



**STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF UNDERGROUND STORAGE TANKS**

**TECHNICAL GUIDANCE DOCUMENT - 012**

**EFFECTIVE DATE: JANUARY 21, 1994**

**REVISED DATE: AUGUST 1, 1996**

RE: GENERAL FACILITY SITE CHECK

**PURPOSE**

In order to satisfy Rule 1200-1-15-.05(3)(b), this investigation shall be conducted at facilities with evidence of on-site environmental impact (exclusive of analytical data) or off-site environmental impact and at which underground storage tank (UST) system(s) have passed tightness testing.

An environmental impact includes, but is not limited to, the discovery of released petroleum at a UST site and/or in the surrounding area (such as free product or vapors in soils, basements, sewer and utility lines and nearby surface water).

**GENERAL INFORMATION**

Site check activities and the evaluation of the subsurface investigation shall be directed by a registered professional geologist under the Tennessee Geologist Act (T.C.A. §62-36-101 et seq.), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. §62-2-101 et seq.). In addition, all Fund eligible work shall be conducted and/or overseen by an UST-approved Corrective Action Contractor.

Any of the following conditions shall warrant the installation of one ground water monitoring well at the location indicated in Procedures A.3. or B.3. below.

1. Environmental impact which includes surface water and/or ground water;
2. Borings which encounter ground water; or,
3. Tank(s) and/or supply line(s) installed at or below the soil/bedrock interface.

If at any point during the site check activities, free product is encountered on site, it shall be managed in accordance with TGD - 004, Requirements for Free Product Removal.

All site check activities shall be conducted in accordance with all relevant sections of the Environmental Assessment Guidelines. The results shall be reported in accordance with the Site Check Report Guidelines.

## PROCEDURES

In order to satisfy Rule 1200-1-15-.05(3)(b), the following procedures shall be completed:

### A. Sampling Due to Single Point Environmental Impact

1. Two (2) imaginary lines (Lines A and B) shall be constructed from the point at which the environmental impact was discovered to the edges of the UST system, as shown in Diagrams 1 and 2. The angle formed by these two lines shall then be bisected by a third imaginary line (Line C). A fourth line (Line D) shall be placed perpendicular to Line C, in the area between the UST system and the point of environmental impact, at a distance of 10 to 15 feet from the nearest portion of the UST system. All borings are to be located along Line D.
2. All borings shall be placed as follows:

