

**1301:7-9-13 PETROLEUM UST CORRECTIVE ACTION.**

**(A) PURPOSE AND SCOPE.**

For the purpose of prescribing rules pursuant to division (A)(2) of section 3737.88 of the Revised Code, the Fire Marshal hereby adopts this rule to establish release reporting and corrective action requirements for underground storage tanks containing petroleum products. This rule is adopted by the fire marshal in accordance with Chapter 119. of the Revised Code and shall not be considered a part of the "Ohio State Fire Code." The following petroleum UST systems are exempted from this rule:

- (1) Any UST system holding hazardous wastes listed or identified under Chapter 3745-51 of the Administrative Code, or a mixture of such hazardous waste and petroleum;
- (2) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307(B) of the Federal Water Pollution Control Act (33 U.S.C.A. 1251 and following);
- (3) Equipment or machinery that contains petroleum for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
- (4) Any petroleum UST system whose capacity is one hundred ten gallons or less;
- (5) Any UST system that contains a *de minimis* concentration of petroleum;
- (6) Any emergency spill or overflow containment UST system used for petroleum products that is expeditiously emptied after use.

**(B) DEFINITIONS.**

- (1) "BTEX" means benzene, toluene, ethylbenzene, and total xylenes.
- (2) "Release" means:
  - (a) Any spilling, leaking, emitting, discharging, escaping, leaching or disposing of a petroleum product from an underground storage tank system into the ground water, a surface water

body, subsurface soils or otherwise into the environment;

(b) Any spilling, leaking, emitting, discharging, escaping, or disposing of a petroleum product into ground water, a surface water body, subsurface soils or otherwise into the environment while transferring or attempting to transfer petroleum products into an underground tank system; or

(c) Contamination of subsurface soils or ground water on the UST site by petroleum products found in concentrations exceeding the action levels specified in paragraph (E) of this rule and confirmed through laboratory analysis of samples from the UST site.

(3) "Suspected release" means evidence of a release obtained through one or more of the following events:

(a) Monitoring results from a release detection method required by rule 1301:7-9-07 of the Administrative Code that indicate that a release may have occurred unless:

(i) The monitoring device is found to be defective, and is immediately recalibrated or replaced, and additional monitoring does not confirm the initial result; or

(ii) In the case of inventory control, a second month of data does not confirm the initial result;

(b) Unusual operating conditions observed by the owners and operators unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced. Such unusual operating conditions shall include, without limitation, the erratic behavior of petroleum dispensing equipment, the sudden loss of petroleum from the UST system or an unexplained presence of water in the tank.

(c) The presence of free petroleum product discovered during removal of

an UST system or part thereof or in an excavation on the UST site or on property nearby the UST site;

(d) The discovery of petroleum product vapors within or along building foundations or other subsurface man-made structures such as building foundations, basements, pedestrian tunnels, utility vaults, sewer lines, or the like, or in a drinking water well located on the UST site or on property nearby the UST site;

(e) The presence of free floating petroleum product in a monitoring or an observation well located on the UST site or on property nearby the UST site; or

(f) The presence of petroleum products observed on a surface water body located on the UST site or on property nearby the UST site suspected to have arisen from a release from an UST system.

(4) "UST site" means the parcel of property where an UST system is or had been located.

(5) "PPM" means parts per million.

(6) "TPH" means total petroleum hydrocarbons.

#### (C) REPORTING OF RELEASES AND SUSPECTED RELEASES.

Owners and operators shall report a release or suspected release to the fire marshal and the local fire department within twenty-four hours of discovery by the owner or operator. Spills or overfills of twenty-five gallons or less that do not reach a surface water body and that are cleaned up within twenty-four hours need not be reported.

#### (D) CONFIRMATION OF SUSPECTED RELEASES.

##### (1) Tightness test.

Upon discovery of a suspected release, owners and operators shall conduct a tank tightness test within seven days of the

reporting of the suspected release and in accordance with paragraphs (E)(3) and (F)(2) of rule 1301:7-9-07 of the Administrative Code. Within three days of receipt of results, owners and operators shall notify the fire marshal of the results of the test by telephone, electronic mail, or the like. Owners and operators shall submit the test results and supporting data to the fire marshal, which shall be actually received by the fire marshal within ten days of receipt by the owner or operator.

