

# WVDEP / AST Regulator Roundtable

Ruth M. Porter, Program Manager

Joe Sizemore, Assistant Chief  
Inspector



# Secondary Containment

- Capacity
  - 10.2.i addresses capacity
    - Must hold the contents of the largest tank
    - Trenches and sumps are included in the “capacity”
    - Must anticipate “sufficient freeboard” for precipitation events
    - Must anticipate displacement volumes of other ASTs and “other items”



# Secondary Containment

- Leak Size
  - Small leak vs big leak vs catastrophic tank failure
  - Being evaluated at each facility individually
  - Consider how quick a tank can be filled - pump capacity



# Secondary Containment

- Holding Time - 72 hours (10.2.c)
  - Originated in the Groundwater Protection Rule
  - This is a “minimum” hold time
  - Related to the definition of “sufficiently impervious”



# Secondary Containment

- Sufficiently Impervious - documentation requirement?
  - Defined at 2.62
    - Term is used in the statutory definition of secondary containment
    - Concrete slabs are potentially “sufficiently impervious” depending on construction, condition and substance stored.
  - This is part of the annual certification (5.2.c.8)
    - “structural integrity and soundness”
  - Certification also required via 10.2.i.
  - Specific documentation must be available upon request (6.1)



# Secondary Containment

- Upgrades to Level 1 Secondary Containment
- (10.2.f)
- Formal permeability standard
  - Must be less than  $1 \times 10^{-7}$  cm / sec.
  - Verified at the time of installation.



# Release Prevention Barriers

- Defined at 2.54
- Concrete pads may be RPBs provided they meet both parts of the 2.54 definition to include:
  - Preventing the escape of released material.
  - Channeling the released material for leak detection.



# Secondary Containment Drains

- Requirements for drains to remain closed (10.2.i.5)
- Secondary containment structures draining to a waste water treatment plant is considered a “controlled drainage event”. (10.2.k)
- NPDES permitted treatment and outfall monitoring controls this discharge





# Routine Maintenance Inspections (5.1)

- Secondary Containment Inspections
  - Conducted once every 14 days for Level 1
  - Conducted at the time of the “monthly check” for Level 2
  - Variances are not contemplated in the rule
    - Contact the agency with site specific questions
  - Records must be maintained for 12 continuous months
  - Electronic records are acceptable



# Routine Maintenance Inspections

- What is to be inspected during a check of secondary containment? (5.1.a)
  - Potential hazardous environmental conditions
  - Releases, spills overflows and leakage
  - Deterioration, discharges and accumulation of liquids in the secondary containment
  - Closed containment valves



# Routine Maintenance Inspections

- Monthly checks of Overfill Equipment (5.1.b.4)
  - Is it present?
  - Is it operable?
    - Are the gauges or alarms working?
    - Can they be tested?
    - Consider manufacturers recommendations for operation and maintenance



# Annual Certifications (5.2)

- 5.2.c .1 through 9 lists the items to be reviewed
- AST design standards - nearly all tanks are built to “a standard”. AST construction standards pre-date regulatory development in WV.
- 5.2.a.2 allows a qualified person working under the direction of a PE to conduct the inspection



# Annual Certifications (5.2)

- 5.2.d requires certifying person has “direct knowledge”.
- Certification Form is available at [www.dep.wv.gov/tanks](http://www.dep.wv.gov/tanks) and look for “Certification of Annual Inspection of AST System Guidance”



# Amendments to Site Specific Permits & Plans

- What is the mechanism?
- No site specific plans have been submitted for AST compliance thus far.
- Per DWWM / NPDES permitting staff this is likely a “minor permit modification”
- 4.2.a.2.A through C lists requirements on the modification



# Compliance Schedules

- Interest has been shown in the integration of O&M requirements into Consent Orders with compliance schedules.
- The agency is evaluating these on a case by case basis.
- Proposed timelines must be expedited.



# Financial Responsibility (Section 12)

- Guidance is forthcoming
- All forms of FR must cover corrective action
- Thresholds (12.1.c) are:
  - 20¢ / gallon for storage capacity for all level 1 tanks
  - 10¢ / gallon for storage capacity for all level 2 tanks
  - Minimum \$5,000 per facility
  - 12.2.i offers alternatives for certain oil & gas and mining facilities.





# Internal Inspections

- Not required for tanks 30,000 gallons or less
- Existing tanks shall conduct internal inspections in accordance with industry standards
- New tanks shall be internally inspected every 20 years or 30 years depending on the presences of a RPB
- API Risk Based Inspections are an acceptable alternative.



# Internal Linings & Coatings (9.5)

- Not required
- May be used to address corrosion and / or compatibility
- Inspection of internal coatings (9.5) are required every 10 years (requirement originated via NACE)
  - WVDEP now recognizes the conflict with 5.3.b.1 internal inspection requirements.



# Permanent Closure

- Addressed in 11.3
- Required for all “regulated” tanks
- Oversight is provided by a PE or Certified Tank Inspector.
  - The intent is to assure worker safety and protection of the environment
  - PE / Tank Inspector must be involved in the process



# Deregistration

- Intended for tanks that no longer meet the statutory definition of an AST
  - §22-30-3(1)
  - 47 CSR 63 - 1.5.a.
- Deregistration is not permanent tank closure



# Piping (8.7) and Ancillary Equipment (8.6)

- All piping and ancillary equipment is regulated by the AST act and rule up to the first point of isolation
- First Point of Isolation is a statutory definition
  - Device (valve, pump, dispenser) nearest the tank where the flow of fluids may be shut off
  - §22-30-3(3)



# Exemptions in the Statutory Definition of AST

- Applicability of “pipeline facility” exemption
  - §22-30-3(1)(J)
  - Where material removed from the gas transportation stream is being stored prior to disposal or recycling is a statutory AST.



# Pressure Vessels

- Question concerning internal inspections of pressure vessels.
- Specifically what Industry Practice to use.
- AST Statute and Rule intends to regulate atmospheric storage tanks and not pressure vessels
- Call me.



# Damage and Repairs

- Damage must be evaluated (5.4.a)
- Results in a “Fit” or “Not Fit” Determination (5.4.b)
- “Not fit” tanks must be certified by a PE or certified tank inspector prior to it being returned to service (5.2.b.5.e)
- Repaired secondary containment must be certified by a PE or certified tank inspector (10.2.g.1.b)





# Next Steps for the AST Program

- All Level 1 tanks inspected within 3 years
- Procurement of a new data base / inspection tool
- Increases in staff
- Annual Invoicing for all regulated tanks
- Issuance of Certificates to Operate



# Thank You!!

## Questions??

Ruth M. Porter - (304) 926-0499, ext. 1007

Joseph M. Sizemore - (304) 926-0499, ext.  
1314

