WORKING GROUP MEETING #1 PROPOSED AMENDED RULE 1178 FURTHER REDUCTIONS OF VOC EMISSIONS FROM STORAGE TANKS AT PETROLEUM FACILITIES



December 12, 2017 SCAQMD Headquarters

Diamond Bar, CA

Background

- Rule 219 Equipment Not Requiring a Written Permit Pursuant to Regulation II amended in May 2017
 - Adoption resolution directed staff to work with stakeholders to introduce proposed amendments to Rule 1178 to:
 - Incorporate VOC control technologies for guidepoles in floating roof tanks as recognized by U.S. EPA; and
 - Explore mechanisms to minimize permitting impacts when addressing VOC control technologies for guidepoles in floating roof tanks that are subject to the Rule 1178
- Staff is proposing amendments to Rule 1178 to incorporate one additional technology recognized by U.S. EPA in their 2000 Storage Tank Emission Reduction Partnership Program (STERPP) agreement

Rule 1178 Background

- Adopted in December 2001
- Amended in April 2006
- Reduce VOC emissions from large storage tanks at petroleum facilities
 - Tank upgrades roof, seals, fittings
 - Self-inspection and maintenance
 - Compliance reporting

Rule 1178 Applicability

Applicability

- Aboveground petroleum storage tanks
 ≥ 19,815 gals (75,000 liters);
- Organic liquids with a true vapor pressure > 0.1 psia (under actual storage conditions); and
- Petroleum facilities > 20 tons per year VOC in any emission inventory year beginning 2000

Affected facilities

- Crude petroleum operations
- Petroleum refining facilities
- Petroleum bulk stations and terminals



Current Specifications for Slotted Guidepoles for External Floating Roof Tanks

- For tanks with slotted guidepoles:
 - Gasketed cover, pole wiper, pole sleeve
 - Equip each slotted guidepole having a pole float with a gasketed cover, a pole wiper, and a pole float wiper

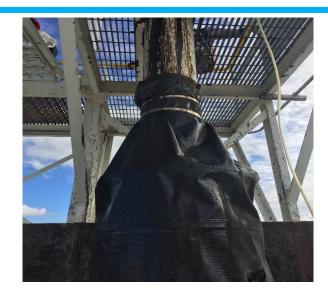
U.S. EPA STERPP Agreement



- In 2000, U.S. EPA entered into Storage Tank Emission Reduction Partnership Program (STERPP) agreement to reduce emissions from slotted guidepoles
- Current Rule 1178 provisions for slotted guidepoles are acceptable options under the STERPP
- In addition to current Rule 1178 provisions, STERPP recognized flexible enclosure (vapor sock or "slinky") technology as an acceptable option

Flexible Enclosure Technology

- Flexible fabric cover completely encloses the slotted guidepole
- Eliminates vapor emission pathway from inside the tank through the guidepole slots to the outside air
- Removal of pole float allows installation of radar gauge measurement system
 - Better measurement technology
 - Reduces the need to open the hatch for manual gauge measurement





Proposed Rule Amendments

- Require that each slotted guidepole that does not have a pole float be equipped with:
 - SCAQMD approved flexible fabric cover that completely encloses slotted guidepole;
 - Fabric must be UV and petroleum resistant with no holes, slots, or gaps
 - Double clamps at top and bottom of flexible fabric cover
- If technology is used (flexible fabric cover with removal of pole float), must use radar gauge for organic liquid measurement

Proposed Rule Amendments (Continued)

- Update Inspection Procedures
 - Quarterly inspections of flexible fabric cover for tears, cracks, or holes
 - Repairs completed with 72 hours
 - Seeking input on timing of complete replacement if necessary
- Use same notification procedures if inspection indicates a repair is necessary
- Considering a replacement period for flexible fabric covers – seeking input
- Other clarifications to Rule 1178

Next Steps

Action	Target Dates
Public Workshop	January 11, 2018
Stationary Source Committee	January 19, 2018
Set Hearing	February 2, 2018
Public Hearing	March 2, 2018

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