##### (2) Drinking water well analysis.

If a release is suspected to impact a drinking water well located on the UST site or on a nearby property, owners and operators shall within three days of discovery have the drinking water well tested for the appropriate parameters listed in Table 1 of paragraph (D)(4) of this rule. The fire marshal shall be notified of the test results by telephone, electronic mail, or the like, within twenty-four hours of receipt of the test results by the owner or operator. Owners and operators shall submit the test results to the fire marshal, which shall be actually received by the fire marshal within seven days of receipt by the owner or operator.

##### (3) Site check

Within sixty days of a failed tightness test, the reporting of a suspected release as defined in paragraphs (B)(3)(c) to (B)(3)(f) of this rule, or the occurrence of a spill or overfill as described in paragraph (F) of this rule, owners and operators shall conduct a site check to determine whether subsurface soils or ground water on the UST site have become contaminated with petroleum products in excess of the action levels set forth in paragraph (E) of this rule, unless a site assessment under paragraph (I) of this rule has been begun by the owners or operators. The site check may be discontinued and a site assessment under paragraph (I) of this rule begun if free product is discovered during the site check investigations. The fire marshal shall be notified if a site check is discontinued. Owners and operators shall prepare a site check letter report for the fire marshal, which shall describe the nature of the

suspected release, the type and location of samples collected during the site check, and the sample results. Copies of the boring logs and laboratory data sheets shall be attached to the site check letter report. Owners and operators shall submit the site check letter report and attachments to the fire marshal, which shall be actually received by the fire marshal within sixty days of a failed tightness test, the reporting of a suspected release as defined in paragraphs (B)(3)(c) to (B)(3)(f) of this rule, or the occurrence of a spill or overflow as described in paragraph (F) of this rule. A site check shall consist of the following:

- (a) Placement of a minimum of three soil borings in locations where contamination would most likely be present or would have migrated, considering information known about the site and the suspected release. Each soil boring shall be drilled to a minimum depth of twenty feet, auger refusal, the ground water table, or a ground water confining layer, whichever shall be encountered first. The fire marshal may approve use of an exploratory trench in lieu of soil borings on the UST site.
- (b) Continuous split spoon samples from the borings. If the ground water table is encountered, obtain a sample of the ground water. If a ground water sample cannot be collected, obtain a soil sample from immediately above the soil water interface.
- (c) Maintenance of boring logs and characterization of soils encountered during drilling or excavation.
- (d) Screening of samples from each

soil boring or excavation in accordance with procedures established by the fire marshal. The soil sample with the highest reading from each boring or excavation, based upon field screening, and any sample collected of ground water, or if a ground water sample cannot be collected, the soil water interface sample, shall be submitted to a laboratory for analysis. If field screenings of soil samples do not register a reading, a soil sample shall be collected from the bottom of the boring or excavation or from immediately above the soil-water interface, if ground water is encountered and submitted for laboratory analysis. Samples collected pursuant to paragraph (D)(3)(d) of this rule shall be analyzed for the parameters listed in Table 1 of paragraph (D)(4) of this rule as follows: if the suspected release is a gasoline product, test only for the parameters listed for analytical group no. 1; if the suspected release is a middle distillate product, test only for the parameters listed for analytical group no. 2; if the suspected release is used oil or an unknown petroleum product, test only for the parameters listed in analytical group no. 3; if the suspected release is heavy fuel oils or lubricating oils, test only for the parameters listed in analytical group no. 4; and if the suspected release is another product other than listed in analytical groups 1 through 4, consult with the fire marshal for the appropriate parameters.

