

Remediation Program Guide

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Office of Land Quality
Indiana Department of Environmental Management

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1. INTRODUCTION

1.1 *Why Read This Remediation Program Guide?*

The Indiana Department of Environmental Management (IDEM) Office of Land Quality (OLQ) administers 12 programs that address sites that are contaminated, potentially contaminated, or perceived to be contaminated by hazardous substances or petroleum. Each program operates under a set of rules or laws and addresses a particular kind of site. This guide provides a roadmap through the cleanup programs, from release to closure, to clarify how each site is addressed. The programs differ in many ways, including:

- Terminology
- Types of documentation
- The path that a project travels through the program
- Public notice and participation opportunities

IDEM has made more information available online to make communication easier and information more accessible. This guide explains what information can be found online and where the information is located.

This *Remediation Program Guide* (RPG) is a partner document to the *Remediation Closure Guide* (Waste-0046-R1) (www.IN.gov/idem/4694.htm).

A note about naming conventions

IDEM's remediation programs use various terms to describe the parties who interact with IDEM. The terms indicate why or how the party(s) entered a program and may be based in law. The Voluntary Remediation and Brownfields Programs interact with applicants or program participants. The LUST and ELTF Programs generally interact with owner/operators (O/Os). RCRA, State Cleanup, Superfund, and DERP generally interact with responsible parties/persons or potentially responsible parties/persons. In order to simplify this text, when discussing multiple entities collectively that interact with IDEM's remediation programs, this text will use the general term "party(s)." In the context of a program specific discussion the appropriate term will be used.

1.2 *What Is in This Remediation Program Guide That Is Not in the Remediation Closure Guide?*

This RPG outlines processes and regulatory requirements of the OLQ remediation programs. The RPG describes each program. The RPG also includes information of general use. It discusses the following:

- Document submittals and enforcement processes
- The structure of each remediation program
- How projects flow through each program
- Some program-specific technical guidance
- Useful guidelines, forms and checklists, and e-Tools

The *Remediation Closure Guide* sets forth policies and procedures applicable to all of IDEM's remediation programs. The *Remediation Closure Guide* provides a consistent, risk-based approach to address contaminated sites. It provides detailed information including:

- Remediation objectives
- Conceptual site model (CSM) development
- Exposure assessment
- Remedy selection and implementation
- Background
- Plume evaluation
- Analytical methods
- Standard equations
- Screening levels

1.3 The Approach to Remediation Has Changed

In 2009, Indiana statutes, Indiana Code (IC) 13-12-3-2(a), 13-25-5-8.5 (c) (1) and (d) (3) (www.IN.gov/legislative/ic/code), were revised by House Enrolled Act (HEA) 1162. In the past, IDEM generally required removal of contaminants to closure levels based on the particular land use, to the extent practicable, as a precondition to remedy approval. HEA 1162 added new language to IC 13-25-5-8.5 (c) (1) and (d) (3) that:

- Requires that the remediation objectives proposed for a site be considered when determining the nature and extent of the hazardous substance or petroleum contamination
- Allows the risk based remediation objectives to include risk management and control of completed or potential exposure pathways
- Requires that environmental restrictive covenants (ERCs) and environmental restrictive ordinances (EROs) be considered when evaluating the remediation proposals if proposed as mechanisms to control exposure and manage risk
- IC 13-12-3-2(a) makes the remediation objectives detailed in IC 13-25-5-8.5(d) applicable to all remediation programs

IDEM interprets the above to mean that the agency must consider risk management and exposure pathway control remedies as valid risk management approaches to site closure. Rather than requiring that contaminants be removed as a precondition for remedy approval, IDEM also must consider a risk management approach. Proposed risk management remedies should be evaluated carefully, especially where federal requirements may apply.

The *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) provides detailed information about how to assess the protection of human health and the environment, and how to select appropriate remedies.

1.3.1 Record of Remedy Selection and Record of Site Closure

Environmental policies and rules change over time, as do the people who work with them and the people who are affected by them. Environmental investigation and remediation is a process that often takes years to complete. The data collected and interpreted and the documents developed can be extensive and

complex. When contamination is managed in place, a site may require long term maintenance. Circumstances may result in decisions being revisited over time. Therefore, clear documentation is essential. IDEM developed two state forms, Record of Remedy Selection and Record of Site Closure, to serve the following purposes:

- To clarify the amount and type of information necessary to support risk-based decision making
- To ensure that decisions made by the Remediation Services Branch (RSB) of OLQ are consistent, clearly presented and weighed against the appropriate criteria
- To serve as an executive summary of the remedy selection and remedy implementation, identifying key documents and any public participation activities

The appropriate form should be completed by the party(s) (*or their environmental contractor*) and be submitted with any Corrective Action Plan (CAP), Remediation Work Plan (RWP), or any request to approve site closure. IDEM staff will indicate approval by signing and returning the form to the requestor.

The Record of Remedy Selection (RRS) - State Form 54471 (www.IN.gov/idem/5157.htm) presents the remedial or corrective action plan when IDEM must approve the selection of the remedial (*or corrective*) action. It certifies that the remedy selection process was carried out properly; describes the technical parameters; specifies the remediation objectives and remedy components; and provides a consolidated source of information - including the rationale behind the selection.

The Record of Site Closure (RSC) - State Form 54472 (www.IN.gov/idem/5157.htm) presents the site closure decision. (*In cases where IDEM can approve the remedy selection and site closure simultaneously, the RSC may present all information about the remedy selection and remedial action(s) performed, so an RRS would not be necessary.*) It describes the technical parameters; specifies the remediation objectives and remedy components; and provides a consolidated source of information - including the rationale behind the selection.

1.4 How Will IDEM Manage the Transition of Sites From RISC and Other Existing Nonrule Policies to the Remediation Closure Guide (RCG)?

