

Aboveground Storage Tank Regulations and the Mining Industry

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Applicable Regulations

- Chapter 22, Article 30 – AST Act
 - Legislative Rules are being promulgated
- Spill Prevention Control and Countermeasures (SPCC)
- 47 CSR 58 Groundwater Protection Rule
- 38 CSR 2F – Groundwater Protection Rules Coal Mining Operations



Spill Prevention Control and Countermeasures (SPCC)

- Oil Pollution Prevention regulation (40 CFR part 112)
 - Originally promulgated in 1973
 - Specifies requirements for prevention of, preparedness for, and response to oil discharges
- Requirements help prevent oil discharges from reaching navigable waters or adjoining shorelines.
- Certain facilities, are required to develop SPCC Plans that describe equipment, workforce, procedures, and training to prevent, control, and provide adequate countermeasures to a discharge of oil.
- Administered by USEPA



47 CSR 58 – Ground Water Protection Rule

- WVDEP Legislative Rule – effective since 1994
- Scope is broad and includes loading / unloading areas, subsurface borings, outside storage areas, impoundments, drums, pumps, pipelines, sumps and tanks.
- Requires secondary containment. Specifies 72 hours of containment
- Lacking in specific performance standards



38 CSR 2F – Groundwater Protection Rules Coal Mining Operations

- Effective since 1994
- Establishes a series of practices for the protection of groundwater at coal mining operations
- Section 3.6 outlines requirements for sumps and tanks
- Very similar to 47 CSR 58



WV Code Chapter 22, Article 30

- “AST Act”
- Originally established via Senate Bill 373 in the 2014 Legislative Session
- Revised via Senate Bill 423 in the 2015 Legislative Session
- Response to the Freedom Industries Spill



Applicability of the AST Act

- Statutory Tank Definition
- Found at 22-30-3(1)
- A tank is:
 - Made to contain 1,320 gallons of fluid
 - 90% above the ground, non-earththen
 - Remains in one location for 365 days



Applicability of the AST Act

- A tank is not:
 - A shipping container regulated by Railroad Safety Act or DOT
 - Barges or boats
 - Swimming Pools
 - Process Vessels including wastewater treatment devices
 - Devices containing water (drinking water, surface water, groundwater...)



Applicability of the AST Act

- A tank is not:
 - Device containing food or food grade materials used for human or animal consumption
 - Located on a farm and contents are not distributed commercially except when the tank is in a Zone of Critical Concern
 - Empty Tanks held inventory or offered for sale
 - Pipe lines and liquid traps
 - Electrical Equipment



What Must a “Tank” do?

- Register by July 1, 2015
 - (previously October 1, 2014)
 - Nearly 50,000 tanks have been registered since June 10, 2014
 - Registration is electronic
 - Lots of tank data is now available



