

Summary of Updates to DEP Technical Guidance 263-0900-011

Storage Tank Modification and Maintenance Issues

- **Cover Page**

- The statement of Authority was updated for consistency with other Storage Tank Program technical guidance documents.

- **Definitions**

- Alphabetized the defined terms for consistency with §245.1 and other technical guidance documents.
- The guidance/clarification text was italicized to better differentiate it from the regulatory text.
- Added the definitions for “Containment Structure or Facility,” “Emergency Containment” and “Excavation Zone.” These terms were referenced by other definitions and/or included in the existing guidance narrative.
- Formatted the structure of the definitions for “Major Modification,” “Minor Modification” and “Storage Tank System” for consistency with §245.1.
- Incorporated additional guidance text to both “Major Modification” and “Minor Modification” to better clarify program policy on activities involving “breaking ground” and “excavation.”
- The definition for “Maintenance” was corrected (added missing regulatory text) for consistency with §245.1. And the text that was previously added for guidance was removed because it did not provide any additional clarification as intended.
- The definition for “Storage Tank Facility” was corrected (added missing regulatory text) for consistency with §245.1.

- **Technical Guidance**

- Reorganized the existing narrative text to a more logical order.
- Corrected regulatory citations (e.g. “Chapter 245.21(b)” → “§245.21(b)”).
- Added text to clarify program policy for UMX oversight of tank handling activities (“meaning the certified installer must be present throughout the duration of any tank handling activity”).
- Added text to provide awareness of the existence of inspector conflict of interest provisions in Chapter 245 (“Additionally, see §245.106 for conflict of interest provisions that are applicable to certified inspectors for tank handling activities”).
- Figures
 - The activity decision chart and three AST depictions were repositioned from the end of the document to within the guidance narrative; now Figures 1 through 4. Some resizing was done for page fitting purposes.
 - The activity decision chart was reformatted (removal of an extraneous line and repositioning of some existing text) to improve comprehension/readability.
 - A few of the AST depiction label arrows and text (in Figures 2 and 4) were corrected for consistency with the provided example activities and program policy.

- Added text to tie the Figures into the narrative and provide a general explanation for activity determination.
- Added text to clarify program policy regarding the requirement for UST under dispenser containment as related to tank handling activity.
- Added text to address the documenting of modification activities and inspections.
- Corrected the titles and document numbers listed for the referenced EPA documents and added reference to PEI/RP900 and PEI/RP1200.
- **Examples**
 - Repositioned existing text from the guidance narrative to the beginning of this section to clarify that the list of examples “may not be all-inclusive, but rather reflect most frequently asked questions.”
 - At the top of each list of activity examples, some activity definition information was reiterated for the reader’s reference.
 - Some reordering of the listed examples (primarily within the maintenance activities list) in an effort to cluster related activity examples.
 - Added to AST major modification examples:
 - “Installation of corrosion protection systems or anodes on cathodic galvanic (sacrificial) and impressed current systems.”
 - “Installation of new emergency or secondary containment structures.”
 - Updates to AST major modification examples (~~added, deleted~~):
 - **“Installation of new or additional piping runs or not like kind replacements within the emergency containment.”**
 - Added to UST major modification examples:
 - “Replacement of a complete dispensing unit when excavation is required (requires liquid tight under dispenser containment, and includes partial system closure activity that must be performed or overseen by a UMR).”
 - Updates to UST major modification examples (~~added, deleted~~):
 - **“Replacing or repairing tank system components (including equipment and primary or secondary containment structures) when excavation is required.”**
 - **“Installation, repair or replacement of interior (internal) tank lining or coating for product compatibility.”**
 - **“Installation or replacement of corrosion protection systems – including the addition or replacement of anodes on cathodic galvanic (sacrificial) and impressed current systems – except when installing anode bags or spike anodes to only piping connectors, and excavation is only performed by hand (considered a minor modification).”**
 - Updates to AST minor modification examples (~~added, deleted~~):
 - “Excavations within the emergency containment, ~~and~~ **but** not under the tank or piping supports.”
 - **“Modifying or substantially repairing emergency or secondary containment structures.”**

- “Repairs involving cutting or welding on aboveground piping runs ~~or not like kind replacements~~ downstream from **and including** the first control valve and within the emergency containment.”
- Added to UST minor modification examples:
 - “Repairs to cathodic protection systems that only involve replacement of a rectifier unit and/or the reconnecting of wires; so long as the only excavation involved is performed by hand.”
 - “Repairs to primary or secondary containment structures – including the installation or repair of containment sump entry fittings – without excavation.”
- Updates to UST minor modification examples (**added, deleted**):
 - “Staking and placing of concrete forms over the tank field **and piping runs.**”
 - “Replacement of a complete dispensing unit, **without excavation.**”
 - “Replacement, removal or disconnection of ~~flexible~~ piping connectors.”
 - “Replacement or removal of primary piping through extraction from the secondary piping or double walled piping systems or double wall piping from a tertiary conduit when accessible from aboveground or through ~~manways~~ **manholes** (not involving an excavation).”
 - “Installation or replacement of anode bags or spike anodes to ~~flexible~~ piping connectors; **so long as the only excavation involved is performed by hand.**”
 - “Installation or replacement of **piping** isolation boots; **so long as the only excavation involved is performed by hand.**”
 - “**Initial** installation of a line leak detector.”
 - “Installation, repair or replacement of spill containment devices; **including the installation or replacement of drain valves or plugs.**”
 - “Initial installation or complete replacement of an automatic tank gauging system; **or the replacement of an automatic tank gauge console.**”
- Added to maintenance activity examples:
 - “The decommissioning of a Stage II vapor-recovery system not involving excavation or tank handling activity; such as the replacement or removal of product dispensers, or the replacement, removal or disconnection of product piping, piping connectors and/or break-away (shear) valves.”
 - “Adjustments to rectifier settings (requires evaluation and adjustment determination by a corrosion expert or corrosion engineer.)”
- Updates to maintenance activity examples (**added, deleted**):
 - “Aboveground storage tank cleaning not performed as part of a tank closure activity; **and which does not involve the removal of any lining.**”
 - “Repair or **direct** replacement of threaded or flanged ancillary equipment located downstream of first isolation **control** valve and within the emergency containment of **an** aboveground storage tank **system.**”
 - “Replacement or repair of the tank pump or submersible turbine (with extractable column) if accessible through the ~~manway~~ **manhole** or tank riser sump (not involving removal or disconnect of packer manifold assembly or piping below the ground or grade surface).”

- “Repair of line leak detectors and repair or replacement of metering devices (with like kind devices) when accessible from aboveground or through ~~manways~~ **manholes**.”
- “Changing or replacing ~~substance~~ **product** dispenser components above the break-away (shear) valve (not involving piping disconnect at the valve).”
- “Emptying ~~the over-fill~~ (spill containment) buckets **and sumps**.”
- “Testing of the cathodic protection **system** (requires a qualified cathodic protection tester).”
- “~~Replacement of drain valve in a spill containment.~~” This was incorporated into the UST minor modification list.”