IDEM provides Nonrule Policy Documents (NPDs) such as the *Risk Integrated System of Closure (RISC) Technical Guide (Waste-0046)* (www.IN.gov/idem/4694.htm) as guidance to be used along with applicable rules or laws for risk-based assessment of contaminated sites. Rules or laws may be amended and NPDs revised during the course of a remediation project. IDEM developed a transition policy to identify the applicable guidance and associated procedures and screening level tables for each project.

In general, where 328 IAC and 329 IAC make reference to RISC, IDEM will interpret that in terms of the relevant component of the RCG. Some specific examples are:

- Where 329 IAC 7.1-2-9 defines No Further Action Letters in terms of RISC closure levels, IDEM will interpret that as completed remediation objectives.
- In 329 IAC 7.1-4-1; and in 328 IAC 1-4-1, where these rules say that sites will be prioritized based upon identification or detection of any contaminant above “RISC residential default cleanup levels”, IDEM will interpret that as “RCG residential screening levels”. Where this

section discusses: “ ‘surface soil’ and ‘direct contact exposure pathway’ as defined or further explained in RISC”, IDEM will interpret that as meaning those explanations provided in the RCG. RISC cleanup standards for the appropriate land use will be interpreted as risk-based remediation objectives.

- Where 328 IAC 1-1-5.1 discusses emergency actions in terms of RISC residential groundwater cleanup objectives, IDEM will interpret that as RCG residential screening levels. Where 328 IAC 1-3-5 discusses reimbursable costs associated with transitioning to RISC, IDEM will interpret that as transitioning to the RCG.
- Where 328 IAC 1-1-5.1 discusses costs for remediation of contamination not shown to be at concentrations exceeding the risk integrated system of closure (RISC) as described in IC 13-23-8-4(a)(4)(A)(ii) industrial cleanup standards, IDEM will interpret that as risk-based remediation objectives appropriate for industrial land use as discussed in the RSC. Off-site contamination at concentrations exceeding RISC residential cleanup standards will be interpreted as off-site contamination exceeding residential screening levels. Where personnel classification activity descriptions refer to RISC evaluations, statistics, etc., IDEM will interpret that as RCG evaluations, statistics, etc.

IDEM will evaluate proposed remediation work plans and remediation objectives (*including substantive additions or amendments to previously approved remediation work plans or remediation objectives*) based on the laws, rules, guidance, and prior agreements in effect at the time of each proposal. To the extent that NPDs may become outdated due to amendments to statutes or rules, IDEM must follow state law, unless the site is governed by an agreement, such as a Voluntary Remediation Agreement or Agreed Order, or an order such as a Commissioner’s Order.

The transition period for the RCG ends six months from its effective date. For subsequent substantive changes to guidance (*which includes screening level tables*), IDEM will provide advance notice of the revisions or updates and when appropriate, define a transition period of 6 months that will begin on the effective date of the new guidance. IDEM will consider both the guidance that is being replaced and the new guidance to be in effect during the transition period. A party(s) may choose to use either previously applicable guidance or the new guidance if the following program-specific milestones are met before or during a transition period:

- **Brownfields** – a Remediation Work Plan has been submitted or a complete request for a Comfort/Site Status/No Further Action letter has been logged by the program
- **Resource Conservation and Recovery Act (RCRA) permitting** - a closure plan has been submitted to IDEM
- **RCRA Corrective Action** - a facility investigation work plan has been submitted to IDEM
- **Leaking Underground Storage Tank Program and Excess Liability Trust Fund Program** - a Corrective Action Plan (CAP) has been submitted to IDEM
- **State Cleanup Program** – a Remediation Work Plan has been submitted to IDEM

- **Voluntary Remediation Program** – a Voluntary Remediation Work Plan (RWP) has been submitted to IDEM

If the above milestones have not been met before the end of the transition period, then IDEM will refer to current guidance and applicable rules and laws when evaluating proposed remediation work plans and remediation objectives.

Party(s) that are utilizing an older guidance document may propose site-specific approaches or choose to change to the most current guidance at any time. The scientific methodology and any inputs used to evaluate risk or to establish remediation objectives need to be current at the time they are presented to IDEM for approval. Whether using an older guidance document or the most current guidance, site-specific approaches, including the calculation of site-specific remediation objectives, will be evaluated using currently accepted methodology and best available science.

For example, if the party(s) has an approved remediation plan that references an old default closure level (*or even an entire table of old default values*) or a calculated nondefault value which was based on the toxicity information that was current at the time it was approved, they may proceed with the project under the terms of that approved remediation plan even as policy and science changes after that (*except if a hazardous substance or petroleum becomes an imminent and substantial threat to human health or the environment*). Note that the terms “default closure levels” and “nondefault closure levels” are no longer used. These levels from the *RISC Technical Guide* have been updated and are provided in the *Remediation Closure Guide* as “screening levels.” The *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) provides detailed guidance on the use of screening levels.

The RCG defines a remediation objective as “an environmental concentration of a chemical such that an equal or lower concentration will not result in unacceptable risk to receptors. Examples include screening levels, site-specific levels, and background concentrations.” Approved site remediation objectives will not be re-opened merely because they utilize “outdated” guidance or closure tables. If, however, the party(s) decides at some later date to change or recalculate a remediation objective and present a new remediation objective for IDEM to approve, the party(s) will need to base their proposal and calculations on science information and toxicity data that is current at the time that they request that approval. The party(s) may revise selected remediation objectives for a site, as long as the revised value(s) reflect toxicity and other scientific information that is current at the time of the update. A comprehensive table of all remediation objectives should accompany each update. The comprehensive table should describe the source and revision date(s) of all original and revised remediation objectives.

If a party(s) does not complete a remediation project consistent with the terms and conditions of the Remediation Work Plan (*or agreement*), or if a hazardous substance or petroleum contaminant becomes an imminent and substantial threat to human health or the environment, then IDEM may withdraw its prior approval of the work plan.

