

# AST Closure Plan



Environmental Enforcement/Tanks  
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 Charleston, WV 25304  
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## West Virginia Department of Environmental Protection

Owners who are permanently closing aboveground storage tanks may use this form to notify of the intent to close their aboveground storage tanks and utilize this template for their closure plan. Additional guidance for closure can be found in the Corrective Action Guidance Document (CAGD) which can be found at <https://dep.wv.gov/WWE/ee/tanks/lustmain/Pages/default.aspx>.

Please submit via the AST electronic submission system found at this link: <https://apps.dep.wv.gov/astlast/Portal/Index.aspx>.

1. This closure plan is being submitted for AST's located in the following county: \_\_\_\_\_  
*Submit one plan per county. **You must attach a WVDEP AST Closure Spreadsheet to this plan.** The plan requires you to list all tanks being closed in the county and requires details for the closure that must be completed for the plan to be acceptable.*

2. I am requesting a waiver of the thirty (30) day notification period:  Yes  No

3. Closure plan submittal date: \_\_\_\_\_

4. Date range you anticipated tank closure(s): \_\_\_\_\_

### 5. Owner Information

Name:		Company Name:	
Address:			
County:		Phone:	
State:	Zip:	E-Mail:	

### 6. Operator Information same as owner

Name:		Company Name:	
Address:			
County:		Phone:	
State:	Zip:	E-Mail:	

### 7. Facility Information Various locations throughout the county (check if your tank(s) are not associated with a distinct facility)

Name:			
Address:			
County:		Phone:	
State:	Zip:	E-Mail:	

### 8. Certified person performing closure information

Name:	*PE: <input type="checkbox"/>	API: <input type="checkbox"/>	STI: <input type="checkbox"/>
Phone:	Certification #		
E-mail:	Issued on:	Expires on:	

**Notification of Closure** - The certified closure person or company representative must contact the WVDEP Tank Unit (AST Inspector and CAU Program Manager) for the county in which the closure is taking place a minimum of 72-hours prior to commencing closure activities.

\*PE "Professional engineer" means a person who has been duly registered or licensed as a professional engineer by the West Virginia Board of Registration for Professional Engineers, as set forth in W. Va. Code § 30-13-1, et seq.

# AST Closure Plan

## I. Closure Assessment

### DEP Approved Sample Locations for all AST Closures (refer to AST/LAST Closure Guidance Memo for more information)

#### A. ASTs with diameter less than or equal to 25 feet

Soil samples shall be collected at twelve (12) inches below grade in native soil at the following locations:

- One (1) sample shall be collected from native soil below the center of the tank;
- One (1) sample shall be collected from the lowest elevation inside the secondary containment; and
- One (1) sample shall be taken from below the outfall/valve of the secondary containment drain; and
- When necessary, one (1) sample from all areas (inside or outside of containment) where obvious contamination is present from a release (e.g. stained soils, dead vegetation).

#### B. ASTs with diameter greater than 25 feet

Soil samples shall be collected at twelve (12) inches below grade in native soil at the following locations:

- Four (4) samples (one in each quadrant) shall be collected from native soil below the tank;
- One (1) sample shall be collected from the lowest elevation inside the secondary containment;
- One (1) sample shall be taken from below the outfall/valve of the secondary containment drain; and
- When necessary, one (1) sample from all areas (inside or outside containment) where obvious contamination is present from a release (e.g. stained soils, dead vegetation).

1. Will you collect samples using the appropriate DEP approved sample location criteria described above?

Yes       No

*If no, complete section I of Attachment A and submit with your plan.*

2. Describe below any field screening that will be utilized during sampling.

3. Are you using the DEP approved analysis method provided on one of the Attachments?

Yes       No

*If yes, select which DEP approved attachment you will be using.*

*If no, complete section II of Attachment A and submit with your plan:*

Attachment B (DEP approved for Petroleum related compounds)

Attachment C (DEP approved for Common Substances)

## II. Attachments

Attach the following to this closure plan:

1. Tank closure spreadsheet (**Mandatory**, do not submit the plan without a completed spreadsheet).
2. Field Data collection sheets to be used, if any
3. Photos of the ASTs' secondary containment, piping, pumps, containment drains, etc., as necessary to clarify sampling locations, justify no sampling, or provide the Agency with information about the site.
4. Map showing sample locations
5. Any additional information you think the Agency needs to know to approve the plan.

**ATTACHMENT A**  
**OWNER PROPOSED SAMPLING LOCATIONS and PARAMETERS**

**I. Closure Sample Locations**

Describe below the proposed sampling locations for each tank and justification why these sampling locations are more appropriate than the DEP approved locations. Provide as an attachment photos of the ASTs' secondary containment, piping, pumps, containment drains, etc., as necessary to clarify sampling locations, justify no sampling, or provide the Agency with information about the site.

**II. Closure Sample Parameters**

Describe below the analytical parameters, the lab method, sample containers, and preservatives that will be utilized for sample analysis.

