#### **Guidance Documents**

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# Underground Storage Tank Indemnification Fund Bulletin 1: Mark-Up Of Invoices

Mark-up allows a consultant or contractor who purchases equipment or hires subcontractors on behalf of the eligible participant to be reimbursed for administrative costs associated with coordinating the work of subcontractors. Invoices from prime corrective action consultants charge mark-up for expense and sub-contracting work ranging anywhere from 3% to 20% and above. In addition, the types of charges which are marked up vary from consultant to consultant. The core functions associated with remedial activities are defined as geological and engineering activities. The Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) realizes that in the course of corrective action, it may be necessary to enlist the services of outside contractors/vendors to perform non-core functions associated with the cleanup and to purchase supplies. Since November 1, 2004, non-core functions performed by outside contractors and supply purchases may be reimbursed with a mark-up not to exceed 10%. Subcontractor invoices may also include mark-up for services and/or purchase of supplies; however, the maximum total mark-up the USTIF will reimburse for any service or item is 10%. USTIF reimbursement is subject to applicable laws and regulations including claim eligibility and the limitation of payment to the reasonable and necessary costs for corrective action, not to exceed the claim aggregate limit, and subject to applicable deductible and/or proration.

Examples of non-core functions include, but are not limited to:

- Laboratory Analyses
- Drilling Contractors
- O&M (work by outside vendors)
- Soil Disposal
- Equipment Rental (from outside vendors)
- Surveying Services
- Excavation Services
- Paving Services
- Electricians
- Drafting Services



Expenses associated with the mark-up of a consultant's or contractor's own internal operating expenses (such as meals and lodging) are not eligible for reimbursement. Costs for goods and/or services provided by the eligible participant are not eligible for reimbursement. Mark-up will not be reimbursed on charges for services performed by or provided by third parties that are considered core functions and/or administrative and periodic in nature. Examples include, but are not limited to:

- Groundwater Sampling and Reporting
- Project Management
- Meals
- Lodging
- Car Rentals
- System Utility Bills (electricity, natural gas, etc.)
- Copy Services
- Permits and Fees (such as those related to filing an Environmental Covenant or county fees associated with discharge permits)

November 2004, Revised April 2020



# Underground Storage Tank Indemnification Fund Bulletin 2: Monitored Natural Attenuation

Monitored Natural Attenuation (MNA) at corrective action sites represents an acceptable and proven method of remediation. At sites where this method of remediation is presented as the selected alternative in the Remedial Action Plan (RAP), and has been approved by the Pennsylvania Department of Environmental Protection (DEP), the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) will reimburse the claimant for reasonable and necessary costs involved, including costs associated with regular monitoring. The USTIF too often sees charges for work performed, such as quarterly monitoring, where there has been no submission of a Site Characterization Report (SCR) or RAP and, therefore, no approval from the DEP for MNA as the choice for remediation. In other cases, MNA is proposed in the RAP but the DEP requires another type of remedial approach. The USTIF will reimburse claimants for sampling events prior to submission and approval of a SCR/RAP only to the extent that the sampling is reasonable and necessary for completion of the SCR/RAP.

Revised April 2020



# Underground Storage Tank Indemnification Fund Bulletin 3: Subrogation

The Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) regulations define subrogation as the right of the USTIF to pursue a claim against a third party when the tank owner or operator (hereafter referred to as claimant) have been indemnified by the USTIF. Subrogation recoveries result in savings for the USTIF and recovery of any deductible for the eligible claimant.

When a release occurs as a result of a third party's faulty or improperly installed equipment, or individual negligence, the USTIF will reimburse the eligible claimant for reasonable and necessary corrective action costs resulting from the damages and then seek reimbursement of the monies paid by the USTIF, as well as applicable deductible(s) paid by the claimant, from the responsible party.

The USTIF has the burden of proving damages including payments to the claimant. At the onset of a release or as soon as possible, the claimant must cooperate by preserving any evidence and chain of custody records. This is vital for successful subrogation. The claimant must save the defective part or piece of equipment or any other evidence as proof until a request to inspect or obtain the evidence is requested by the USTIF.

The rights of recovery are assigned to the USTIF. Claimants should refrain from doing or saying anything that would compromise our rights. If you are contemplating any form of litigation in the matter, please inform your attorney(s) that USTIF's interests must be protected should any settlement take place. In the event an insurance representative contacts you please refer them to the USTIF.

Revised April 2020



### Underground Storage Tank Indemnification Fund Bulletin 4: Deductibles Related To Third Party Claims/Access Agreements

The purpose of this bulletin is to clarify the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) position with regard to deductibles involving third party claims, particularly in relation to access agreements between eligible tank owners and operators (hereafter referred to as claimants) and off-site property owners.

