September, 2005 DRAFT TECHNICAL GUIDANCE

DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF MINING AND RECLAMATION

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TITLE:	Aboveground Storage Tanks on Coal Mining Permits	
EFFECTIVE DATE:	Preliminary Draft	
AUTHORITY:	Surface Mining Conservation and Reclamation Act The Clean Streams Law The Storage Tank and Spill Prevention Act	

POLICY:

Although aboveground storage tanks on coal mine sites are exempt from regulation under 25 Pa. Code Chapter 245, these tanks are regulated generally under the Surface Mining Conservation and Reclamation Act, 52 P.S. § 1396.1 *et seq.* and 25 Pa. Code Chapters 87, 88, 89 and 90. The regulations require that permittees apply best management practices to prevent contamination of water or soil and other pollution.

PURPOSE:

This technical guidance describes the permitting and monitoring requirements for aboveground storage tanks on coal mine sites.

APPLICABILITY:

This guidance applies to all coal mining and reclamation activities approved under the Surface Mining Conservation and Reclamation Act, including Government Financed Construction Contracts. This does not apply to storage tanks on Noncoal Mining Sites.

DISCLAIMER:

The policy and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of the Department to give these rules that weight or deference. This document establishes the framework, within which the Department will exercise its administrative discretion in the future. The Department reserves the discretion to deviate from this policy statement if circumstances warrant.

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BACKGROUND

The definition of aboveground storage tank in the Storage Tank and Spill Prevention Act and its associated regulations, 25 Pa. Code Chapter 245, excludes tanks regulated under the Surface Mining Conservation and Reclamation Act, 52 P.S. § 1396.1 *et seq.* (SMCRA). Neither SMCRA nor the coal mining regulations, 25 Pa. Code Chapters 86 – 90, contain provisions specific to storage tanks. However, storage tanks are regulated generally under the following sections of the coal mining regulations:

Bituminous Coal Surface Mines	87.65 (a) (3), 87.65 (a) (9), 87.158, 87.173
Anthracite Coal Mines	88.42(2)(v), 88.44(a)(3), 88.44(a)(9), 88.49 (a),
	88.132, 88.220, 88.333, 88.381(b)(12), 88.493(6)
Bituminous Underground Coal Mines	89.67, 89.81
Bituminous Coal Preparation Plants	89.172(a)(2), 89.172(a)(3), 89.173(8), 89.173(12)
Coal Refuse Disposal Facilities	90.46(2)(v), 90.101, 90.147, 90.168

The implementation of these regulatory requirements is described in this guidance. The key principles of this implementation strategy are compliance assistance and pollution prevention. The Bureau of District Mining Operations (BDMO) will encourage mine operators to follow best management practices described in this guidance. These practices are consistent with Chapter 245. BDMO will monitor the effectiveness of these practices through routine inspections.

This guidance applies to all Aboveground Storage Tanks (AST) on coal mine permit areas.

AST means, for the purposes of this guidance: Stationary tanks, including pipes and dispensing systems connected to them, used to store regulated substances, motor oil or fuel, the total volume of which, including the volume of piping, is at least 90% above the ground. Tanks on mobile equipment are not considered ASTs. Nor are barrels or drums (e.g. 55 gallon drums) considered ASTs.

There are three basic components of the requirements for storage tanks on mine sites.

- 1. Identification.
- 2. Operation and maintenance in order to prevent releases or spills.
- 3. Removal from the mine site upon completion of mining.

PROCEDURES

I. Regulatory Responsibility

Responsibilities of District Mining Operations

The District Mining Offices will oversee all ASTs storing fuel, motor oil or a regulated substance situated within the permit area of a surface coal mine, the surface area of an

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underground coal mine, coal refuse reprocessing operation, coal refuse disposal operation, or coal preparation plant and within the project area of a Government-Financed Construction Contract.

For the purposes of this guidance, a regulated substance is anything that, when released into the environment, may present a danger to the public health, welfare or the environment. Examples of regulated substances that are commonly stored on a mine site are petroleum products such as solvents and other oils, antifreeze, liquid caustic soda and ammonia.

Although Chapter 245 applies only to tanks above a certain size and stationary aboveground storage tanks, (i.e., tanks that are permanently affixed to real property), under the mining regulations all AST are regulated. This includes AST containing product that are on skids or temporary frames.

Responsibilities of Field Operations

DEP Regional Offices are responsible for regulating certain tanks located on mine sites. These are underground storage tanks on all coal permits and aboveground and underground storage tanks on all noncoal permits. The Regional Offices also regulate aboveground storage tanks that are associated with a coal mining activity but not located within the permit area, such as an aboveground storage tank at a mining company's off-permit garage or repair facility.