## (4) List of parameters and analytical methods.

TABLE 1

Analytical Group	Constituent	Analytical Method For Soil Samples	Analytical Method For Water Samples
1. GASOLINE (Motor Gasoline, Aviation Gasoline, and Gasohol)	Benzene	EPA Method 8020	EPA Method 602
	Toluene	EPA Method 8020	EPA Method 602
	Ethylbenzene	EPA Method 8020	EPA Method 602
	Total Xylenes	EPA Method 8020	EPA Method 602
	Total Petroleum Hydrocarbons	EPA Method 8015	Not Applicable (MODIFIED)
2. MIDDLE DISTILLATES (Kerosene, Diesel Fuel, Jet Fuel, and Light Oils)	Benzene	EPA Method 8020	EPA Method 602
	Toluene	EPA Method 8020	EPA Method 602
	Ethylbenzene	EPA Method 8020	EPA Method 602
	Total Xylenes	EPA Method 8020	EPA Method 602
	Polynuclear Aromatic Hydrocarbons	EPA Method 8100 (MODIFIED)	EPA Method 610
	Total Petroleum Hydrocarbons	EPA Method 418.1	Not Applicable
3. Used Oil and Unknowns	Volatile Organic Aromatics	EPA Method 8240	EPA Method 624
	Total Petroleum Hydrocarbons	EPA Method 418.1	Not Applicable
	Total Petroleum Hydrocarbons	EPA Method 418.1	Not Applicable
4. Heavy Fuel Oils and Lubricating Oils	Total Petroleum Hydrocarbons	EPA Method 418.1	Not Applicable
5. Other Compounds	Not Applicable	Consult With The Fire Marshal	Consult With The Fire Marshal

## (E) ACTION LEVELS

(1) Upon completion of a site check pursuant to paragraph (D)(3) of this rule or a closure assessment pursuant to paragraph (K) of rule 1301:7-9-12 of the Administrative Code, owners and operators shall determine the appropriate action levels for the UST site using the scoring system and action level table set forth in paragraph (E)(3)(i) of this rule. If contaminant levels at any location on the UST site, as determined by the site check or closure assessment, exceed the action levels determined for the UST site, owners and operators shall proceed to

conduct a site assessment pursuant to paragraph (I) of this rule.

(2) If owners and operators have obtained laboratory analytical results from a study or survey of the UST site other than from a site check conducted pursuant to paragraph (D)(3) of this rule, a closure assessment conducted pursuant to paragraph (K) of rule 1301:7-9-12 of the Administrative Code, or a site assessment conducted pursuant to paragraph (I) of this rule, owners and operators shall conduct a site check pursuant to this rule if any such results exceed the appropriate action levels determined for the UST site using the scoring system and action level table set forth in paragraph (E)(3)(i).

## (3) Scoring system.

(i) UST sites shall be scored using the site feature scoring system set forth in this paragraph.

## SITE FEATURE SCORING SYSTEM

SITE FEATURES	COLUMN A		COLUMN B		COLUMN C		COLUMN D	
	SCORE 20 IF TRUE	SCORE	SCORE 15 IF TRUE	SCORE	SCORE 10 IF TRUE	SCORE	SCORE 5 IF TRUE	SCORE
1. Distance of UST system from closest drinking water supply well or intake currently in use.	>1000 feet		301-1000 feet		<301 feet		Inside of designated sensitive area	
2. Average depth to ground water.	>50 feet		31-50 feet		15-30 feet or unknown		<15 feet	
3. Predominant soil type of substratum.	Clay or Shale		Silt or Clayey Sands or Fine Sandstone		Silty Sand or Fine Sand or Sandstone or Unknown		Clean Sand or Gravel or Conglomerate	
4. Natural and/or manmade conduits or receptors.	< 8		8-10		11-13		> 13	
Subtotal:								

Total Score = \_\_\_\_\_

(ii) Site feature 1 shall be measured from the edge of the portion of the UST system closest to the drinking water supply well or intake. A drinking water supply well or intake includes an area upstream from a public surface water supply intake, a public drinking water well, a private drinking water well, or a reservoir or lake greater than five acres in surface area.

