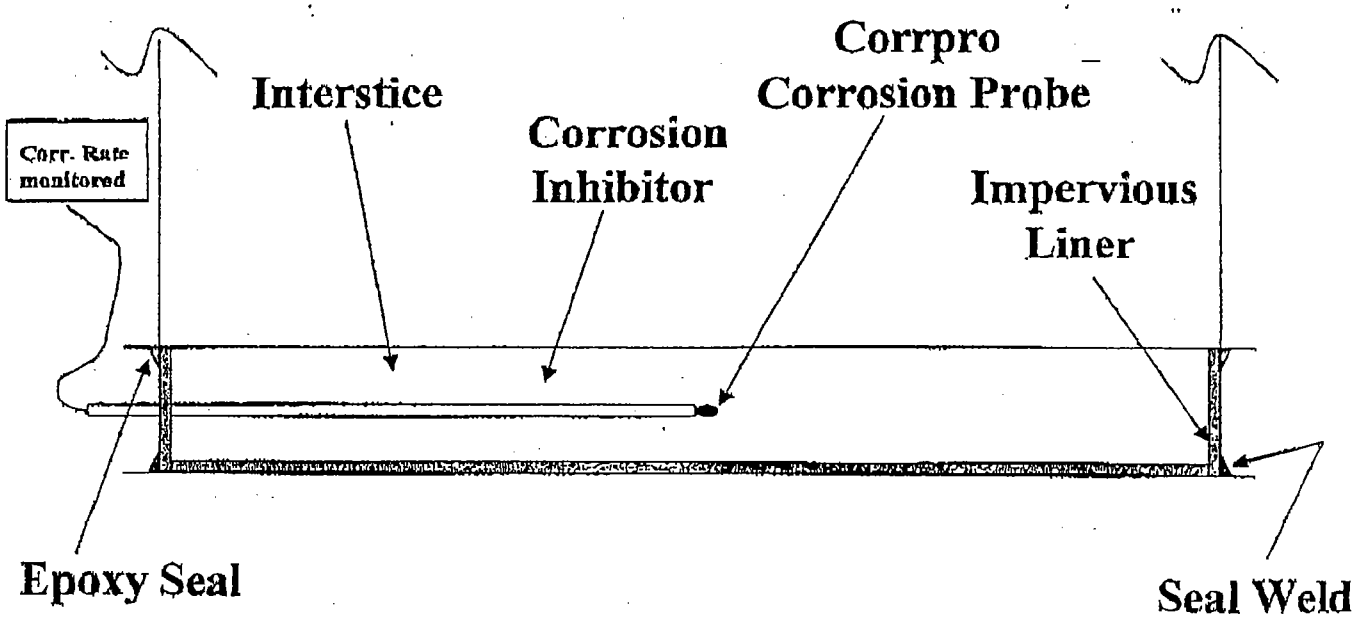
This alternative procedure provides constantly monitored, accurate data which assures protection of at least equal level to that provided by cathodic protection.

Additional Advantages

1. In addition to the corrosion measuring probe which is the heart of the system, the procedure also involves injection of a vapor phase, environmentally safe inhibitor which, over time, establishes a chemical interface between the interstitial material (sand, concrete, etc.) and the under side the tank floor which reduces or mitigates corrosion resulting in increased safe operating life.
2. The usual practice of periodic visual (for hydrocarbon liquid) and electronic surveillance (for hydrocarbon vapors) of the interstitial space through existing radial leak monitor ports at the tank perimeter also continues to be performed.

EXHIBIT A

Alternate Corrosion Control System



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