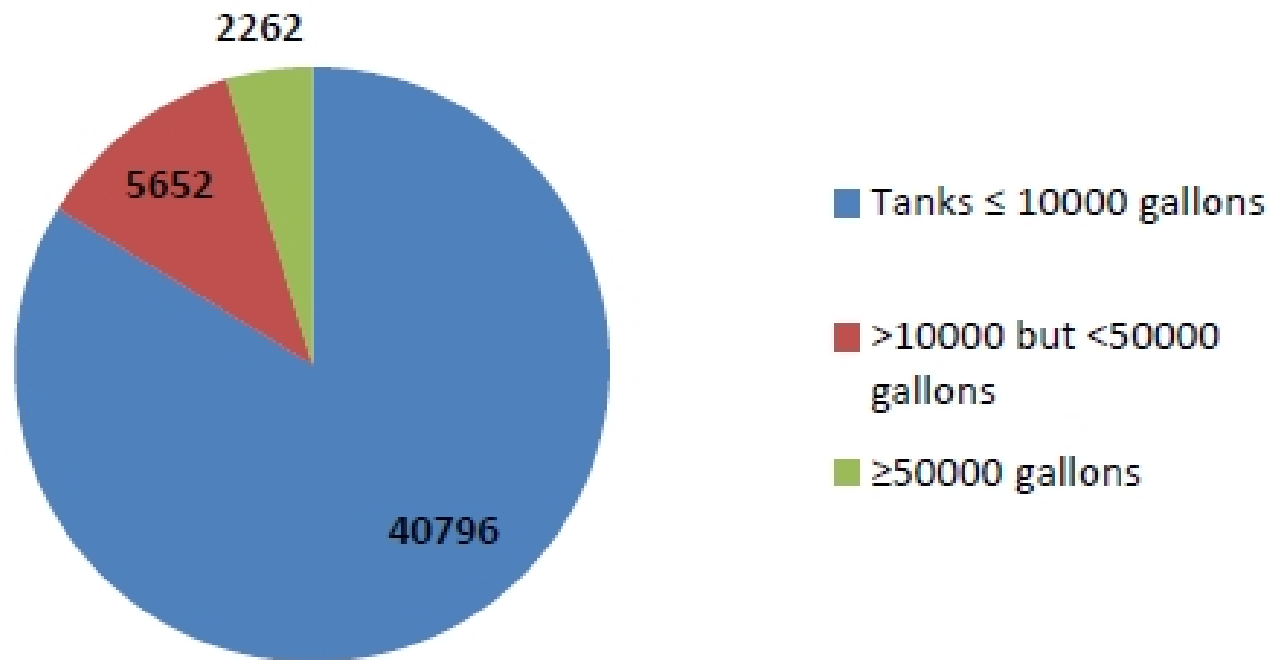
What Must a “Tank” do?

- Display the required signage
- Owner’s / operator’s emergency contact phone number
- DEP Spill Line (800-642-3074)
- Tank registration number
 - 3 digit county code and 8 more numbers