Section #705C of the Storage Tank and Spill Prevention Act sets forth the applicable language concerning deductibles. This section of the Act provides for a deductible that is applicable to remediation activities, and a separate deductible that is applicable to property damage, bodily injury or both caused from a release from an underground storage tank.

The USTIF's position is that remediation activities such as installing a system or wells off-site are remediation costs related to the original deductible incurred by the claimant for remediation activities. However, where the off-site property owner requests additional sums of money for temporary loss of use of the property, inconvenience, or other general damage, these requests fall under the definition of "property damage", as defined in Section 977.4 of the USTIF's regulations (25 Pa Code Chapter 977), and therefore require the claimant to incur a second deductible for payment of a third party claim.

It is not uncommon for claimants or their consultants to enter into access agreements with off-site property owners that commit the claimant to significant monetary exposure. Careful consideration should be given to having an attorney review the scope of the agreement. If a claimant submits a reimbursement request to the USTIF for monetary expenses associated with an off-site access agreement, the request will be reviewed for reasonable and necessary costs under Chapter 977.33 of the Underground Storage Tank Fund; and, if the USTIF agrees to such a reimbursement request, a third party deductible may be applied.

Revised April 2020



# Underground Storage Tank Indemnification Fund Bulletin 6: Initial Site Characterization Work Plan Documentation

When requested via a letter from the Pennsylvania Underground Storage Tank Indemnification Fund's (USTIF's) Third Party Administrator (TPA), USTIF is requiring the submission of a "Work Plan" that includes a concise scope of work for all proposed initial site characterization activities as described below and following the "Administration of the Storage Tank and Spill Prevention Program" regulations at 25 Pa Code Chapter 245 (Sections 309 and 310) for site characterization. The Work Plan includes 8 Sections, Figures and Appendices, and must be completed and submitted following the format provided below.

An electronic copy of the Work Plan should be submitted to USTIF's TPA Work Plan Coordinator prior to implementing any intrusive Site Characterization Activities. The invoice to prepare the Work Plan should be submitted to the TPA Work Plan Coordinator via email within 30 days of the Work Plan submission. The Work Plan email's subject title should be "Work Plan, Claim No. ########(X)". DO NOT SUBMIT THE WORK PLAN TO THE Pennsylvania Department of Environmental Protection (DEP). Reasonable and necessary costs incurred to develop this initial Work Plan for a site, up to \$5,000, are reimbursable since they apply to the collection and presentation of information consistent with the Chapter 245 Site Characterization requirements and/or guidelines. This payment will be made regardless of the eventual eligibility determination. If the subject property is already undergoing corrective action because of an earlier release or you are unsure if a Work Plan should be submitted, please contact the TPA prior to preparing a Work Plan.

The objective of the Work Plan is to foster the generation and use of basic information by the environmental professional. A secondary purpose is to provide a preliminary cost estimate (to be included as an attachment in the Work Plan as discussed later). With the exception of emergency responses and interim responses as defined in Chapter 245, the Work Plan should be submitted *prior to the initiation of intrusive site characterization and/or corrective action work* (i.e., monitoring wells, soil borings, etc.). To improve the quality of the site characterization, basic information must be obtained by the environmental professional to prepare a complete Scope of Work for the Work Plan. In all cases, the DEP remains the regulator of the corrective action



process. USTIF's goal is to improve the quality of the corrective action work for which it reimburses claimants consistent with its fiduciary responsibility.

USTIF understands that the items that will be included in the Work Plan are consistent with § 245.309 (relating to site characterization), should constitute industry best practices, and are consistent with an appropriate standard of care for USTIF-funded work as part of the process for preparation and submittal of a Site Characterization Report to the DEP. Nothing in this document should be construed as conflicting with Chapter 245 or Chapter 250 requirements. Additionally, USTIF's response to the Work Plan will have no impact on the DEP's review of Site Characterization Reports or Remedial Action Plans. Lastly, USTIF's Work Plan requirements are not intended to, and should not be construed to, interfere with the claimant's obligations under §§ 245.306 (relating to interim remedial actions), or 245.307 (relating to affected or diminished water supplies). For example, affected water supplies should be replaced immediately, harmful vapors abated immediately, and any other emergency response and/or interim remedial action(s) required in accordance with §§ 245.306 or 245.307 should be completed.