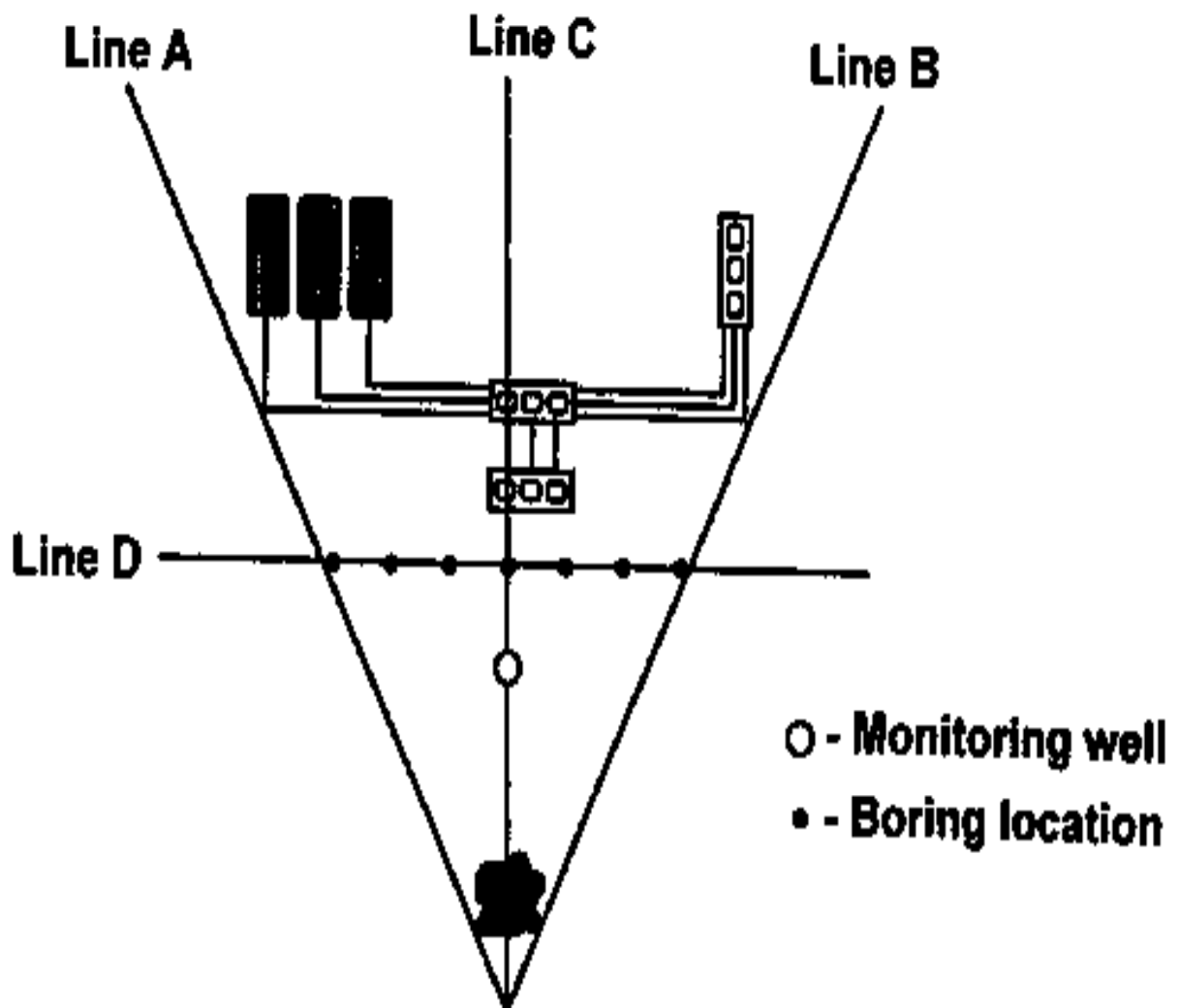
The first boring shall be advanced at the intersection of Line C and Line D. Additional borings shall be located on Line D at points fifteen (15) feet to each side of the initial boring. Each additional pair of borings shall be located on Line D at points fifteen (15) feet from the previous pair. Borings may continue outward along Line D in this manner until Lines A and B are encountered. If more than seven (7) borings will be required to meet these guidelines, the Division shall be contacted for prior approval.
3. If warranted, one ground water monitoring well shall be installed on Line C at a point midway between the UST system and the point where an environmental impact was observed. If the midpoint is not located on the site, then the well shall be installed at the intersection of Line C and the property boundary.

