Alexandria Fire Department

POLICY		
Subject:	Underground Storage Tank Removals	**Policy #** CODE 2009-001
Approved: John Catlett, Director		**Date:** April 1, 2009

1. PURPOSE

1.1 To establish policy regarding the permitting, inspection and removal of underground flammable or combustible liquid storage tanks.

2. AUTHORITY

2.1 Section 202 of the Uniform Statewide Building Code (USBC) defines storage tanks as a structure.

2.2 Section 108.1 of the USBC requires an application for permit for the construction or demolition of a building or structure.

2.3 Section 3404.2.14.1 and 3404.2.14.2 of the Virginia Statewide Fire Prevention Code (VSFPC) addresses the requirements for removal and disposal of above ground and underground flammable and combustible liquid storage tanks.

2.4 Chapter 580 of the Virginia Administrative Code (VAC) (9VAC25-580) contains the Department of Environmental Quality Regulations for Underground Storage Tanks: "Technical Standards and Corrective Action Requirements".

3. APPLICABILITY

3.1 This policy shall apply to owners and operators of all underground flammable or combustible liquid storage tanks except as provided below (9VAC25-580-20):

- Any underground storage tanks (UST) whose capacity is less than 110 gallons **unless it is leaking**;

- Equipment or machinery that contains regulated substances for operational purposes such as hydraulic fork lifts and electrical tanks **unless it is leaking**; or

- Any wastewater treatment tank system that is part of a wastewater treatment facility.

4. REQUIRED PERMITS

4.1 A demolition permit is required from the Code Official;

4.2 The Department of Transportation and Environmental Services (T&ES) requires an approved erosion control plan if the total land disturbance for the tank removal exceeds 2,500 square feet.

4.3 Section 107.2 of the VSFPC requires a permit for the installation, removal, abandonment, placed temporarily out of service, or otherwise dispose of an underground or aboveground flammable or combustible liquid storage tank. For the purpose of this policy, the demolition permit shall constitute meeting the VSFPC permit requirements for removal of underground or aboveground storage tanks.

4.4 A Fire Prevention Permit (FPP) shall be obtained for the abandonment of an underground flammable or combustible storage tank(s) in place.

5. PROCEDURES

5.1 Procedures for Removal of Underground Storage Tanks

5.1.1 Contractor shall disconnect and remove all suction, venting, inlet, gauging and electrical lines.

5.1.2 Contractor shall remove all flammable or combustible material from the tank(s). Any waste material shall be treated as hazardous waste and shall be disposed of in accordance with applicable Local, State and Federal regulations.

5.1.3 Contractor shall clean the tank(s) and remove any remaining product and debris. All vapors shall be purged from the tank(s) in an approved manner.

5.1.4 Contractor shall remove tank and piping from ground and call for field inspection.

5.1.5 A New Construction Inspector shall inspect tank and opening to ensure proper removal of tank and all components.

5.1.6 A New Construction Inspector shall witness the taking of no less than three soil samples by the contractor. The soil samples shall be taken as follows:

- Sample 1 should contain random sampling from two walls of the excavation.
- Sample 2 should be obtained from the remaining two walls.
- Sample 3 should be from the bottom of the excavation, preferably at the lowest point.

5.1.7 Soil samples shall be submitted to the Virginia Department of Environmental Quality (VDEQ) for analysis. Samples shall be submitted by the contractor.

5.1.8 A copy of the analysis report from VDEQ shall be provided to the New Construction Inspector for review.

5.1.9 Should the VDEQ indicate no further remediation is necessary, the test results will be noted in Permit Plan and the Demolition Permit will be closed.

5.1.10 Should the VDEQ indicate areas of soil contamination, the Fire Prevention Office will be notified and all applicable requirements provided in Section 6, "Procedures for Leaking Tanks" in this policy shall be followed. New Construction and Fire Prevention staff shall coordinate and work jointly toward resolution of each leaking tank incident. All inspection and remediation activity will be tracked under the Demolition Permit number.

5.1.11 Upon successful remediation of the site, the results will be recorded in the Demolition Permit and the case will be closed.