1.5 Introduction to the Remediation Programs

This RPG will introduce these remediation programs:

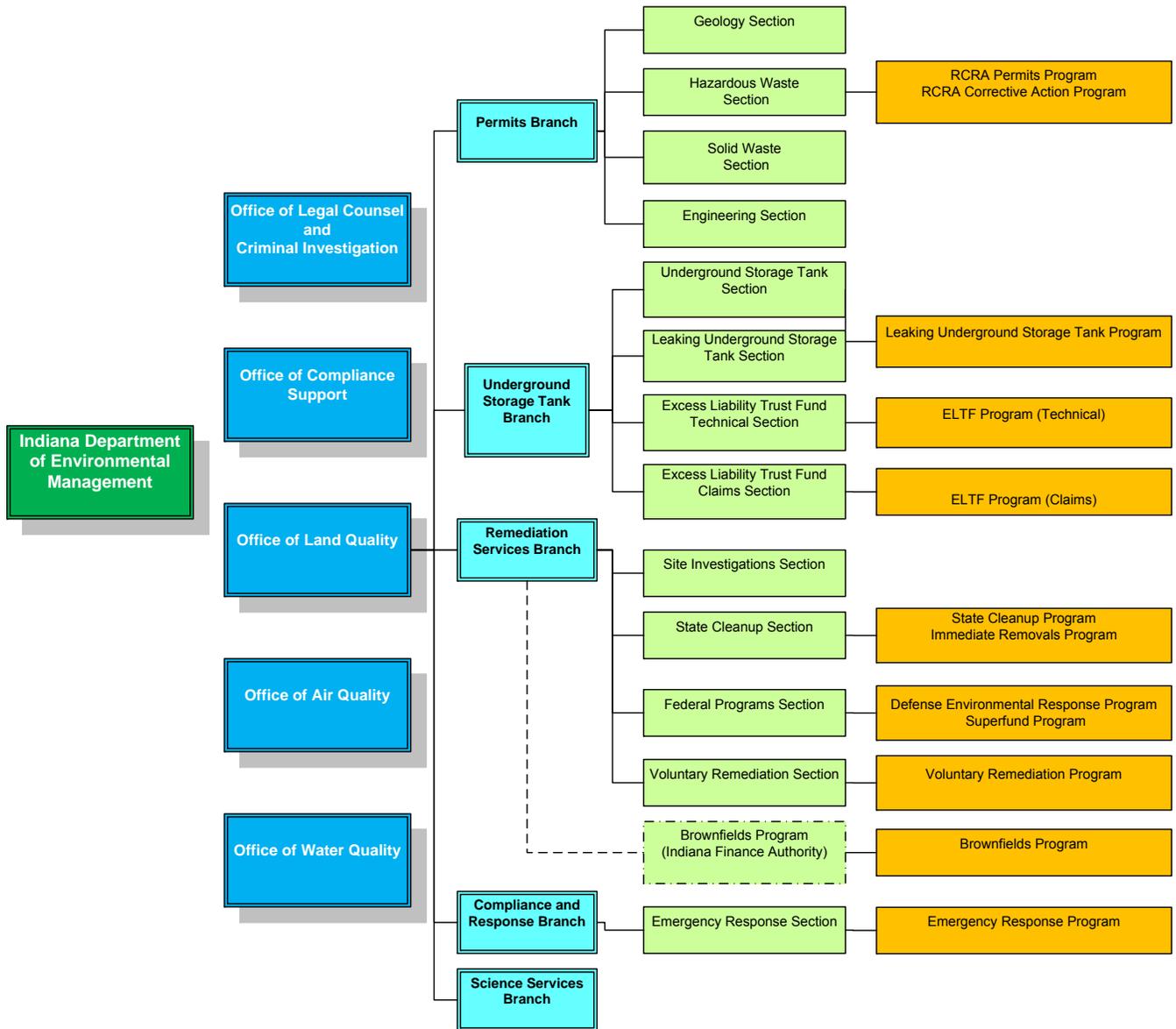
- Indiana Brownfields Program (IBF) (www.IN.gov/ifa/brownfields)
- Excess Liability Trust Fund (ELTF) Program (www.IN.gov/idem/5063.htm)
- Leaking Underground Storage Tank (LUST) Program (www.IN.gov/idem/4997.htm)
- Resource Conservation and Recovery Act (RCRA) Closure and Corrective Action Program, Subtitle C (www.IN.gov/idem/4995.htm)
- Site Investigation Program (SI) (www.IN.gov/idem/4143.htm)
- State Cleanup Program (SCP) (www.IN.gov/idem/4179.htm)
- Superfund Program (SF) and Defense Environmental Restoration Program (DERP) (www.IN.gov/idem/4152.htm)
- Voluntary Remediation Program (VRP) (www.IN.gov/idem/4127.htm)

Figure 1.1 illustrates where these programs are located in IDEM's organizational structure.

FYI - Spill Response!

Emergency Response is not described in detail in this RPG. Spill responses performed in accordance with 327 IAC 2-6.1 are not remedial actions. If the released material is not completely removed, IDEM Emergency Response may refer the incident to a remediation program for further work. At that time, the guidance provided in the Remediation Closure Guide would apply. See Section 1.7 for more information about Emergency Response referrals.

Figure 1.1 IDEM Office of Land Quality Corrective Action and Remediation Programs



1.6 Remediation Process Overview

The *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) contains detailed information about approaches to, and requirements for, site discovery, assessment/investigation and closure. A site will follow this general path from discovery through closure:

Discovery. When a party(s) spills a hazardous substance or discovers contamination from previous spills or site activities, they should report that spill or contamination by calling the IDEM Spill Line at (317) 233-7745 or (888) 233-7745. Spill Line staff will ask questions to determine if there is an ongoing spill or damage to waters of the state. If not, the caller is given an incident number which allows the site to be tracked regardless of which IDEM program oversees subsequent activities, and the site is referred to the appropriate program.