USTIF requires that the claimant cooperate in accordance with 25 Pa Code § 977.32 (relating to participant cooperation) by including the data/items in the Work Plan submittal described below. Failure to include these data/items in the Work Plan submittal may be interpreted by USTIF as a lack of cooperation and therefore may affect reimbursement for eligible claims. The TPA will review the Work Plan and comment as necessary to the claimant and its environmental professional within 15 business days of receipt of the Work Plan. It is expected that the environmental professional would undertake this planning step at each site regardless of USTIF requirements and that while the Work Plan is being reviewed by USTIF, necessary additional detailed planning and scheduling tasks would also be undertaken. The intent is not to interfere with the routine judgments of the claimant's environmental professional, but rather it is the intent of USTIF that characterization work: 1) be in compliance with applicable DEP regulations and guidance, 2) be planned and well-reasoned, 3) lead to a full site characterization that can be used to further timely, effective, and comprehensive corrective action; and, 4) be necessary and reasonable to justify reimbursement for eligible claims. Because the Work Plan is preliminary in nature, the information presented therein is subject to change. Even though portions may be preliminary in nature, it is important that it be complete, and that it represent the best professional judgment of the environmental professional in responsible charge



of its preparation and submission. Therefore, it is appropriate that the environmental professional responsible for preparation may want to use qualifying language such as "Preliminary Document – Submitted at the Request of USTIF for Project Planning Purposes", etc. To the extent that the Work Plan involves professional geological work (as defined by the Engineer, Land Surveyor and Geologist Registration Law and its implementing regulations), the Work Plan must be signed and sealed by a Pennsylvania-licensed Professional Geologist.

Other than emergency response activity(s) and interim remedial action(s) as may be required by §§ 245.306 (relating to Interim Remedial Actions) or 245.307 (relating to affected or diminished water supplies), failure to submit the Work Plan requested herein, prior to the work being performed, will likely result in an increase in the amount of time necessary to review invoices associated with site characterization activities which could delay reimbursement. USTIF may require that the environmental professional provide justifications for costs post facto that would not have otherwise been necessary if the Work Plan had been submitted. The preparation of post facto justifications will not be reimbursable. Invoices for preparation of Work Plans where the Work Plan did not include the required information or that did not follow the Work Plan bulletin (such as intrusive work completed prior to submission of the initial work plan) will likely not be reimbursed.

The Work Plan shall consist of the following Sections, Figures and Appendices.



#### FORMAT FOR SUBMISSION:

#### Section 1 - Subject Property History

Please provide a summary of the site history. This summary should include a discussion of ANY AND ALL known or suspected existing and historic petroleum product or waste UST(s) and AST(s) located at the subject property (fuel, consumptive heating oil, used motor oil, etc.). Also include UST/AST system (tanks, lines, dispensers, etc.) closure/removal/upgrade history and the reasons why, if known. If not known, please specify in the Work Plan. Discuss and provide the quantitative results including location maps of ANY and ALL previous characterization/sampling and/or remediation work including, but not limited to ASTM Phase I and Phase II Environmental Site Assessments, UST/AST closure reports, SCRs, RAPs, RACRs (or Act 2 equivalents). The Work Plan is a stand-alone document and may not include this information by reference to other documents, though relevant figures, tables or excerpts from such documents may be referenced in the Work Plan provided they are attached as exhibits to the Work Plan.

Describe any known emergency responses, interim remedial actions or any corrective action that has taken place prior to the submission of this Work Plan.

To the extent known and to the extent such records are reasonably available; please provide a copy of any historic former or existing property owner notifications of:

- a. Suspected release(s);
- b. Confirmed releases;
- c. DEP subsequent responses to historic suspected or confirmed release(s); and,
- d. DEP historic "Site closure letters" or "Relief/release of liability" letters.
- e. DEP written orders or requests for any matter related to Ch. 245.

The site release history summary may include, but is not limited to, information obtained from sources such as environmental reports, release notifications, NOVs, DEP site closure or "no further action" determinations, etc. Also please include any repair and maintenance records that may help to



identify or eliminate potential source area(s) at the subject property ("site"). This site history should be used to determine the analytical testing suite.

Geophysical surveys may be proposed as the environmental professional deems necessary to investigate known or suspected historical USTs. File searches at DEP regional offices may also be proposed (or if already conducted, included) for the site or adjacent petroleum-related facilities.

#### Section 2 - Nature of the Release

Please explain whether the release was likely a "chronic" or "catastrophic" release. To the extent it is known; please explain the estimated volume and most likely source of product lost.