Analytical Parameter	Lab Method	Sample Container	Preservatives

**NOTES: The following must be adhered to.**

**Soil Samples**

Soil sampling protocol for volatile organics (such as BTEX, MTBE, and TBA) must follow the requirements of SW846 Method 5035 utilizing vials with preservatives for collection of VOCs. The lab can provide sampler and sample container.

**NOTE:** WVDEP Certified Laboratory must be used to analyze samples regardless of using recommended or proposed sampling criteria. WVDEP certified laboratories can be found at the following link:

<https://dep.wv.gov/WWE/Programs/lab/Pages/default.aspx>

The most recently promulgated version of the analytical method shall be utilized by the laboratory.

**ATTACHMENT B  
(Petroleum Related Sampling Parameters)**

For the regulated community's convenience due to the prevalence of petroleum related ASTs in WV, the analytical parameters and methods required for various petroleum products are listed below. Be advised that these are typical analytical parameters; however, the WVDEP may require additional analytical parameters based upon specific site situations as is necessary to properly protect public health and the environment.

Gasoline (leaded, unleaded, aviation, etc.)		Lab Method	Sample Container	Preservatives
MTBE/TBA/BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes)		SW846 8260	3 - 40 ml vials	Sodium Bisulfate, methanol, cool to ≤6 C
Lead (only applicable for leaded fuels)		SW 846 6010	4oz wide mouth jar with Teflon lid	cool to ≤6 C
Diesel, Kerosene, Heating Oil		Lab Method	Sample Container	Preservatives
BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes)		SW846 8260	3 - 40 ml vials	Sodium Bisulfate, methanol, cool to ≤6 C
PAHs (Polynuclear Aromatic Hydrocarbons)		SW846 8270	4oz wide mouth jar with Teflon lid	cool to ≤6 C
<u>Used Oils Only*</u>	RCRA metals (arsenic, barium, cadmium, lead, mercury, selenium, and silver)	SW846 6010	4oz wide mouth jar with Teflon lid	cool to ≤6 C
Crude Oil, Brine, and Condensates		Lab Method	Sample Container	Preservatives
BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes)		SW846 8260	3 - 40 ml vials	Sodium Bisulfate, methanol, cool to ≤6 C
PAHs (Polynuclear Aromatics Hydrocarbons)		SW846 8270	4oz wide mouth jar with Teflon lid	cool to ≤6 C
Chloride		SW846 9056	4oz wide mouth jar with Teflon lid	cool to ≤6 C

**\*Used Oils**

*For used oil, metals must be analyzed in addition to the other parameters listed above. Ethylene glycol or a chlorinated solvent scan may be required if the possibility that these compounds have been added to a used oil tank.*

**Soil Samples**

Soil sampling protocol for volatile organics (such as BTEX, MTBE, and TBA) must follow the requirements of SW846 Method 5035 utilizing vials with preservatives for collection of VOCs. The lab can provide encore or terra core sampler and sample containers.

**NOTE:** WVDEP Certified Laboratory must be used to analyze samples regardless of using recommended or proposed sampling criteria. WVDEP certified laboratories can be found at the following link:

<https://dep.wv.gov/WWE/Programs/lab/Pages/default.aspx>

The most recently promulgated version of the analytical method shall be utilized by the laboratory.

**ATTACHMENT C**  
(Common substances stored in ASTs)

For the regulated community's convenience due to the prevalence of common substances stored in ASTs in WV, the analytical parameters and methods required for various products are listed below. Be advised that these are typical analytical parameters; however, the WVDEP may require additional analytical parameters based upon specific site situations as is necessary to properly protect public health and the environment.

Acids (Hydrochloric Acid, Sulfuric Acid, Acetic Acid)	Lab Method	Sample Container	Preservatives
pH	SW846 9045	4oz wide mouth jar with Teflon lid	cool to ≤6 C
Bases (Sodium Hydroxide, Sodium Hypochlorite, Caustic Soda, Ammonium Nitrate)	Lab Method	Sample Container	Preservatives
pH	SW846 9045	4oz wide mouth jar with Teflon lid	cool to ≤6 C
Glycols (Ethylene, Propylene, Diethylene)	Lab Method	Sample Container	Preservatives
Glycols*	SW846 8321	4oz wide mouth jar with Teflon lid	cool to ≤6 C
Methanol, Ethanol, Isopropyl alcohol	<b>Lab Method</b>	Sample Container	Preservatives
Organics*	SW846 8015	4oz wide mouth jar with Teflon lid	cool to ≤6 C
* List the individual constituent that is being sampled on the laboratory COC			

**Soil Samples**

Soil sampling protocol for volatile organics (such as BTEX, MTBE, and TBA) must follow the requirements of SW846 Method 5035 utilizing vials with preservatives for collection of VOCs. The lab can provide sampler and sample container.

**NOTE:** WVDEP Certified Laboratory must be used to analyze samples regardless of using recommended or proposed sampling criteria. WVDEP certified laboratories can be found at the following link:

<https://dep.wv.gov/WWE/Programs/lab/Pages/default.aspx>

The most recently promulgated version of the analytical method shall be utilized by the laboratory.