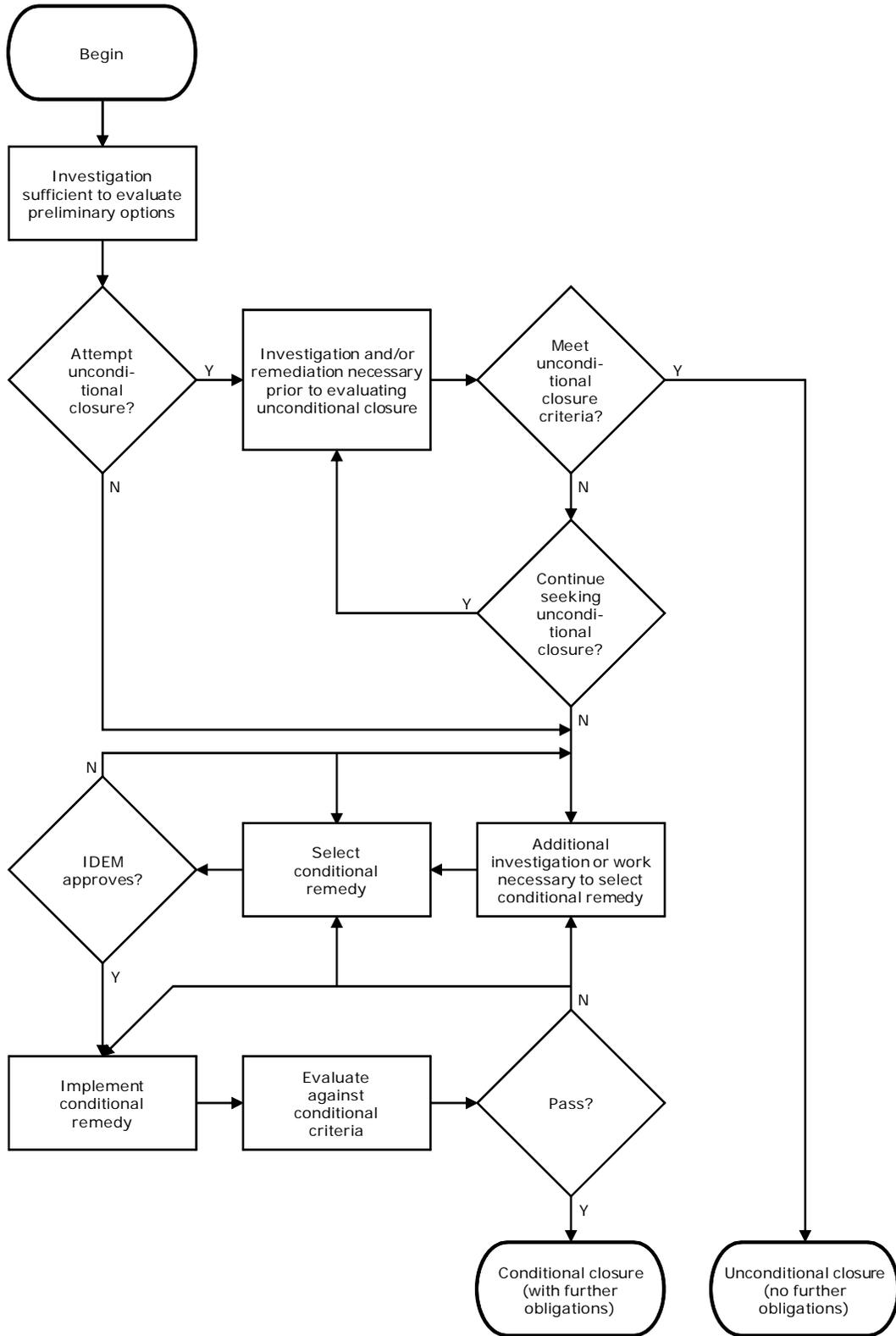
Assessment or investigation. The next step is to assess the extent of contamination and where it is located by collecting information and taking samples. Information may include but is not limited to documents about the history of a facility, data from previous sampling events or studies, or information about a community, a process or a contaminant. Plans and results are submitted to IDEM for review. If the results indicate that contaminant levels are below remediation objectives, a site may go directly to closure.

Closure. Closure is IDEM's written recognition, based on information from the results of an investigation, assessment or remediation, that remediation objectives were achieved. Closure may be achieved by removal or in-situ treatment of contamination, by prevention of exposure to the contaminants through engineered or institutional controls, or by demonstration that chemical concentrations are below remediation objectives.

Conditions Subsequent. Some remediation may require long term maintenance of engineered controls. If contaminants are not removed, IDEM may require institutional controls to ensure that the remedy continues to protect human health and the environment. The most commonly used institutional controls (www.IN.gov/idem/5959.htm) are environmental restrictive covenants (ERCs) and environmental restrictive ordinances (EROs). Sites may require periodic monitoring and/or inspections, and in some cases financial assurance may be necessary.

Figure 1.2 provides an overview of the remediation process from the point when a site enters an IDEM program until site closure. Each program chapter includes a more detailed process flow chart for that program.

Figure 1.2 Remediation Process Overview



1.7 Remediation of Emergency Response Sites

The Emergency Response (ER) Section (www.IN.gov/idem/4155.htm) responds and/or oversees responses to spills and other environmental emergencies. The Spill Rule (327 IAC 2-6.1) requires that the spilled material of a quantity, type, duration and in a location as to damage the waters of the state; be removed or neutralized, utilizing the most effective actions to prevent contaminants from entering waters.