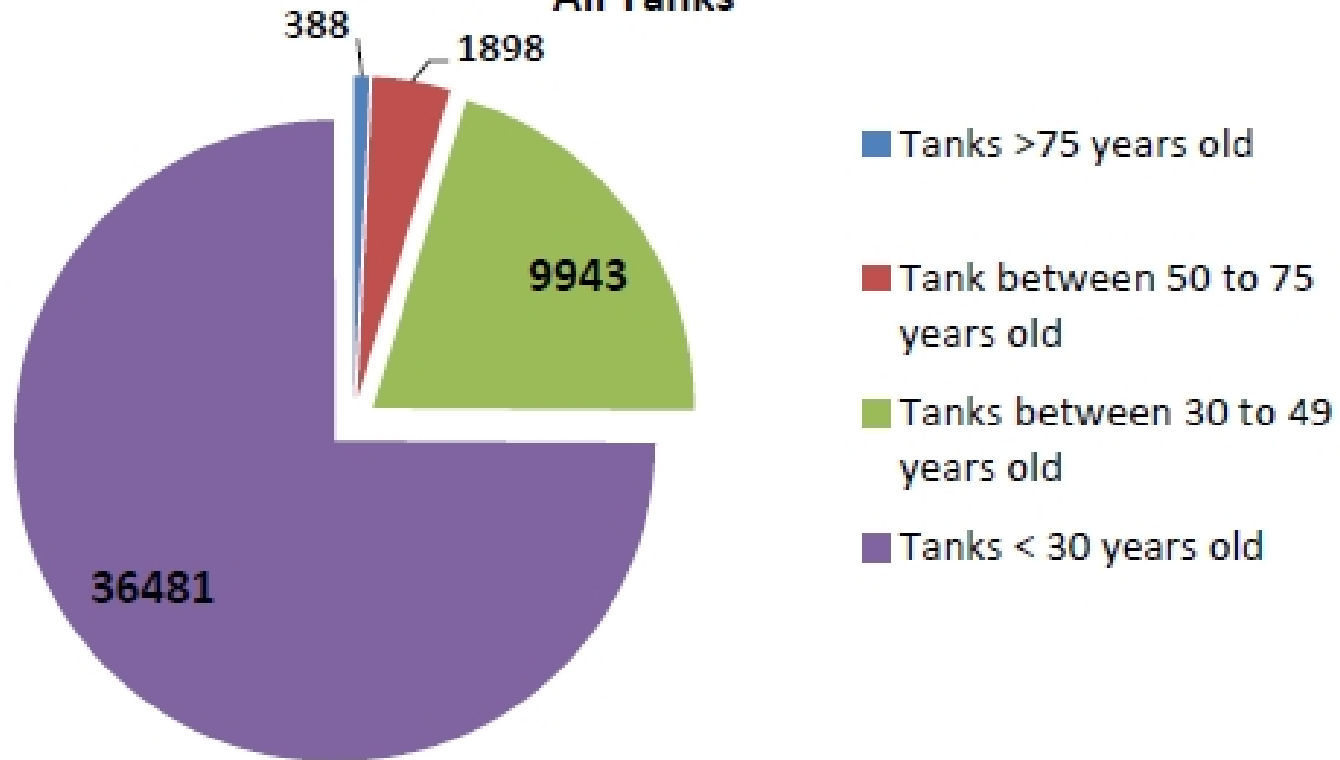
Tank Capacity

All Tanks



Tank Ages

All Tanks

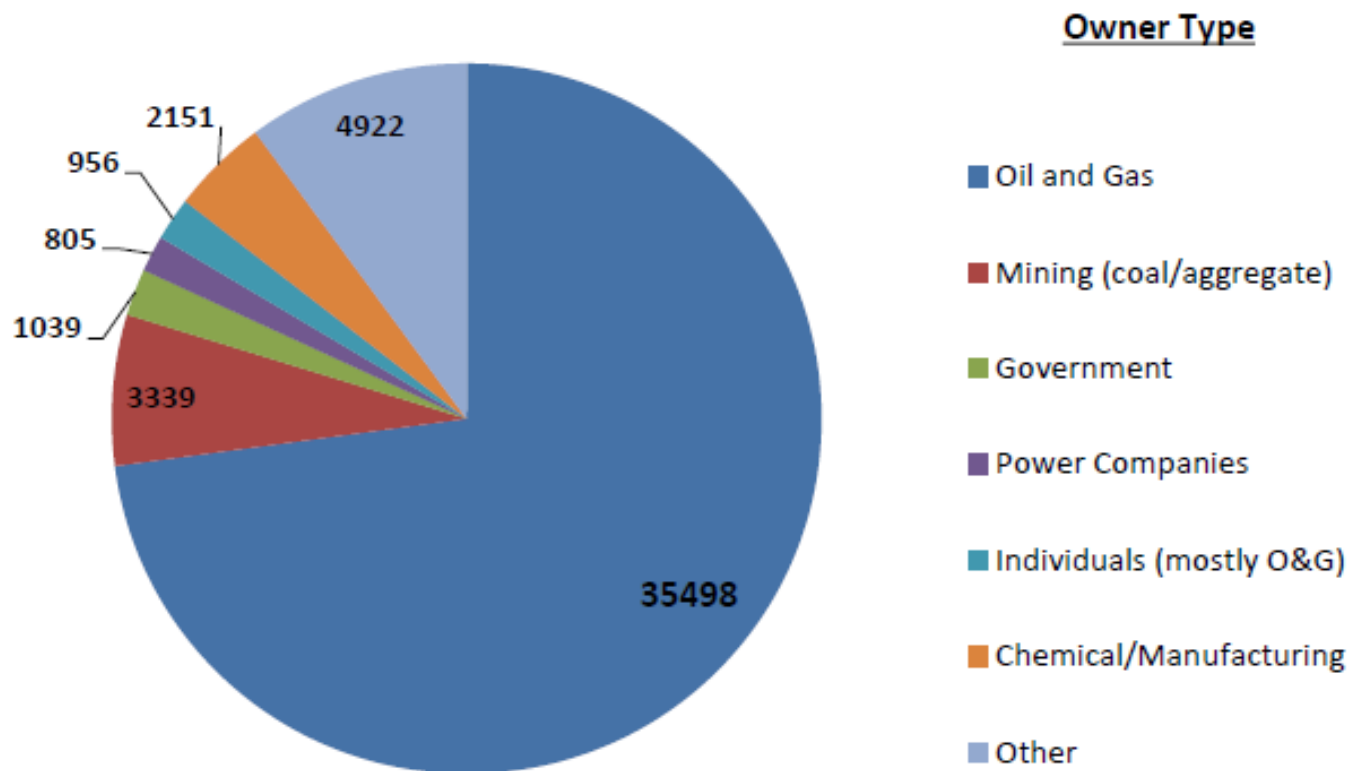


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Generalized Owner Type

All Tanks



Noteworthy AST Data

- Oldest tank
 - 124 years old
 - Installed in 1891
 - 4,200 gallon tank (100 barrel)
 - Crude and brine
- Tanks over one million gallons
 - 248
- Largest Tank
 - 9.2 million gallon
 - Natural gas condensates



More Important Definitions

- Public Water System
 - Supplies water for human consumption
 - On average of 25 individual per day for at least 60 days per year
 - Or has at least 15 service connections
 - Bathhouses are specifically excluded



More Important Definitions

- Zone of Critical Concern (ZCC)
 - Related to Public Surface Water Supply Source or Public Surface Water influenced groundwater supply source
 - Uses a mathematical model to calculate a five hour flow time above the water intake
 - Measured 1,000 feet from each bank in the principal stream and 500 feet from each bank in the tributaries
 - This was recently recalculated and it grew significantly



More Important Definitions

- Source Water Protection Area
 - Also called a Wellhead Protection Area
 - Related to a public groundwater supply source