### B. Sampling Due to Multiple Points of Environmental Impact

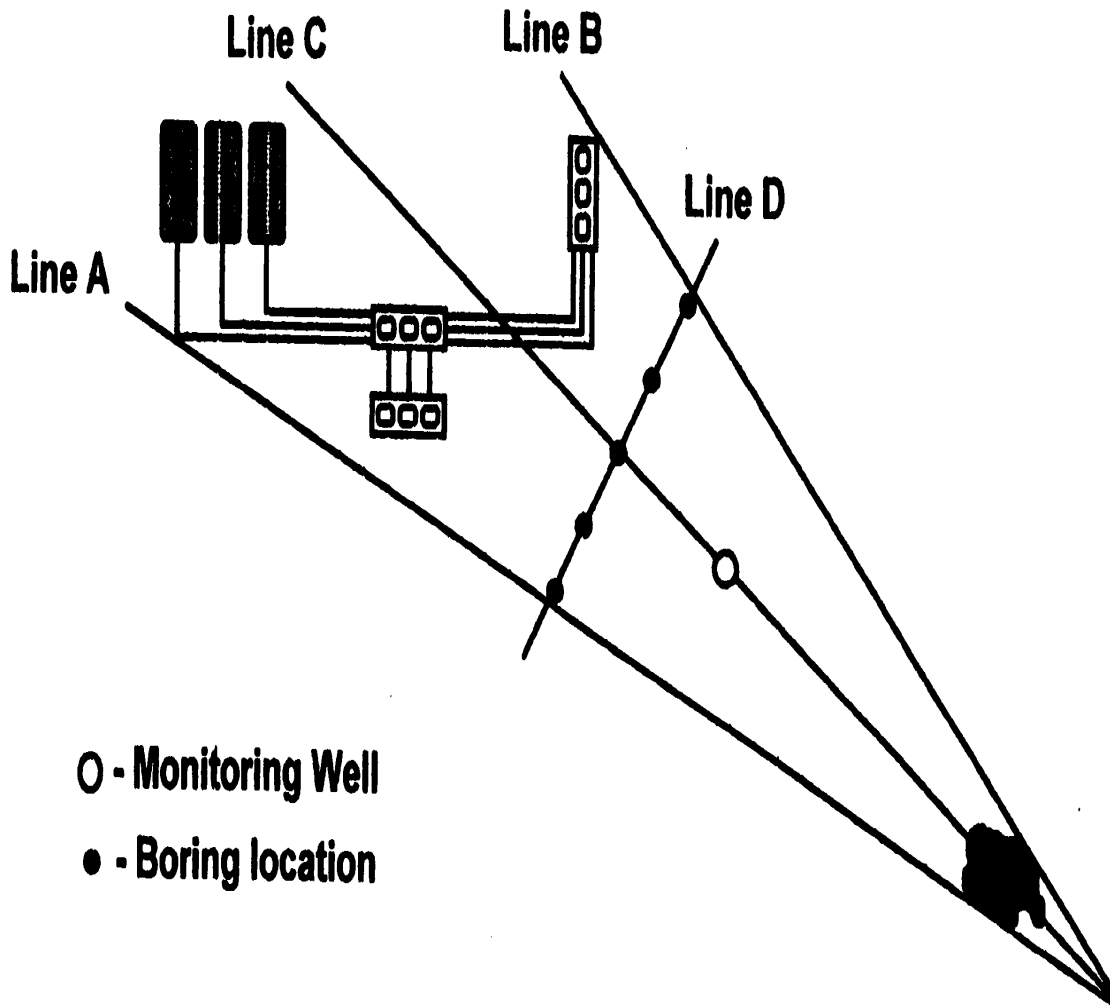
1. Two (2) imaginary lines (Lines A and B) shall be constructed from the points at which environmental impact was discovered to the edges of the UST system, as shown in Diagram 3. The angle formed by these two lines shall then be bisected by a third imaginary line (Line C). A fourth line (Line D) shall be placed perpendicular to Line C, in the area between the UST system and the points of environmental impact, at a distance of 10 to 15 feet from the nearest portion of the UST system. All borings are to be located along Line D.
2. All borings shall be placed as follows:

The first boring shall be advanced at the intersection of Line C and Line D. Additional borings shall be located on Line D at points fifteen (15) feet to each side of the initial boring. Each additional pair of borings shall be located on Line D at points fifteen (15) feet from the previous pair. Borings may continue outward along Line D in this manner until Lines A and B are encountered. If more than seven (7) borings are required to meet these guidelines, the Division shall be contacted for prior approval.
3. In the case of multiple impact points, the well shall be installed at the midpoint of an imaginary line from the UST system to the point of the most significant impact. If the midpoint is not located on the site, then the well shall be installed at the intersection of the line and the property boundary.

# Diagram 1



# Diagram 2



# Diagram 3