ER may also serve as a “front door” for sites with releases that are not reportable spills. When IDEM staff receive calls from responsible parties about a newly discovered release, IDEM encourages that RP to report the release via the Spill Line. When the Spill Line receives a call, staff enter the site into IDEM’s tracking system and assign an incident number. That number allows the site to be tracked regardless of which IDEM program oversees subsequent activities.

Spill Line staff always collect information to determine if emergency mitigation is necessary. In some cases, a release may be a reportable spill that occurred in the past but was not reported or mitigated. However, many releases reported to the Spill Line are referred to the appropriate program immediately, or require little or no emergency mitigation. If the Spill Rule is not applicable to the release according to 327 IAC 2-6.1-1, or if the site meets the exclusions in 327 IAC 2-6.1-3, ER staff will immediately refer the site to the appropriate program. Detailed information about reportable spills is included in the Spill Rule.

Figure 1.3 Spill Reporting, Containment, Response and Remediation Referral Matrix

	Spills involving acute releases	Spills involving historic releases
Spills to soil, surface water, no ground water impacts	<ul style="list-style-type: none"> • Report spill to Spill Line • ER oversees emergency mitigation • ER oversees immediate containment from waters • ER oversees spill response, removal • RP may earn closure under ER 	<ul style="list-style-type: none"> • Report spill to Spill Line • If there is an ongoing spill or damage to waters of the state: <ul style="list-style-type: none"> ○ ER oversees emergency mitigation ○ ER oversees spill containment and manages impacts to surface waters and public utilities such as sewer lines • Site ultimately referred to Remediation Services Branch for characterization, closure
Spills involving ground water	<ul style="list-style-type: none"> • Report spill to Spill Line • ER oversees emergency mitigation • ER assesses spill containment and manages impacts to surface waters and public utilities • RP may choose to perform additional removal under ER • Site ultimately referred to Remediation Services Branch for characterization, closure 	<ul style="list-style-type: none"> • Same as above

This table provides general guidance. There may be exceptions to this process.

When spill responses fail to remove contaminant concentrations to background or nondetect levels, the site may be referred to the State Cleanup Program (SCP). All spills, overfills and releases from regulated Underground Storage Tanks (USTs) are referred to the Leaking Underground Storage Tank (LUST) Program. LUST sites fall under the legal authority in IC 13-23 (*Underground Storage Tanks*) and 329 IAC 9 (*Underground Storage Tanks*). SCP sites fall under the legal authority in IC 13-25-4 (*Hazardous Substances Response Trust Fund*) and IC 13-24-1(*Petroleum Releases*).

Process

When a spill response is referred to SCP, SCP enters sites into the State Cleanup database, and SCP determines site priority and whether it should remain in SCP or be transferred to the appropriate remediation program. A site may be evaluated by the Site Investigations (SI) Program. ER or SCP will refer a site to the LUST Program if contamination results from a release from an underground storage tank (UST) that contained regulated substances (*petroleum product or hazardous substance*) after January 1, 1974. If a UST was closed prior to January 1, 1974 the site is referred to SCP. Releases from unregulated underground storage tanks (USTs) are usually remediated in accordance with LUST guidance.

The IDEM OLQ project manager will send a letter to the party(s) requesting an initial spill report. OLQ technical staff will review the report and may recommend further actions. IDEM may request further site investigation to determine the extent of contamination. The next step depends on the nature and extent of contamination.

1.8 Potential Petroleum Contaminants

IDEM has developed an updated list of potential petroleum contaminants. Table 3.1 of this RPG entitled *Potential Petroleum Contaminants* provides guidance for selecting the parameters to sample in soil, ground water monitoring wells, drinking water wells, air, and soil gas. The table contains other useful information including laboratory test methods. The updated parameters will be used by the IBP, RCRA Corrective Action Program, LUST Program, ELTF Program, SCP, and VRP. Table 3.1 is presented in Chapter 3 of this guide.

1.9 Document and Electronic Data File Submittal Guidelines

1.9.1 Why Does IDEM Have Document Submittal Guidelines?

IDEM has an electronic document repository called the Virtual File Cabinet (VFC) (www.IN.gov/idem/6551.htm). VFC can capture, store, file, distribute, and securely access electronic documents of all types. This makes it possible for people to look at the public documents in the IDEM files from any computer connected to the internet.

VFC is in constant use. In order to realize the benefits of VFC, IDEM has had to learn what the system will most efficiently handle, given the limitations common to web-based technologies. For that reason, IDEM staff developed guidelines for document submittal.

More information about the VFC is in Section 1.11.

1.9.2 What Are the Document Submittal Guidelines?

The *Document Submittal Guidelines* explain how to submit documents for IDEM to review. They can be found on the IDEM website (www.IN.gov/idem/6578.htm). If there is a need to change the *Document Submittal Guidelines*, the website will be updated. Many environmental consultants are on OLQ's mailing list and will receive these updates directly. Consultants who would like to be added to the mailing list should contact the Chief of the Science Services Branch at (317) 232-8866. **Please check the *Document Submittal Guidelines* on the IDEM website when planning to submit a document!**

The *Document Submittal Guidelines* explain the best way to format electronic documents so that the VFC will upload them correctly, and the number of paper copies that should be submitted.

- Generally IDEM asks for one electronic (*compact disc*) and two paper copies of any document more than ten pages long that is submitted for review.
- Electronic documents should be limited in size to 25 megabytes (MB). Other formatting pitfalls to avoid are detailed in the guidance.
- Data packages (*these are described in Section 1.10 below*) are the exception. Only one paper copy of a data package needs to be submitted.
- If there is a legal document (*these are described in Section 1.10 below*) that specifies some number of copies, the specifications in that legal document must be followed.
- For RCRA Closure, the number of copies of a closure plan required for review depends on the unit type undergoing closure. The OLQ permit manager will provide guidance on the number of copies to be submitted prior to closure plan submittal.