<u>Example</u>: The data indicates a catastrophic release occurred and that an estimated 100 to 500 gallons (634 to 3170 lbs.) of unleaded gasoline was released from a leaky fitting 3 feet below grade near an unleaded gasoline dispenser following a line replacement. The loss was estimated to last an estimated three months and the leak was identified and fixed (when and by whom?)

### Section 3 - Hydrogeology

Explain the anticipated direction of shallow groundwater flow based, at least, on local topography and surface water features from a USGS 7.5 minute quadrangle or other available data sources. Identify the elevation of surface water feature(s) within one mile of the site and estimate both elevation estimated from a USGS topographic map and horizontal distances in feet. If historical or other relevant information exists (e.g., wells or reports from previous release investigations, Phase II ESA borings), make use of this information.

Considering (at least) local surface water features, and the potential for perched water systems, estimate the anticipated depth to the top of the shallowest zone of saturation (regardless of potential yield).



### Section 4 - Geology

Identify the bedrock Formation and site- or area-specific lithology of the shallowest bedrock associated with the site from a source such as:

- a. "Map 61" (Atlas of Preliminary Geologic Quadrangle Maps of Pennsylvania 1981 PA Geological Survey) as indexed at <a href="http://www.dcnr.state.pa.us/topogeo/map61/glossary.aspx">http://www.dcnr.state.pa.us/topogeo/map61/glossary.aspx</a>, or;
- b. the 1980 Geologic Map of Pennsylvania and/or other published map sources, or;
- c. any other reliable source such as the USGS, US Department of the Interior, or, Pa Topographic and Geologic Survey, DCNR, among others.

For sedimentary bedrock, identify and approximate the basic local structural orientation (strike and dip) of the shallow underlying bedrock formation(s).

Also identify areas where soil is expected to be thick and/or permeable, such as areas with glacial outwash or fluvial systems.

When conducting the field reconnaissance, if possible, map on-site and nearby bedrock outcrops (and Brunton Compass readings) and document the findings.

### Section 5 - Deep Well Special Case

To expect reimbursement, the total depth of the first monitoring wells installed during an initial investigation phase and intended to be "water table" wells shall not exceed 60 feet without a technically supported argument, prepared by a Pennsylvania-licensed professional geologist, that the water table lies below 60 feet. That is, there is a presumption that the total depth of monitoring wells in the Commonwealth should not be greater than 60 feet. USTIF may deny reimbursement for costs associated with the installation and monitoring of wells that are installed to an inappropriate depth or with



inappropriate construction (particularly those wells installed after the initial well and site-specific information has been obtained).

# If you do not plan to drill the initial wells to a depth greater than 60 feet, write "NA" under this section heading.

- a. Review of a plan that proposes the installation of any well with a total depth greater than 60 feet when NOT working in the Allentown Area, State College Area, or other unique carbonate bedrock areas will require the Professional Geologist to rebut the presumption that wells greater than 60 feet are inappropriate to obtain reimbursement. For any monitoring well, reimbursement may be denied or adjusted if:
  - The shallowest zone of saturation (regardless of low yield) is cased off without the well-reasoned intent to do so (exceptions; piezometers, nested wells, etc. if/as required by the DEP);
  - ii. The screen is "drowned" (generally meaning that screened interval is entirely below the top of the shallowest encountered saturated zone, i.e., the water table or perched water table), without the well-reasoned intent to do so;
  - iii. The well has a screened or open borehole interval that crosses more than one water bearing zone where the potential for cross-contamination is increased without the well-reasoned intent to do so;
  - iv. The construction technique is substantially inconsistent with DEP's "Groundwater Monitoring Guidance Manual";
  - v. The well was installed to a depth that should have been recognized as excessive given information available prior to drilling;
  - vi. Following installation, the environmental professional does not recognize that static water levels are anomalous. The most likely cause is that shallow groundwater is communicating within the well-bore with deeper water bearing zones. (i.e., water in the well bore is flowing up or down depending on the vertical gradient resulting in the masking of multiple potentiometric surfaces).



A shallow well or two that are dry (e.g., a well drilled to the top of bedrock and completed as a soil monitoring well that is dry) are acceptable and provide valuable information about the site. Soil borings that are drilled before monitoring wells are drilled can be completed as temporary soil piezometers and provide valuable site-specific information.