5.1.12 Disposal of USTs shall be in accordance with all applicable local, State and Federal regulations.

5.2 Procedures for abandonment of tank(s) in place.

5.2.1 The applicant must provide proof that the tank(s) have been tested for tightness within ninety days of the date of application for abandonment and certify by way of testing certification that the tank(s) are not leaking.

5.2.2 The applicant shall demonstrate that removal of the tank(s) would jeopardize the structural integrity of a building or portion thereof. This information must be verified by way of a field inspection by a New Construction inspector or a Fire Inspector from the Office of

Building and Fire Code Administration (OBAFCA)

5.2.3 **In No case shall a leaking underground storage tank be permitted to be abandoned in place.**

5.2.4 Once the above conditions are satisfied, the applicant may be permitted to process the following abandonment procedures:

5.2.4.1 Disconnect and remove all suction, venting, inlet, gauging and electrical lines.

5.2.4.2 Remove all flammable or combustible material from the tank(s) and connected piping. Any waste material shall be treated as hazardous waste and shall be disposed of in accordance with applicable Local, State and Federal regulations.

5.2.4.3 Clean the tank(s) and remove any remaining product and debris. All vapors shall be purged from the tank(s) in an approved manner.

5.2.4.4 Upon inspection and verification of the above procedures by an inspector, the applicant may be permitted to proceed with filling the tank with an inert, solid material. (Exception: Residential heating oil tanks of 1,100 gallons or less, provided the fill line is permanently removed to a point below grade to prevent refilling the tank. Remaining underground piping shall be capped or plugged. All above grade fill piping shall be permanently removed when tanks are abandoned or removed.) [2006 IFC 3404.2.13.1.4 (3), (4) &(5)]

5.2.4.5 An inspector shall document the exact size, location, date and method of abandonment in Permit Plan.

6. PROCEDURES FOR LEAKING TANKS

6.1 In the event an underground tank is found to be leaking the following procedures shall be observed:

6.1.1 The owner or operator of the tank must immediately notify the following agencies:

- The Alexandria Fire Department (703) 838-4660
- The Virginia Department of Environmental Quality (703) 583-3800 (If after normal business hours contact the Virginia

Department of Emergency Services at 1-800-468-8892

- Department of Transportation and Environmental Services – Environmental Quality Office (703) 838-4334

6.1.2 A Fire Inspector or Fire Marshal shall be dispatched to the site location and shall issue a Notice of Violation to the responsible party which shall require compliance with the following subsections of this policy.

6.1.3 After notifications are made, the owner or operator shall make immediate arrangements to have all remaining product in the tank(s) removed.

6.1.4 The tank(s) shall be purged of all flammable or combustible vapors in an approved manner approved by the Director of the Office of Building and Fire Code Administration.

6.1.5 The owner or operator shall take a minimum of three soil samples from the affected area to determine the extent of the leak and subsequent soil contamination. If the leak is more widespread, additional soil samples may be required to determine the full extent of the contamination.

6.1.6 A soil remediation plan must be submitted to and approved by the Director of the Office of Building and Fire Code Administration, the Director of Transportation and Environmental Services and the Virginia Department of Environmental Quality.

6.1.7 The owner or operator of the leaking tank(s) shall be responsible for all contaminated soil removal and disposal irrespective of property ownership.

6.1.8 In the event the responsible party lacks the capability or intent to perform countermeasures, they shall have reasonable opportunity to elect either to contract with another for the performance of these countermeasures or to join the City in contract for such work.

6.1.9 If the responsible party fails to inform the City of their election within the time frame specified in the issued Notice of Violation, the City may proceed without delay to undertake the required countermeasures, and to charge the owner, tenant or other person in control of the premises for the entire cost of such work. (VSFPC 2703.3.1.4)

7. CANCELLATIONS

7.1 April 26, 1998 policy memorandum "Required Soil Samplings for Underground Storage Tank Closures"

7.2 November 29, 1999 policy memorandum "Code Enforcement Policy for Closure of Underground Flammable or Combustible Liquid Storage Tanks"