(iii) Site feature 2 shall calculate the average depth of ground water utilizing readily accessible public documents and or site-specific investigations, such as local drilling logs within one-quarter mile of the site, Ohio department of natural resources records, Ohio department of transportation records, soil boring logs, site checks, and site assessments. The depth should be

calculated from the ground surface and not from the bottom of the tank excavation. If the depth to ground water can not be determined then you must utilize the score from column C of the site feature scoring system.

(iv) Site feature 3 shall select a substratum type which best represents the soil and/or bedrock under the UST site or is most typical of the area utilizing readily accessible public documents and/or site-specific

investigations, such as local drilling logs within one-quarter mile of the site, geologic maps, Ohio department of natural resources records, Ohio department of transportation records, soil boring logs, site checks, and site assessments.

(v) Site feature number 4 shall be scored using the following site Feature Number 4 Worksheet and in accordance with procedures established by the fire marshal:

SITE FEATURE NUMBER 4 WORKSHEET

Basements or subsurface foundations within one hundred feet of UST system	4 points	_____
Storm sewer within fifty feet of UST system	4 points	_____
Sanitary sewer within fifty feet of UST system	4 points	_____
Septic system leach field within fifty feet of UST system	2 points	_____
Water line main within fifty feet of UST system	1 point	_____
Natural gas line main within fifty feet of UST system	1 point	_____
Bedrock area prone to dissolution along joints of fractures (i.e., caves & sinkholes) within one hundred feet of UST system	1 point	_____
Faults or known fractures within one hundred feet of UST system	1 point	_____
Buried telephone/television cable main within fifty feet of UST system	1 point	_____
Buried electrical cable main within fifty feet of UST system	1 point	_____
	TOTAL POINTS	_____

## (4) Action level table.

(i) Action levels shall be determined for the UST site by applying the total score calculated for the UST site pursuant to paragraphs (E)(3)(i) to (E)(3)(v) of this rule to the following table:

	CATEGORY 4	CATEGORY 3	CATEGORY 2	CATEGORY 1
<b>TOTAL SCORE</b>	>71	70-51	50-31	<31
<b>Constituents level in soil:</b>				
Benzene	.500 PPM	.335 PPM	.170 PPM	.006 PPM
Toluene	12 PPM	9 PPM	7 PPM	4 PPM
Ethylbenzene	18 PPM	14 PPM	10 PPM	6 PPM
Total Xylenes	85 PPM	67 PPM	47 PPM	28 PPM
<b>Constituents level in ground water:</b>				
Benzene	.005 PPM	.005 PPM	.005 PPM	.005 PPM
Toluene	1 PPM	1 PPM	1 PPM	1 PPM
Ethylbenzene	.700 PPM	.700 PPM	.700 PPM	.700 PPM
Total Xylenes	10 PPM	10 PPM	10 PPM	10 PPM
<b>TPH level in soil:</b>				
Analytical Group No. 1	600 PPM	450 PPM	300 PPM	105 PPM
Analytical Group Nos. 2, 3, and 4	1156 PPM	904 PPM	642 PPM	380 PPM

**(F) CLEANUP OF SPILLS AND OVERFILLS.**

(1) If a spill or overflow of petroleum products results in a release into a nearby surface water body or consists of a release to the environment of more than twenty-five gallons of petroleum product, owners and operators shall attempt to contain and immediately clean up the spill or overflow and shall perform a site check in accordance with paragraph (D)(3) to (D)(3)(d) of this rule.

(2) If a spill or overflow of petroleum products does not enter a nearby surface water body and no more than twenty-five gallons of petroleum product has been released to the environment, owners and operators shall immediately contain and clean up the spill or overflow. If cleanup is accomplished within twenty-four hours, no further action shall be required. If the cleanup is not completed within twenty-four hours, owners and operators shall immediately notify the fire marshal and the local fire department and shall perform a site check in accordance with paragraphs (D)(3) to (D)(3)(d) of this rule.