When working in areas where a depth-to-first-water level (water table) is commonly greater than 60 feet (particularly in carbonate areas such as Allentown, State College, or other unique carbonate bedrock areas), the total depth of the wells may be deeper, but must be justified by a Pennsylvania-licensed Professional Geologist with supporting documentation. This documentation should not rely upon drilling observations or databases focused on "yieldable" quantities of groundwater. Data used to support the depth to the shallowest zone of saturation (regardless of yield) for Sites in any locations may be obtained from local municipalities, US Department of the Interior, USEPA, USGS, DEP, USTIF, TPA drillers, other environmental professionals working in the area, Pa Geologic Society, Pa Topographic and Geologic Survey, etc. In any event, no monitoring wells, regardless of depth, may have overly long open hole or screened intervals as discussed in the DEP's "Groundwater Monitoring Guidance Manual".

Note: It is USTIF/TPA's experience that monitoring wells installed to depths and with screened intervals that risk the integrity or continuity of the uppermost water containing interval (i.e., deep, long-screened wells) risk both increased downward migration and the ability to accurately assess the contamination in the shallowest zone. This, in turn, affects the ability to evaluate, design, and implement remedial options for a Site.

### Section 6 - Receptor Evaluation

Once the above information requested in Sections 1-5 has been obtained and evaluated, USTIF requests that the environmental professional discuss potential receptors.

Please discuss whether there are current on property or off-property (third party) receptor impacts (supply well impact, surface water impact, ecological, and or vapor intrusion into, on or off-property buildings or utilities).



Please discuss whether public and/or private supply wells that use groundwater or other sensitive receptors are close to the property boundary and whether there is an ordinance that would prohibit the use and/or installation of private and/or public supply wells (if an Ordinance exists, please provide a copy of the document).

### Section 7 - Proposed Wells and Borings

#### **Monitoring Wells**

Based on the information available to the environmental professional at the time of the preparation of this Work Plan, describe the intended locations, depths, screened intervals and completion units (soil or bedrock) of the proposed initial monitoring well and the rationale for these wells.

#### Soil Borings

Describe the intended locations and soil sampling depths of proposed soil borings and what field screening/decision criteria will be used to select soil samples for analysis.

Describe the parameters to be analyzed for both groundwater and soil samples collected (e.g., DEP new unleaded gasoline short list) and provide justification why the parameters are being analyzed. If additional sampling is proposed (e.g., surface water, water supply wells, soil vapor), please describe the locations and rationale for this sampling.

### Section 8 – Additional Topics

Discuss additional topics that relate to the Work Plan and conditions at the site that are pertinent to the scope of work that are not discussed in Sections 1 through 7. Examples of topics and issues might include, but are not limited to: significant separate phase liquid thickness in a UST excavation at the time of closure, the removal of an unusual amount of soil at the time of UST closure, an adjacent facility with a groundwater plume that has migrated onto the claimant's site, a school next to the site, planned emergency or interim actions, the site is or may be underlain by subsurface coal mines, etc.



#### Required Figures

The following Figures are REQUIRED. Failure to provide any of these figures may result in the denial of payment for the Initial Work Plan Invoice because the Work Plan cannot be reviewed without these figures.

**Figure 1:** On a north oriented (show arrow), **scaled** Site Map (developed from a tax map, existing property map, detailed air photo-based map, etc.) show the location of **all** known former and existing storage areas (ASTs, USTs, vents, remote fills, lines, dispenser islands and/or dispensers, etc.), major site improvements, and site property lines. To the extent known, show subsurface utilities. This initial information should be obtained from the claimant and other reliable sources (refer to Section 1).

**Figure 2:** Provide a USGS 7.5 MINUTE TOPOGRAPHIC MAP showing the location of the Site. Do not use other "topographic" maps (e.g., municipality's GIS maps are not appropriate).

<u>Figure 3:</u> Provide a Geologic Map(s) showing the site geology based on published information. Refer to Section 4 for possible sources.

**Figure 4:** Provide an Area Map (developed from a tax map and/or aerial images/photographs) showing the location of buildings and use of other immediately surrounding properties 1,000-foot radius from the site, more or less). Show area water use (public, domestic wells and surface water intakes. Show the approximate location(s) of residential or public supply wells (if present) on each of the adjacent property(s).

**Figure 5:** On a north oriented (show arrow), **scaled** Site Map, show the location of the proposed monitoring wells. Also show the anticipated hydraulic gradient and structure (local strike and dip; if you anticipate encountering sedimentary bedrock). Show the location of the proposed soil borings relative to potential sources and anticipated total depth considering the anticipated water table and/or top of bedrock. Show any other anticipated sampling locations.



#### Required Appendices

The Work Plan must include the following appendices:

**Required Appendix A:** Provide a site reconnaissance summary (may use field notes) and site and adjacent property photo-documentation. Document any obvious or potential source areas on immediately adjacent properties. If potential off-site source area(s) are indicated, provide the approximate location(s) of the source(s) on a supplemental figure in this Appendix.