 - Uses a mathematical model to calculate the area in an aquifer that supplies water to a public water supply well with-in a five year time of travel



More Important Definitions

- Zone of Peripheral Concern (ZPC)
 - Five hour flow time using a mathematical model
 - Above a ZCC which creates a protection zone of 10 hours above a water intake
 - Measured 1,000 feet from each bank in the principal stream and 500 feet from each bank in the tributaries
 - A “new” term and recently calculated for the first time



More Important Definitions

- Regulated Level 1 tank
 - Located in a ZCC, source water protection area or public surface water influenced groundwater supply source area; or
 - Contains substance that appears on the “List of Lists” in a concentration of 1% or greater; or
 - CERCLA, EPCRA and 112(r) of the CAA
 - Does not include petroleum (CERCLA petroleum exclusion)
 - 50,000 gallons or greater in size regardless of contents or location

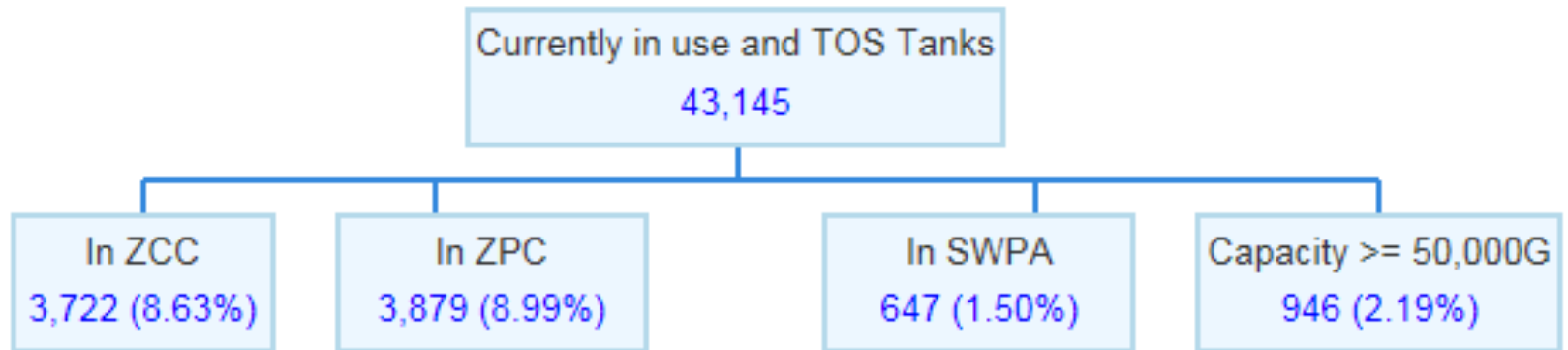


More Important Definitions

- Regulated Level 2 tank
 - Located in a ZPC and is not a Level 1



Tank Locations



List of Lists

- 1,836 contain material found on the list of lists
- 1,391 are level one because of contents ONLY



How many tanks will be regulated?