1.9.3 Electronic Data File Submittal Guidelines

Electronic data files may be sent as an e-mail attachment to the Geographic Information Services (GIS) (www.IN.gov/idem/6546.htm) staff at OLQDATA@ idem.IN.gov. IDEM also has published *Electronic Data File Submittal Guidelines* that can be found at www.IN.gov/idem/5384.htm.

1.10 Common Documents and Document Review

Many documents may be developed as remediation projects progress from a reported release to closure. Those may include and are not limited to:

Notifications. Notifications are submitted on state forms (www.IN.gov/idem/5157.htm) to the appropriate program. Information about notifications for each program is included in the program specific chapters of this RPG. Notifications are submitted to the mailing address or contact person identified on the State Forms.

Plans. Plans explain the approach to an investigation or remediation. They may include:

- Work Plans
- Quality Assurance Project Plans(QAPPs)
- Sampling Plans (SAPs)
- Engineering/Design Plans
- Community Relations Plans (CRPs)
- Operation and Maintenance Plans

- Remediation Work Plans (RWPs) and Corrective Action Plans (CAPs) (*CAPs also may serve as investigation reports*)

Reports. Reports present or interpret data, or describe an activity that was completed such as an investigation or remediation activity. Reports may include:

- Initial Site Characterization (ISC) Reports
- Further Site Investigation (FSI) Reports
- Feasibility Study (FS) Reports
- Risk Assessment Reports
- Remedial Action Reports
- Remediation Completion Reports

Data Packages. Data Packages (*sometimes referred to as Level IV or Quality Control /Quality Assurance (QA/QC) Packages*) are documentation of the QA/QC measures for environmental data. They include data summaries, raw data and laboratory QA/QC information.

Legal Documents. Agreed Orders, Commissioner's Orders, and Voluntary Remediation Agreements are some examples of legal documents.

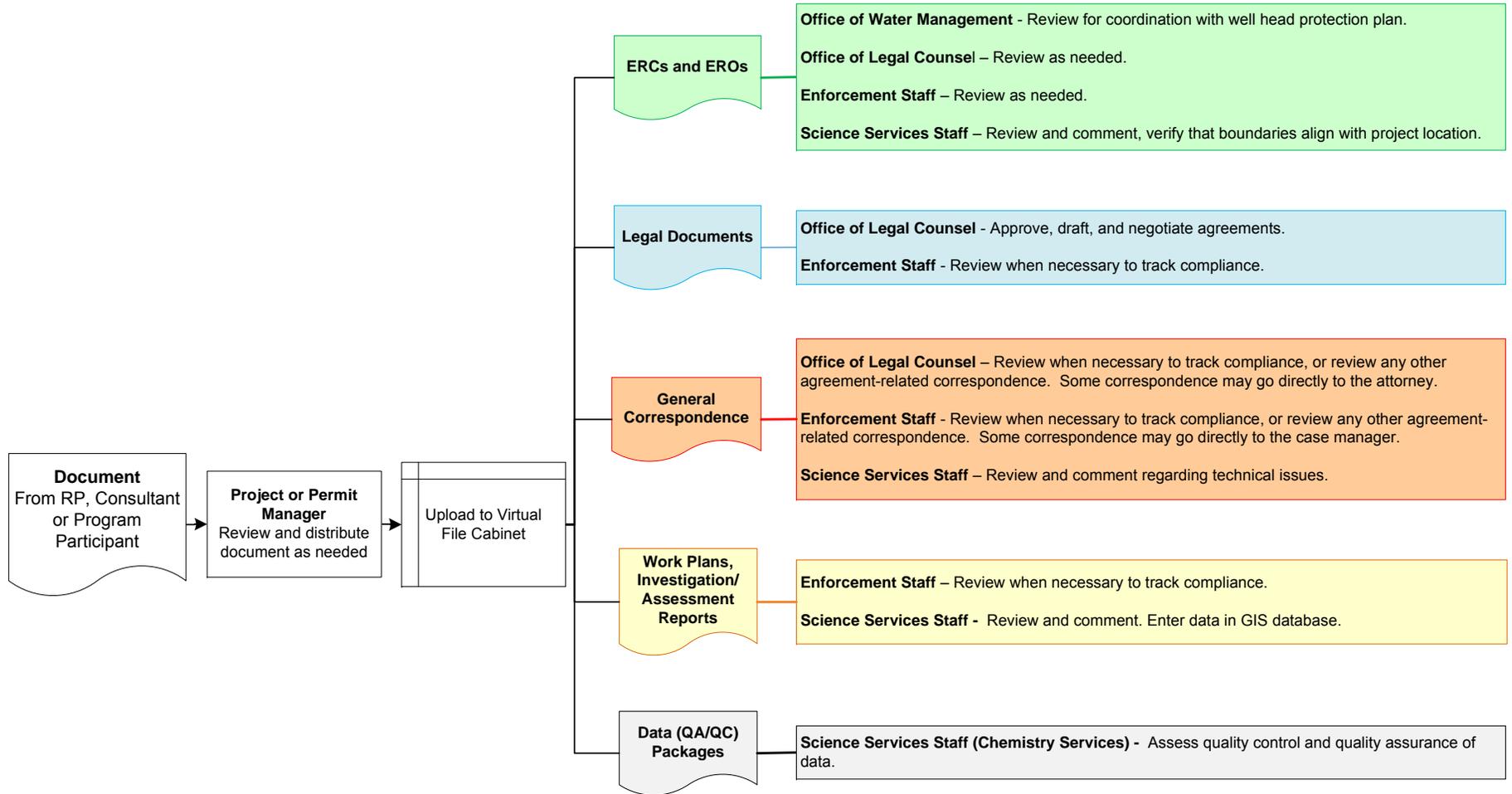
General Correspondence. General correspondence may communicate information about subjects such as project personnel; meeting arrangements; discussion of legal, financial or technical issues; and status reports.