**(G) FREE PRODUCT REMOVAL**

(1) Where free product is present, owners and operators shall implement a free product recovery program that removes free product to the maximum extent practical, while continuing other actions required by this rule. In meeting the requirements of this paragraph, owners and operators may use manual bailing, skimming, pumping or other removal techniques that:

(a) Remove free product in a manner that minimizes the spread of contamination into previously uncontaminated zones and uses recovery and disposal techniques appropriate to the hydrogeologic conditions at the UST site and that properly treat, discharge, or dispose of recovered product in compliance with applicable federal, state and local laws;

(b) Handle any flammable products in a safe and competent manner to prevent fires or explosions;

(2) Owners and operators shall notify the fire marshal within twenty-four hours, by telephone, electronic mail, or the like, of the start of free product removal activities. After starting free product removal activities owners and operators shall prepare a written report describing the location of the free product, its thickness, the devices or system used for removal and management of the free product, location of recovery wells, and the amount and disposition of free product and water produced by the recovery activities. Owners and operators shall submit this initial written report to the fire marshal, which shall be actually received by the fire marshal within twenty days of starting the free product removal activities. Additional written reports shall be prepared, filed with and actually received by the fire marshal every month until termination of free product removal under paragraph (G)(3) of this rule or implementation of corrective action in accordance with this rule, whichever is earlier. A free product removal system that cannot be repaired within twenty-four hours of discovery of a system malfunction shall be reported immediately, by telephone, electronic mail, or the like, to the fire marshal and local fire department. The malfunction shall be corrected and the system placed back into service as promptly as is technically feasible.

(3) Free product removal activities may terminate once free product has been removed to the maximum extent practicable.

**(H) IMMEDIATE CORRECTIVE ACTIONS IN RESPONSE TO UST SYSTEM RELEASES.**

(1) If testing or other evidence confirms that a release has or continues to occur from the UST system, owners and operators shall perform the following corrective actions within twenty-four hours of confirmation of the release:

(a) Take immediate action to prevent any further release of the petroleum from the UST system into the environment. Such actions shall include removal of petroleum product from the UST system as is necessary to prevent further release into the environment; and



(b) Immediately identify and mitigate fire, explosion, vapor and safety hazards associated with such release.

(c) Inspect above ground releases or exposed below ground releases and take steps to prevent further migration of such releases into surrounding soils and ground water through use of absorbent pads, absorbent booms, dikes, siphon dams, and the like;

(d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the excavation zone to subsurface structures, such as basements, sewers, or the like; and

(e) Manage contaminated soils that are excavated in a manner that complies with applicable state and local requirements.

#### (I) SITE ASSESSMENT

(1) If free product is present or the action levels set forth in paragraph (E) of this rule have been exceeded at any sampling location, owners and operators shall proceed to conduct a site assessment to delineate the full extent of the release. This delineation shall consist of determining the nature and extent of contamination on the UST site and the potential for off-site contamination. The site assessment shall be completed within one hundred eighty days of reporting of a release or suspected release. Owners and operators shall prepare a written site assessment report. Owners and operators shall submit the written site assessment report to the fire marshal, which shall be actually received by the fire marshal within one hundred eighty days of reporting of a release or suspected release.

(2) If a potential for off-site contamination is identified, owners and operators shall use their best efforts to obtain permission to enter such off-site areas to complete full delineation of the contamination. Within forty-five days of a determination of possible off-site contamination, owners and operators shall secure off-site access and submit to the fire marshal, which shall actually be received by the fire marshal within this forty-five day period, a timetable for completion of the

delineation or, if access cannot be obtained, submit a report to the fire marshal, which shall actually be received by the fire marshal within this forty-five day period, which describes efforts that were made to obtain access and the reasons that access was not secured. If access is obtained, delineation of off-site contamination shall be completed in accordance with the timetable submitted to the fire marshal.