11,000_(ish)



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AST Act Requirements

- Register Tanks and collect a Fee
- Regulate Level 1 to a higher standard
- Promulgate Rules
 - Design, construction and maintenance of ASTs and secondary containment
 - Leak detection
 - Record Keeping
 - Corrosion prevention
 - Closure Requirements
 - Fees



AST Act Requirements

- Permit Amendments
- AST Evaluation and Certification at regular intervals
 - Evaluation by PE, API or STI Certified Individuals
- Financial Responsibility
- Corrective Action
- Spill Prevention Response Plans or certification of a GPP or SPCC



AST Act Requirements

- Notice to Government and Water Companies
 - Public water system, state, county and municipal emergency response organizations
- Signage
- Public Access to Information



Legislative Rules

- 47 CSR 63 – AST Rule
 - Specific tank operation and management requirements
- 47 CSR 64 – AST Fee Rule
 - Annual fees for regulated tanks
- 47 CSR 65 – Administrative Penalty Rule
 - Resolution of enforcement actions and assessment of penalties



What about “unregulated” ASTs?

- Don't meet the statutory definition
- Don't meet the Level 1 or 2 definition
 - Approximately 32,000 of these
- What Changed?

• AWARENESS



General Themes

- Mining Industry ASTs are regulated like any other AST
- Tanks are tanks
- It's all about the tank definition, location, contents and size



Mapping Tool

The screenshot shows a web browser window displaying the "West Virginia Water Resources Management Plan" mapping tool. The browser's address bar shows the URL "tagis.dep.wv.gov/WWaterPlan/". The page title is "West Virginia Water Resources Management Plan". The map displays the state of West Virginia with various watersheds outlined in black. Overlaid on the map are numerous red and yellow patches, representing specific water resources or management areas. The map includes a scale bar (0 to 100 km and 0 to 50 miles) and a "Print HUC 8 Watersheds" button. The interface also features a search bar, "GIS Layers" and "Basemap" buttons, and a "Powered by Esri" logo. The bottom of the browser window shows the Windows taskbar with various application icons and the system tray displaying the time as 7:44 PM on 10/21/2015.

Electronic Submission System



 **Department of Environmental Protection** 

State of West Virginia

Enter Login Information:

Login:

Password:

Once you have successfully entered your login information, any period of inactivity for 2 hours will log you out of the system.

[Forgot login or password?](#)



Links

- Mapping

<http://tagis.dep.wv.gov/WVWaterPlan/>

- Electronic Submission System

<https://apps.dep.wv.gov/eplogin.cfm>



www.dep.wv.gov/tanks

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Home > Water and Waste Management > Aboveground Storage Tanks

Aboveground Storage Tanks (ASTs)

Do I need to register my AST?
[Learn more](#)

Do I need to modify my existing registration due to the updated AST Act, effective June 12, 2015?
[Learn more](#)

AST Registration Graphical Information

Featured Links

- Enrolled Final Version Senate Bill No. 373 (Original Act)
- Enrolled Final Version Senate Bill No. 423 (Amended Act)

INDEX-alphabetic

HOT TOPICS

- Aboveground Storage Tanks
- Enrolled Final Version Senate Bill No. 373
- Industry Standards, Organizations & Other Resources
- Interim Spill Prevention Response Plan Guidance for ASTs
- Submitting a Spill Plan or Spill Plan Certification
- Interim Guidance for

Overview of the Aboveground Storage Tank Act and Its Implementation

Senate Bill 373, containing the Aboveground Storage Tank Act §22-30 and the Public Water Supply Protection Act §22-31 was approved by the 2014 Legislature and signed into law by Governor Earl Ray Tomblin on April 1, 2014. The law officially took effect on June 6, 2014. The bill required an

Thank You!!

Questions?

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