All tanks regulated by the Regional Offices should be registered with the Bureau of Land Recycling and Waste Management, Division of Storage Tanks, PO Box 8762, Harrisburg, PA 17105-8762, (717) 772-5599. A registered tank will have a certificate of registration, which must be placed in a protected area visible to the public at the facility where the tank is located.

II. Permitting Considerations

The operations plan for each mine must provide information on all storage tanks located within the proposed permit area, including underground storage tanks, (i.e., those regulated by DEP Regional Offices). Module 10.17 of the permit application for bituminous surface mines, Module 10.17 of the permit application for anthracite coal mines and Module 10.8 for bituminous underground mines ask for the location of tanks and the measures to be taken to prevent adverse impacts of leaks and spills.

All storage tanks, not just ASTs regulated under SMCRA, must be identified in the Operation Plan of the permit application. Identification must include the type of tank, and the material to be stored in the tank A supplemental Mining Tank Inventory Report Form is attached as Appendix A. The purpose of this form is to provide the necessary detailed information about the tank that may not be known when the permit application is filed. The permit should require this form to be provided to the Department within 10 days of installation of a tank regulated under SMCRA.

The operation plan for the permit must describe procedures that the permittee will follow to prevent spills. These procedures include:

- Leak detection
- Appropriate security to prevent vandalism
- A plan for routine maintenance
- Practices to avoid spills and overfilling
- Labeling or marking the components of the tank system
- A plan for tank closure
- A cleanup plan
- Record keeping
- The name and telephone number of the person to be notified in the event of a leak or spill
- The name and phone number of the local emergency medical unit.

III. General Standards/Best Management Practices

Placement of ASTs

AST should not be placed in flood-prone areas or waterways. All AST should be level for proper operation, placed on stable ground and properly supported according to the manufacturer's specifications. Tanks that are not permanently fixed to the ground should be placed on saddles or provided with skids or other raised, stable supports that allow for visual checks for leaks. Whenever possible, the body of a tank should not be placed directly on the ground.

Containment

AST must have emergency containment to collect overfills, leaks and spills. The emergency containment should be large enough to contain the entire volume of the tank. It may consist of berms, dikes, retaining walls, the manufacturer's containment structure or other structures that will hold product in the event of a sudden failure of the tank. The emergency containment structure may have drain valves, but these must be kept closed when not in use. Containment should be sized to contain the volume of the tank.

The purpose of emergency containment is to prevent the flow of the stored material into the waters of the Commonwealth. If earthen berms or dikes are the primary method of containment they must be constructed of compacted fill. In the event of a spill or release any contaminated fill must be excavated and disposed of properly in order to prevent groundwater contamination. There are some situations where the use of earthen berms is not appropriate. These should be reviewed on a case-by-case basis. Examples include High Quality watersheds or shallow groundwater sites.

Other Best Management Practices

In addition to properly siting AST, permittees should use tanks that are constructed of materials appropriate for the substance being contained.

Tanks should also have the following features:

- Locking devices on caps and valves
- Control valves on dispensers
- Appropriate ventilation devices
- Fire extinguishers nearby
- Safety precautions posted
- Protection against corrosion

IV. Monitoring

Mine inspectors are expected to make a visual examination of ASTs on mine sites during a complete inspection and when tanks are newly placed or installed. A completed checklist may be shared with the permittee or responsible person on site to identify potential problems with his tanks.

In order to track AST on coal mines, the eFACTS database will be used. A Sub Facility (SF) record (SF type TANK) will be created for the mining permit Primary Facility (PF) record. When inspections are done that include the AST inspection form, the Tank SF should be linked to the inspection. For tracking in eFACTS, tank SFs can be numbered sequentially for a mine permit (e.g. AST1, AST2)

When tanks are no longer in use, they must be emptied and removed from the mine site.

APPENDIX A



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF MINING AND RECLAMATION

MINING TANK INVENTORY REPORT

Permittee:		Permit No.:
Municipality:		County:
		Comments
Tank Description/Identification		
Tank Owner		
Material Stored in the Tank		
Tank Capacity (Gallons)		
Tank Installation Date		
Tank Construction	Steel	
	Fiberglass	
	Concrete	
	Molded Plastic	
	Aluminum	
	Stainless Steel	
	Other(Please Specify)	
Containment Measures Used		
Tank Closure/Removal Date		
Signature	Title	Date