Required Appendix B: Document the presence or absence of residential or public water supply or industrial supply resources for the property and for properties immediately adjacent to the site. Provide in this appendix, a copy of any ordinances that document restrictions for the installation and use of private supply wells within one-quarter mile radius of the site or any "must connect" requirements. In the event no such ordinance exists, provide documentation in this appendix, such as a phone log, email, letter, etc. from an appropriate local official (Municipality, Township, and Borough) that one does not exist within a one-quarter mile radius of the site. If an Ordinance exists, please provide a copy of the document.

Required Appendix C: Provide a cost estimate for the scope of work as proposed above. (Estimated number of field and office labor-hours per task, number of soil and groundwater samples, extent of subcontractor participation, and anticipated incidental expenses required to implement the Work Plan. Include unit costs.) It is understood that this is a preliminary cost estimate for a Site where there is limited information, particularly about subsurface conditions. The purpose of the cost estimate is to facilitate USTIF's overall management of the claim (e.g., does this seem like a minor or major loss from an "insurance" point of view), and to provide input for the claimant in advance for costs that may not be reasonable or necessary so that these issues can be addressed prior to the work being performed instead of after the fact.

August 15, 2008, Revised January 2011 and April 2020



# REQUIRED COVER SHEET FOR THE WORK PLAN WORK PLAN SUBMISSION

### <u>Preliminary Document – Submitted at the Request of USTIF for Project</u> <u>Planning Purposes</u>

Date:
USTIF Claim Number:
Claimant Name:
Date of Release:
Regulated Substance Released Unleaded gasoline Diesel Fuel Oil Other (Please specify)
Cause/Location of Release (if not known, please specify):
DEP Project Officer:
DEP Reference Number:
Submitted and Sealed By (P.G.):
Claimant's name and email:
Consultant's email:



# Underground Storage Tank Indemnification Fund Bulletin 7: Incomplete Work Plan

In 2008, the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) instituted the requirement to submit an Initial Characterization Work Plan (see USTIF Bulletin 6) in the early stage of the remediation process. The USTIF, in conjunction with the Pennsylvania Counsel of Professional Geologists (PCPG) held a round of seminars introducing and explaining the Work Plan requirement. The objective of the Work Plan is to foster the generation and use of basic information by the consulting firm at the outset of characterization work in order to improve the quality of site characterization for which USTIF makes reimbursements. The information requested in the Work Plan is consistent with Pennsylvania Department of Environmental Protection (DEP) regulations and constitutes good professional practice.

Most consultants are complying with this requirement and hopefully are benefiting from the comments offered by the USTIF's reviewers. However, there are a few consultants whose Work Plan submittals are substantially incomplete and demonstrate a lack of understanding of the requirements and application of Chapter 245.

The USTIF will request that the claimant competitively bid the site characterization at these sites.

May 28, 2009, Revised April 2020



# Underground Storage Tank Indemnification Fund Bulletin 8: Soil Excavation During Interim Remedial Actions

The purpose of this Bulletin is to provide guidance to claimants and their agents (e.g., Pennsylvania Department of Environmental Protection (DEP) certified installers, consultants) with respect to soil excavation as part of an interim remedial action (IRA). This policy is not intended to apply to soil excavation performed as part of corrective action in conformance with a DEP-approved Site Characterization Report/Remedial Action Plan.

When a release occurs from a regulated underground storage tank (UST) system and the release is reported to the DEP, the corrective action process applies under Pennsylvania Code, Title 25, Chapter 245, Subchapter D, and, compliance with Section 245.306, Interim Remedial Actions, must be implemented as necessary and appropriate. Appropriate regulatory and guidance references are attached as Table 1.

The term "interim remedial action" is not specifically defined in Act 32 of 1989, Chapter 245 or guidance. However, the criteria for and components of IRAs are clear from the context of the documents cited in Table 1. Chapter 245.306(a) states "...the responsible party shall immediately initiate the following interim remedial actions necessary to prevent or address an *immediate* threat to human health or the environment..." (emphasis added). The word "immediate" is the key to this phrase. In addition, Section 245.306(b)(1) states that "at sites where free product recovery, regulated substance removal or contaminated soil excavation is performed, the responsible party shall...conduct recovery, removal, storage, treatment and disposal activities in a manner that prevents the spread of contamination into previously uncontaminated areas."