(3) Site assessment shall consist of the following:

(a) A review and summary of information from readily available sources, such as the Ohio department of natural resources and the United States geologic survey, about the geology and hydrogeology of the UST site and its proximity to drinking water wells;

(b) A summary of the nature of the release, immediate corrective actions taken, and free product removal activities;

(c) A map that accurately depicts the locations of the UST system, buildings or other structures within one thousand feet of the suspect UST system, on-site storm sewers, water lines, underground telephone lines, natural gas lines, and other structures and utilities which may act as a route of migration for contaminants, provided this information is readily available and does not require subsurface investigations by owners and operators;

(d) A summary of the results of any soil and ground water analysis from a site check performed by owners and operators in accordance with paragraph (D)(3) to (D)(3)(d) of this rule, a closure assessment performed in accordance with rule 1301:7-9-12 of the Administrative Code, or other prior assessment of the UST site;

(e) A determination of the vertical and horizontal extent of the release. Soil borings drilled to determine the vertical extent of contamination shall

be drilled to auger refusal, a ground water confining layer, the ground water table, or forty-five feet, whichever shall be encountered first. However, if ground water is known to be contaminated from the release, borings shall be drilled to such ground water. Continuous split spoon samples shall be taken from soil borings. Ground water monitoring wells shall be extended a minimum of five feet into the water table and shall be screened to accommodate seasonal fluctuations in the ground water table. Data collection for monitoring wells shall include the depth to product, product thickness, depth of water to top of casing, and the elevation to top of casing;

(f) A determination of the geologic and hydrogeologic characteristics of the UST site which may influence the migration and transport of contaminants. This determination shall include the direction and gradient of ground water flow if ground water is encountered;

(g) A description of faults, fissures, fractures, or other geologic contaminant transport routes;

(h) A description of monitoring well installation and accompanying drilling logs;

(i) Results of surface water sampling from ditches, storm sewers, streams, lakes or other surface waters affected by the release; and

(j) Copies of drilling logs and analytical data sheets shall be attached to the site assessment report.

(4) Samples shall be collected, preserved, and submitted to a laboratory and analyzed in accordance with methods or procedures established by the fire marshal. Analytical parameters and analysis methods for samples shall be those listed in Table 1 of paragraph (D)(4) of this rule.

(5) Monitoring wells installed as part of a site assessment under this rule may be abandoned with the approval of the fire

marshal. Abandonment shall be performed in accordance with requirements under state law;

#### (J) REMEDIAL ACTION PLAN.

(1) Owners and operators shall submit a remedial action plan to the fire marshal for approval, which shall be actually received by the fire marshal within ninety days of the fire marshal's approval of the site assessment report. Unless otherwise provided in this rule, the remedial action plan shall include the following:

(a) A description of the remediation program to be implemented;

(b) Proposed target levels, identified by compound and media, to be achieved by the remediation;

(c) A conceptual design of the remediation system, detailed engineering drawing shall not be submitted;

(d) A brief description of remedial alternatives considered, including a discussion of the reliability, effectiveness, cost, and time needed for completion, and the rationale for the selected program;

(e) A description of monitoring to be used to determine whether target levels are being achieved, including locations of any monitoring wells designated for sampling;

(f) A description of reporting frequency and proposed content of reports;

(g) A description of permits or other governmental approvals required for implementation of the plan;

(h) A description of activities or studies, if any, required to be performed prior to implementation of the proposed remedy;

(i) An implementation schedule and the projected completion date of the proposed remedy.

(2) Proposed target levels shall be determined using the action levels set forth in paragraph (E) of this rule or through use of a site-specific, risk-based exposure assessment. The risk-based exposure assessment shall include identification of exposure routes, human health and environmental criteria for constituents found at the site, and characterization of risks to affected populations from contaminants found at the site. The risk-based exposure assessment shall be conducted in accordance with procedures approved by the fire marshal.

(3) If the site assessment report or subsequent monitoring data demonstrates that the site in question meets approved target levels, the fire marshal shall notify owners and operators that no further action is required in writing.

(4) A remedial action plan may propose a monitoring only remedial program consisting of monitoring of the site for a specific period of time, provided no free product is present, soil contaminants do not exceed twice the sum of the BTEX target levels, and one of the following conditions exist:

(i) The UST site is located in a sensitive area and the BTEX concentration in ground water is less than the sum of the target levels for each constituent and the benzene concentration is below the target level in wells on the UST site, or

(ii) The UST site is located in a non-sensitive area and the BTEX concentration in ground water is less than sum of the target levels for each constituent in wells on the UST site.