Environmental Restrictive Covenants (ERCs) and Environmental Restrictive Ordinances (EROs). These documents are institutional controls, put in place to prevent exposure to contamination by requiring or restricting some activities.

Community Relations Publications. These may include fact sheets, media advisories, public notices of meetings and public comment periods, or notifications to the local community of releases, document approvals, or proposed EROs. The IDEM OLQ project manager and/or Media and Communications Services staff review community relations publications.

After IDEM receives a notification, or when a site, incident or release is identified by some other means, it is assigned to an IDEM OLQ project or permit manager. All subsequent communication is directed to that project or permit manager, who is responsible to ensure documents are reviewed, responded to, and stored. Some legal correspondence may be directed to legal counsel. Documents may require review by staff of Science Services, Legal Counsel, Enforcement, or other IDEM Offices such as the Office of Water Quality. Figure 1.4 illustrates how some common documents are distributed for review.

Figure 1.4 Distribution of Documents for Review



Project or Permit Manager – Project managers manage projects associated with remediation. Permit managers manage projects associated with RCRA permits.
Enforcement Staff – Typically involved with RCRA or LUST enforcement projects.
Science Services Staff – Chemistry Services, Geological Services, Risk Services, and Engineering Services (includes Geological Information System services).

1.11 Information Available Online

1.11.1 Virtual File Cabinet (VFC)

To access electronically stored files, use IDEM's VFC on the IDEM website (www.IN.gov/idem/6551.htm). The VFC contains the public records for many of IDEM's program areas. New records are added daily, so please check the site frequently. The VFC features a simple, fill-in-the-blanks interface, much like any basic search engine. Search the VFC by facility information or document information, or by using the enhanced search feature. The results can then be sorted to allow the searcher to locate the records more easily.

Learn more about VFC, including how to search and enhance viewing options by visiting the VFC Tutorial (www.IN.gov/idem/6551.htm).

1.11.2 Institutional Controls Registry

When an activity/land use restriction or engineering control is necessary to prevent exposure as a part of a remedy, an institutional control may be needed. A list of sites with institutional controls, called the IDEM Institutional Controls Registry, is available on the IDEM website (www.IN.gov/idem/5959.htm). When fully populated, this registry will list all sites where the remedy employs some type of risk-based closure with some type of continuing land use restrictions or engineering controls.

These IDEM cleanup programs are listed in the Institutional Controls Registry:

- Leaking Underground Storage Tanks Program (www.IN.gov/idem/4997.htm)
- Voluntary Remediation Program (www.IN.gov/idem/4127.htm)
- State Cleanup Program (www.IN.gov/idem/4179.htm)
- RCRA Corrective Action Program (www.IN.gov/idem/4995.htm)
- Federal Programs (Superfund Program and Defense Environmental Restoration Program) (www.IN.gov/idem/4152.htm)
- Indiana Brownfields Program (www.IN.gov/ifa/brownfields)

The Institutional Controls Registry will assist in institutional control tracking efforts and provide public information on cleanup sites in Indiana. Information included will help visitors locate and visualize institutional control sites. The Institutional Controls Registry includes information such as the site address, county, city, IDEM cleanup program overseeing the project, and the types of land use restrictions applicable for the site. The registry includes a link to view the actual institutional control document using IDEM's VFC (www.IN.gov/idem/6551.htm) and, where available, internet mapping technology for an aerial view of the site.

1.11.3 Indiana Laws, Rules, and Policies

The entire contents of the current Indiana Code (IC) and Indiana Administrative Code (IAC), along with other useful information about current and proposed Indiana legislation, are posted on the Indiana General Assembly website (www.IN.gov/legislative/ic_iac/) and on the IDEM Rules, Statutes, and Policies website (www.IN.gov/idem/4087.htm), where IDEM NPDs also are found.

1.11.4 State Forms and Other Documents or Resources Pertinent to This Remediation Program Guide

Current state forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents that can be completed electronically. Links to many other documents and internet sites have been provided in this RPG where the information is pertinent.

1.12 When Issues Arise

Each IDEM remediation program is responsible to ensure that cleanups are accomplished in accordance with a specific set of federal and/or state laws, rules, NPDs, and guidance accessible at www.IN.gov/idem/4087.htm. Participation in the Voluntary Remediation and Indiana Brownfields Program is voluntary. Cleanups under other IDEM remediation programs may be performed cooperatively or may be enforcement-driven. The time and expense to achieve closure can be reduced through cooperative interaction between IDEM and the party(s) IDEM endeavors to encourage cooperative projects. The party(s) is advised to contact the project or permit manager when issues arise unless otherwise required by an administrative order or other agreement. Most issues can be resolved through that communication. The program-specific chapters of this guide contain information about how to work through issues or disputes, and various enforcement tools that IDEM may use.

1.13 Forms and Checklists

Sample copies of many state forms, templates and checklists discussed in this RPG may be found at the end of each chapter of this guide. **The sample state forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current state forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to the locations of those forms and checklists, and links to many other documents and Internet sites have been provided where the document is discussed in this RPG.