As noted above, with regard to the excavation of soil, Chapter 245.306(a)(3) states that "the interim remedial action may include excavation of the soils" in order to "prevent *further* migration of the *regulated substance*" (emphasis added). Chapter 245.306(b)(1) states contaminated soil removal should be conducted "in a manner that prevents the spread of contamination into previously uncontaminated areas". The key here is preventing further migration of the regulated substance itself (e.g., gasoline through the soil), not simply removing impacted soils. This concept of mitigating emergencies, immediate threats and preventing migration of regulated substances is further referenced in the <u>Technical Guidance Manual</u> which indicates that it is



appropriate to remove "product-saturated" soil; that is, not simply soil impacted by the regulated substance.

Specific activities associated with IRAs are discussed on page IV–88 of the <u>Technical Guidance Manual</u> which states "all appropriate interim remedial actions must be taken in order to **bring a release under control**" (emphasis added). Specific tasks and activities that are appropriate IRAs as listed in Chapter 245 and the Technical Guidance Manual are shown on Table 2.

As noted above, the discovery of contaminated soil is not in and of itself justification for soil excavation as an IRA. This is reinforced on Page 15 of the Closure Requirements for UST Systems (April 1, 1998) which describes actions associated with extensive contamination: "Extensive contamination is defined as contamination which extends more than three feet beyond the tank system in any direction, or impacts water in the excavation. Additional site characterization and corrective action will be required in cases of extensive contamination. In this circumstance, the requirements of the corrective action process regulations [Chapter 245] must be followed." In other words, the UST closure guidance document is not recommending soil excavation IRAs simply because extensive contamination exists, but rather that the provisions of the corrective action process regulations (Chapter 245) be followed.

The fact that contaminated soil will be left in place prior to the initiation of a formal remediation undertaken under an approved Remedial Action Plan is contemplated and discussed in the corrective action process regulations. Chapter 245.310(a)(4)(v)(F) discusses the reporting of IRAs in the Site Characterization Report. This portion of the regulations indicates that "where excavation of contamination soil is performed...the rationale for terminating soil excavation where the *contaminated soil has not been excavated*, including the volume of contaminated soil remaining in place, and a description of what steps will be taken to address the soils that remain unexcavated." (emphasis added). It is clear from this section of the regulations and from the UST Closure guidance that it is appropriate to leave contaminated soil in place prior to formulating and submitting a Remedial Action Plan for DEP review and approval.

Due to the immediacy of the need for IRAs, DEP regulations allow for the commencement of excavation at the responsible party's discretion and prior to the submission of a Site Characterization Report or Remedial Action Plan. The IRAs are not intended to replace corrective action or to eliminate the need for the Remedial Action Plan. Excessive soil excavation as



# part of interim remedial action can lead to costs that are not necessary and reasonable.

USTIF has seen over-excavation as an IRA that involves thousands of tons of soil. A clear justification (including representative and extensive soil sampling and analysis of excavated soil as well as supporting photographic documentation) is required by USTIF when extensive IRAs are implemented rather than remedial action in accordance with an approved Remedial Action Plan. USTIF will only reimburse for the eligible, necessary and reasonable corrective action costs as part of an IRA or a DEP-approved Remedial Action Plan.

Normal documentation supporting reimbursement for eligible claims must be submitted (For example, excavation contractor invoices and soil disposal invoices). It is presumed that larger soil excavation IRAs are not reasonable and necessary unless a clear and compelling case is made to the contrary. The clear and compelling case will include all necessary information including, at a minimum the following:

- photographs of the tanks if present and removal activities, if any
- soil, groundwater, waste water, and all other waste disposal or recycling documentation
- laboratory reports and supporting information grab samples of the soil that is excavated as part of the IRA collected in place prior to being excavated. (Composite samples or soil pile samples are not acceptable as part of the justification for a large soil excavation IRA.)
- field notes
- a narrative of the IRA activities

It is USTIF's policy that UST pea stone and soil excavation up to the limits expressed below are presumed to be reasonable and necessary as part of a UST system closure by removal or other IRA.

- Single or multiple UST systems with combined capacity up to and including 10,000 gallons – 400 tons
- Single or multiple UST systems with a combined capacity greater than 10,000 gallons – 500 tons

Larger amounts of pea stone and soil will be presumed not to be reasonable and necessary unless a clear and compelling case can be made to the contrary.