A monitoring only plan shall include a minimum of three monitoring wells, one hydraulically upgradient and one hydraulically downgradient of the contamination and one in the area of greatest contamination. Monitoring shall be conducted for a minimum of one year in accordance with the monitoring frequency and reporting approved in the plan.

#### **(K) PUBLIC PARTICIPATION.**

(1) For each confirmed release that requires a remedial action plan, the fire marshal shall provide notice to the public by means designed to reach those members of the public directly affected by the release and the planned remedial action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, publication in a state register, letters to individual households, or personal contacts by field staff.

(2) The fire marshal shall ensure that UST site release information and decisions concerning the remedial action plans are made available to the public for inspection upon request.

(3) Before approving a remedial action plan, the fire marshal may hold a public meeting to consider comments on the proposed remedial action plan if there is sufficient public interest, or for any other reason.

(4) The fire marshal shall give public notice that complies with paragraph (K)(1) of this rule if implementation of an approved remedial action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the fire marshal.

#### **(L) IMPLEMENTATION OF REMEDIAL ACTION PLANS.**

(1) Upon approval of the remedial action plan, owners and operators shall implement the plan. Owners and operators shall monitor, evaluate, and report to the fire marshal the results of implementation efforts in accordance with a schedule approved in the plan.

(2) Following implementation of a remedial action plan, if the treatment technology approved by the fire marshal in the plan has been installed and operated for a minimum of one year and the technology is unable to reduce the level of constituents of concern below target levels such that the asymptotic level has been reached, a request may be made to the fire marshal to discontinue operation of the technology and continue with periodic monitoring of the site. This request shall be granted if the owners and operators demonstrates that use of other

proven treatment techniques will not further reduce constituent levels and the fire marshal finds that levels achieved at the asymptotic level are sufficiently protective of human health and the environment and that the proposed monitoring plan is capable of verifying that constituent concentrations at the asymptotic level have stabilized. If the asymptotic level concentrations are shown to have stabilized or decreased for a minimum of one year, the corrective action plan shall be deemed complete. If constituent levels increase significantly for two consecutive monitoring periods, then active remediation required by the original corrective action plan shall be reinstated.

#### (M) COMPLETION

Following completion of remedial action in accordance with this rule, owners and operators shall prepare a completion report that demonstrates that the remediation objectives of the plan have been met. The report shall contain documentation supporting termination of the remedial program. Upon approval of the report, the fire marshal shall issue to the owners and operators written notice that no further action is required at the UST site.

#### (N) REQUESTS FOR EXTENSIONS

If an owner or operator desires an extension of any time period in which to act contained in this rule, the owner or operator must do the following:

- (1) Prepare a written request setting forth the following:
  - (a) The time period in which to act contained in this rule that is the subject of the extension request;
  - (b) The owner's or operator's reasons for requesting the extension;
  - (c) The length of time that the extension is requested for;
  - (d) The name and complete address of the UST site that is the subject of the extension request;
  - (e) The name of the state fire marshal employee, if any, that is assigned to monitor the corrective actions activities at the UST site that is the subject of the extension request; and

(f) The incident number, assigned by the state fire marshal, for the UST site that is the subject of the extension request.

(2) Submit a timely written request in accordance with paragraph (N)(1) of this rule to the fire marshal prior to the expiration of the time period that is the subject of the extension request. Submission of the written request required by paragraph (N)(1) of this rule is completed for purposes of this paragraph only upon the actual receipt of same by the state fire marshal.

The fire marshal may grant, modify, or deny any extension request at his sole discretion.

#### (O) ALTERNATE TECHNOLOGY

Technologies other than those specified in this rule may be used if the owner and operator:

- (1) Demonstrate to the bureau chief that the alternate technology is at least as effective as those required by this rule; and
- (2) Obtain written approval from the bureau chief to use the alternate technology before the actual implementation of such technology. If the alternate technology is approved by the bureau chief, the owner and operator shall comply with any conditions imposed by the bureau chief on its use.

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