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| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | UST spill bucket integrity testing form  Underground Storage Tanks (UST) Program  Doc Type: Compliance Certification |

Instructions on page 2

Purpose:This procedure is to test the leak integrity of single- and double-walled spill buckets. See reverse side for basic hydrostatic testing instructions. Consult PEI/RP1200, Section 6.2 for hydrostatic test method, Section 6.3 for single-walled vacuum test method, and Section 6.4 for double-walled vacuum test method.

## Facility information

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Facility name: | | |  | | | | | | | | | | | |
| Facility address: | | | |  | | | | | | | Facility ID#: | | |  |
| City: |  | | | | | | | State: |  | | Zip code: | | |  |
| Owner name: | | |  | | | | | | | | | | | |
| Mailing address: | | | | |  | | | | | | | | | |
| City: |  | | | | | | | State: |  | | | Zip code: |  | |
| Phone: | |  | | | | Fax: |  | | Email: |  | | | | |

## Testing information

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. Tank number |  |  |  |  |  |  |
| 2. Product stored |  |  |  |  |  |  |
| 3. Spill bucket capacity |  |  |  |  |  |  |
| 4. Manufacturer |  |  |  |  |  |  |
| 5. Construction | Single-walled  Double-walled | Single-walled  Double-walled | Single-walled  Double-walled | Single-walled  Double-walled | Single-walled  Double-walled | Single-walled  Double-walled |
| 6. Test type | Hydrostatic  Vacuum  Single-walled  Double-walled | Hydrostatic  Vacuum  Single-walled  Double-walled | Hydrostatic  Vacuum  Single-walled  Double-walled | Hydrostatic  Vacuum  Single-walled  Double-walled | Hydrostatic  Vacuum  Single-walled  Double-walled | Hydrostatic  Vacuum  Single-walled  Double-walled |
| 7. Spill bucket type | Product  Vapor | Product  Vapor | Product  Vapor | Product  Vapor | Product  Vapor | Product  Vapor |
| 8. Liquid and debris removed from spill bucket:\* | Yes  No | Yes  No | Yes  No | Yes  No | Yes  No | Yes  No |
| 9. Visual inspection  (No cracks, loose parts or separation of the bucket from the fill pipe.)? | Pass  Fail | Pass  Fail | Pass  Fail | Pass  Fail | Pass  Fail | Pass  Fail |
| 10. Tank riser cap included in test? | Yes  No  NA | Yes  No  NA | Yes  No  NA | Yes  No  NA | Yes  No  NA | Yes  No  NA |
| 11. Is drain valve included in test? | Yes  No  NA | Yes  No  NA | Yes  No  NA | Yes  No  NA | Yes  No  NA | Yes  No  NA |
| 12. Starting level |  |  |  |  |  |  |
| 13. Test start time |  |  |  |  |  |  |
| 14. Ending level |  |  |  |  |  |  |
| 15. Test end time |  |  |  |  |  |  |
| 16. Test period |  |  |  |  |  |  |
| 16. Level change |  |  |  |  |  |  |
| **Test results:** | Pass  Fail | Pass  Fail | Pass  Fail | Pass  Fail | Pass  Fail | Pass  Fail |

*Pass/fail criteria: Must pass visual inspection. Hydrostatic: Water level drop of less than 1/8 inch; Vacuum single-walled only; Maintain at least 26 inches water column; Vacuum double-walled; maintain at least 12 inches water column.*

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| **Comments:** |

\*All liquids and debris must be disposed of properly.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Testing company name: |  | Tester’s name: | |  |
| Date (mm/dd/yyyy): |  | | Tester’s signature: |  |

UST spill bucket integrity testing - Instructions

**General**: Spill buckets for tank systems are neither intended nor designed for the storage of petroleum products, but rather to contain small leaks and spills for short periods of time. This section describes the procedures used to test the integrity of spill buckets to ensure that they do not leak.

**Warning**: Do not use fuels such as gasoline, E85 or diesel as a test fluid because they present a serious fire and safety hazard. Gasoline vapors are flammable and can explode if exposed to an ignition source such as a spark or open flame. If a tank or containment area is not tight, using fuel as the test fluid will cause a release into the soil or groundwater.

**Purpose**: This method is used to test the integrity of single-walled spill buckets or the primary containment of secondarily contained spill buckets.

**Description of test**: The spill bucket is filled with water. The water level is measured at the beginning and end of the test.

**Test equipment**: Test equipment shall include:

• Water

• Measuring stick that is accurate to within 1/16 (0.063) inch and of sufficient length

• Stopwatch or other time-measurement device capable of measuring a one-second increment

**Preparation**:

1. Care should be taken when conducting the test in the rain or during freezing weather conditions.

2. Remove and properly dispose of any liquid and debris (leaves, sediment and trash) in the spill bucket. Clean the spill bucket and examine it for damage, defects or improperly installed components. If there are loose components (e.g., loose band clamps or bolts), have them tightened before conducting the integrity test. If there are items that must be repaired or replaced (e.g., deteriorated gaskets/seals or drain valves), notify the owner/operator.

3. Examine the fill cap and adapter fitting for loose, missing or damaged parts, and have repaired if necessary. Have repairs made before putting water in the spill bucket. Make sure that the seal on the fill cap is present and in good condition. The cap must fit securely and be leaktight on the riser. The water level during the test typically will be above the cap, so a leaking cap will result in a failed test. As an alternative to a tight fill cap, use a plumber’s plug in the fill riser if approved by the authority having jurisdiction (AHJ) and tank owner.

4. The spill-bucket drain valve, if present, must be leak-tight to pass the test. If it is not leaktight, it may be possible to simply remove and permanently plug the drain valve.

5. If the spill bucket is found to have cracks, loose parts or separation of the bucket from the fill pipe, it is not considered to be liquid-tight. This visually indicates a test failure.

**Note**: If the fill cap is not included in the spill bucket test and the cap is not tight, it could be the source of potential fuel contamination from water intrusion.

**Test procedure**:

1. Add water to the spill bucket to a level within 1.5 inches of the top of the spill bucket. Allow the water to settle for 5 minutes before the initial water level measurement is taken.

2. Place the measuring stick vertically at the lowest point in the spill bucket and extending above the water level in the spill bucket to allow for an accurate measurement to be taken. The location of the measuring stick must remain the same for each water level measurement. Document the initial water level measurement as measured from the bottom of the spill bucket. Alternative measurement methods may be used provided that measurement to 1/16 (0.063) inch can be made.

3. Take all precautions to prevent the water level from being disturbed during the duration of the test.

4. After one hour, document the ending water level measurement.

5. Upon completion of the test, remove and properly dispose of the water. Dry the inside of the spill bucket before returning it to service.

**Pass/Fail criteria**: If the water level has dropped less than 1/8 (0.125) inch, the spill bucket passes the integrity test. If the water level has dropped 1/8 (0.125) inch or greater, the spill bucket fails the integrity test.

**Proper disposal of test liquids:** Test liquids must be disposed of properly.