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References for Interim Remedial Actions consisting of soil excavation associated with regulated USTs:

- Section 245.306 (Interim Remedial Actions)
- Section 245.309(b)(1) regarding whether additional IRAs are necessary to abate an imminent hazard to human health or the environment
- Section 245.310 (a)(4)(v)(F) regarding the explanation for terminating soil excavation implemented as an IRA and addressing it instead of in the Remedial Action Plan.
- The <u>Technical Guidance Manual</u> (Section IV E)
- The April 1, 1998 <u>Closure Requirements for Underground Storage</u> <u>Tank Systems</u> guidance document in a peripheral manner



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Table 2
Specific Interim Remedial Actions

Section IV-E, the <u>Technical Guidance Manual</u> lists the following actions to mitigate emergencies or immediate threats:

- checking for and venting product vapors from sewer lines or buildings that have been impacted;
- calling emergency personnel such as local fire and public safety officials for assistance where fire, explosion or safety hazards exist;
- relocating residents until potentially explosive vapors have been reduced;
- restricting access to the site by nonessential personnel and establishing a buffer area around the site;
- recovering free product leaking into subsurface structures such as basements and sewers;

The <u>Technical Guidance Manual</u> also lists actions to prevent further release of the regulated substance:

- removing product from the storage tanks;
- removing the storage tanks;
- excavating *product-saturated* soils (emphasis added);
- removing free product on the water table;
- recovering product from the excavation;
- establishing booms in or interceptor trenches along streams, gullies, or drainage ways where surface water has been or may be impacted; and
- identifying and sampling affected water supplies or water supplies with the potential to be affected.



Chapter 245.306 lists the following actions to mitigate emergencies or immediate threats:

- remove the regulated substance from the tank;
- mitigate fire explosion and safety hazards posed by the vapors and free product;
- identify and sample affected water supplies or water supplies with the potential to be affected

Chapter 245.306 also lists actions to prevent further migration of the regulated substance:

- excavate soil to prevent the "further migration of the regulated substance"
- immediately initiate free product recovery



### Underground Storage Tank Indemnification Fund Bulletin 9: Disclosure of Abandoned Tanks

The purpose of this Bulletin is to provide guidance to claimants and their agents (for example, Pennsylvania Department of Environmental Protection (DEP) certified installers, consultants) for the disclosure to the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) of any known unregistered above ground or underground storage tank(s) at the site that is or has become known while the claim is pending or open.

It is USTIF's intent to be informed of any knowledge of any tank(s) or storage tank(s). The term "tank" or "storage tank" is to be interpreted broadly for USTIF's purposes and means any vessel that holds or held liquids. In accordance with DEP regulations, the tanks would be defined as either non-regulated or regulated (either registered or unregistered) tanks.

Upon receiving the initial report for a claim, USTIF, or its third party administrator (TPA), asks about any existing or any history of unregistered, abandoned or orphan above ground or underground storage tanks (unregistered tanks, includes non-regulated and regulated tanks) related to the property. The information provided by the claimant, or by and through their agents relative to unregistered tanks, must be accurate to the best of their knowledge, during the entire period while the claim is pending or open. Should the claimant or their agents become aware of any tanks previously unknown and undisclosed while the claim is pending or open, the newly discovered "tank" or "storage tank" must be reported to USTIF as soon as it is discovered, but in no case later than 15 days.

The DEP will require the disclosure of unregistered tanks that are regulated under the Storage Tank Act 32 to DEP. Due to the potential for any "tank" or "storage tank" as defined above, to be a source for contamination that may not be eligible for reimbursement by USTIF, all unregistered tanks, regardless of their apparent condition when they are discovered, must be reported to USTIF regardless of whether they are reported to the DEP.

After the initial report to USTIF noted above, a follow-up report to USTIF regarding the tank(s) unearthed or closed by removal, must be submitted. The follow-up report should include the results of representative soil samples collected as if the tank were a registered tank being closed in accordance with



the April 1, 1998 <u>Closure Requirements for Underground Storage Tank Systems</u> (including, as appropriate adjacent to the sides, ends and beneath the tank and analyzed for appropriate DEP short-list compounds). A narrative of the discovery of the tank and a photographic log of any tank closure activities must also be communicated to USTIF in the follow-up report. The reasonable and necessary costs of the soil samples, narrative and photographic log of the unregistered tank(s) will be considered corrective action costs by USTIF. This information will be used in the eligibility investigation of the registered tank release claim. If the claim is ultimately determined to be eligible, these and other reasonable and necessary site characterization costs will be reimbursed. USTIF's statutory and regulatory authority to reimburse for corrective action costs does not include the cost associated with the removal of the unregistered tank. That expense remains as the claimant's responsibility.

Failure to report knowledge of any and all tanks to USTIF during the period while eligibility of a claim is pending or open, or to provide the results of the soil sampling, narrative and photographs noted above, demonstrates a lack of cooperation by the claimant and may result in the denial of the claim or cessation of further payments on a claim.

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