



IOWA DEPARTMENT OF NATURAL RESOURCES WATER LINE- UTILITY COMPANY NOTIFICATION

Complete form and submit it to: the water supply, whether public or otherwise, which provides drinking water to the referenced area **and** to the Underground Storage Tank Section, Iowa Department Of Natural Resources, 502 E 9th St, Des Moines, IA 50319-0034.

(PLEASE TYPE OR PRINT)

Responsible Party Name: _____ Phone: _____

Tank Site Name: _____ LUST No.: _____ Registration No.: _____

Address of Tank Site: _____ City: _____ Zip Code: _____

Water Supply Name: _____ Phone: _____

Address: _____ City: _____ State: _____ Zip Code: _____

GLOBAL POSITIONING SYSTEM LOCATION OF PROPERTY

Latitude _____ Longitude _____ County _____

LEGAL DESCRIPTION OF PROPERTY

¼ _____ ¼ _____ ¼ Section No. _____ Township No. _____ Range No. _____ E W

	Maximum Concentrations of Chemicals of Concern Remaining At the Site					
	Group 1				Group 2: Total Extractable Hydrocarbons	
	Benzene	Toluene	Ethylbenzene	Xylenes	Diesel	Waste Oil
Soil (ppm)						
Tier 1 levels All water lines	2.0	3.2	45	52	10,500	
Groundwater (ppb)						
Tier 1 levels PVC or Gasketed Mains	7,500	6,250	40,000	48,000	75,000	40,000
Tier 1 levels PVC or Gasketed Service Line	3,750	3,120	20,000	24,000	75,000	40,000
Tier 1 levels PE/PB/AC Mains or Service Lines	200	3,120	3,400	19,000	75,000	40,000

(ppm) Parts per million, (ppb) parts per billion, (PVC) polyvinyl chloride, (PE) polyethylene, (PB) polybutylene, (AC) asbestos-cement

Provide site maps showing the extent of soil and groundwater contamination exceeding the lowest applicable Tier 1 levels in relation to all water line receptor types within 200 feet of the source of contamination (see table above). Provide a single map for soil contamination and a single map for groundwater contamination indicating all areas exceeding the Tier 1 levels.

1. Will active corrective action for soil and/or groundwater to water lines be required at the site? Yes No

2. If yes, what is the proposed corrective action? _____

3. **Free product*** is present at this LUST site? Yes No If yes, see the LUST file in DNR Records for free product information.

I certify that the foregoing information is true and correct to the best of my knowledge and agree to provide any additional information the department or water supply may need concerning this site.

Print Name , Address and Phone Number of Certified Groundwater Professional

Signature: _____

Date: _____

Purpose of DNR Form 542-1531

An area contaminated with petroleum compounds may exist within your present or future drinking water distribution system. The petroleum-based chemicals of concern include benzene, toluene, ethylbenzene, xylenes and other compounds found in gasoline, diesel and waste oil. These chemicals entered the ground from a release at the site referenced on the second line on Department of Natural Resources (DNR) Form 542-1531. They are often transported in the direction of groundwater flow.

The main concern is for drinking water lines within the current contamination zone (see attached form and maps). Where sufficient concentrations are present in soil or groundwater, permeable water lines (e.g. PVC, PB, and PE) can degrade and chemicals of concern can diffuse through pipe walls and/or gaskets, and contaminate the water supply. Contamination can also enter compromised water lines during periods of backpressure and back siphonage, regardless of the pipe material. This information is sent to you in response to present leaking underground storage tank (LUST) regulations in Iowa Administrative Code (IAC) Chapter 135.

A risk-based corrective action (RBCA) assessment has been done at the site—either a Tier 1 or a Tier 2. At Tier 1, only a few samples are taken to try to identify the maximum contamination. If more assessment is needed, a Tier 2 is conducted and several samples are collected to determine how far soil and groundwater contamination has spread. Therefore, if the attached maps are from Tier 1, they probably will show only a few soil and groundwater samples. If these maps are from Tier 2, they will show how far the actual contamination plume(s) has spread.

A standard DNR water line notification form (DNR Form 542-1531) and site map(s) are enclosed. The data may prove useful in planning if you repair, replace, change, or expand your water distribution system near the referenced site.

The table on the front side of this form contains the maximum contamination levels found in the soil and groundwater at this site. Below these numbers are rows containing DNR Tier 1 levels for LUST chemicals of concern.

IAC Chapter 135 contains administrative rules regarding the evaluation of LUST sites, while IAC Chapter 43 contains administrative rules regarding water main construction permitting for public water supplies. The underground storage tank (UST) Section of the DNR does not have authority over how water lines are constructed. That authority, as it pertains to public water supplies, is under the DNR's Water Supply Engineering (WSE) Section. The DNR WSE Section considers LUST site documentation when permitting water main construction projects.

A significant distinction between the DNR's drinking water program and LUST program is that current DNR WSE standards for water main construction require the use of pipe and gasket materials that are impervious to organic compounds in areas where groundwater is contaminated by organic compounds, regardless of the measured contaminant concentrations. Even though a project may appear to be outside an area of concern, if soil or groundwater contaminated by organic compounds is encountered during water line construction, non-permeable materials must be used.

***Free product** refers to a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

Iowa Administrative Code 135.12(3)b states, in part:

In areas of free product, all water lines regardless of construction material must be relocated unless there is no other option and the department has approved an alternate plan of construction. If water lines and gaskets are replaced in an area of contamination, they must be replaced with water line materials and gasket materials of appropriate construction in accordance with current department standards set forth in 567—Chapter 43 and with no less than nitrile or FKM gaskets or as otherwise approved by the department. If a service line is replaced and remains in a contaminated area, a backflow preventer shall be installed to prevent impacts to the larger water distribution system.