- Sample 1.1 Record of Remedy Selection (RRS) - State Form 54471
- Sample 1.2 Record of Site Closure (RSC) - State Form 54472

Sample 1.1 Record of Remedy Selection



RECORD OF REMEDY SELECTION (REMEDIAL ACTION OR CORRECTIVE ACTION) State Form 54471 (R2 / 11-11) INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INSTRUCTIONS:

1. *The purpose of this form is to clarify expectations and achieve consistency in investigations, reporting and decision-making for sites addressed under the remediation programs of the Indiana Department of Environmental Management (IDEM). Information in this form should be an executive summary of the Remedial Action Plan or Corrective Action Plan.*
2. *Complete and submit this form with a Remediation Work Plan (RWP) or Corrective Action Plan (CAP), when IDEM must approve the remedy selection.*
3. *You may complete this form electronically; however, a paper copy of this form and all attachments should accompany the Closure Report.*
4. *You may add lines and/or include additional information on separate sheets where needed.*
5. *All instructions within this form are in italics.*

1. SITE INFORMATION

- a. Site name _____
- b. Site/Incident/FID number _____
- c. Date of this submittal (*month, day, year*) _____
- d. Location (*number and street*) _____
- e. City, County, ZIP code _____
- f. Will this amend an approved RWP or CAP? (*Yes or no*) _____
- g. IDEM Remediation Services Section (*Leaking Underground Storage Tanks, Excess Liability Trust Fund, Voluntary Remediation, State Cleanup, Brownfields*) _____

2. RESPONSIBLE PARTY/PARTICIPANT INFORMATION

- a. Name _____
- b. Address (*number and street*) _____
- c. City, State, ZIP code _____

3. CONSULTANT INFORMATION

- a. Name _____
- b. Address (*number and street*) _____
- c. City, State, ZIP code _____
- d. Telephone number _____
- e. E-mail address _____

4. SITE DESCRIPTION

The answers in this section should describe the site prior to any remediation or corrective action.

- a. Site type (type of industry or release)

- b. Size of affected area (acres). The nature and extent of contamination that would not qualify for unconditional closure as determined in accordance with the most recent revision of the Remediation Closure Guide is considered to be the affected area.

- c. Current and expected land use(s) of the affected area (residential, commercial/industrial or recreational)

- d. Current and expected use(s) of land adjacent to the affected area (Residential, commercial /industrial or recreational). An affected area may be completely within an industrial property. In that case, the current use of the adjacent land would be industrial.

- e. Contaminant types (based on your Conceptual Site Model (CSM); metals, volatile organic compounds, semi-volatile organic compounds, Petroleum hydrocarbons, pesticides/herbicides (specify other contaminants)) _____
- f. Contaminated media (groundwater, surface soil, subsurface soil, air, indoor air (vapor intrusion), surface water, storm water, sediment, specify other) _____
- g. Is any part of the affected area within a Well Head Protection Area? (Yes or no.) _____

5. SUMMARY OF COMPLETED AND PROPOSED REMEDIATION OR CORRECTIVE ACTION

- a. Describe free product treatment or free product removal. Check the item that applies below and explain as indicated. Free product treatment or removal may be necessary if any of the following risk-based conditions exist:
 - Free product has the potential to create an acutely hazardous condition
 - Free product is an ongoing source of groundwater contamination that may result in unacceptable risk
 - Direct contact exposure pathway through excavation, utility work or other means is complete or potentially complete or not controlled by proposed remedy; or
 - The vapor intrusion exposure pathway is complete or potentially complete or not controlled by proposed remedy.

No free product was noted during CSM development

Free product treatment or removal measures were performed. Describe any free product treatment or removal measures that were performed: _____

Free product was noted during CSM development but not removed. Explain: _____
- b. Briefly describe any remediation or response, (other than free product treatment or free product removal measures) that has been performed.

6. SUMMARY OF PROPOSED REMEDIATION OR CORRECTIVE ACTION

a. Select the basis for remediation objectives for each contaminant and state what contaminants will be addressed (*In accordance with Indiana Code 13-25-5-8.5. Complete Indiana Code is published at www.IN.gov/legislative/ic/code/. More than one may apply. Group contaminants if addressed by the same type of remediation objective).*

Background.
Contaminants _____

Risk-based, using standard equations and default values (screening levels)
Contaminants _____

Risk-based, using site specific data for default values (screening levels) in standard equations
Contaminants _____

Risk-based, using site specific factors, including consideration of remediation measures
Contaminants _____

b. For each potential exposure pathway(s) listed below, check yes or no to indicate if the pathway requires remediation or exposure control measures. Then either:

- Briefly describe the proposed remediation or corrective action measures, including risk management approaches; or
- If contamination was detected above screening levels or site-specific levels that is not considered to pose a risk, discuss the pathway and the magnitude of risk and explain why the contamination does not contribute to unacceptable risk or a complete pathway. (If no such contamination was detected, no explanation is needed here).

i. Direct contact
Does this pathway require remediation/exposure control measures? Yes No
Discuss: _____

ii. Groundwater contact
Does this pathway require remediation/exposure control measures? Yes No
Discuss: _____

iii. Vapor intrusion
Does this pathway require remediation/exposure control measures? Yes No
Discuss: _____

iv. Other human health or ecological scenario
Does this pathway require remediation/exposure control measures? Yes No
Discuss: _____

c. List and attach a copy of:

i. Each proposed Environmental Restrictive Ordinance (ERO) used for exposure control.

ii. Each proposed Environmental Restrictive Covenant (ERC) used for exposure control.

d. Describe any third party property interest or other formal agreement. (*If any third party property interest or other formal agreement is needed to ensure that the remedy remains protective, identify the third party property address, and the nature of the property interest or agreement needed.*) _____

- e. List any inspections, status reports, or operation and maintenance (O&M) activities (if O&M is necessary). _____
- f. Describe any financial assurance mechanism (if required to assure remedy effectiveness)
 - Type of instrument _____
 - Amount _____
 - Type of reporting required _____
 - Frequency of reporting _____
 - Period of effectiveness _____
 - Beneficiary _____
- g. List any report that contains more information about items a. through f. above Enter title, date and 8-digit Virtual File Cabinet (VFC) document number. Any report referenced here should be listed in Section 10, Record of Communication. More than one may apply, add lines as needed.)

<u>Title</u>	<u>Date</u>	<u>VFC Number</u>
_____	_____	_____

7. ILLUSTRATION OF CONCEPTUAL SITE MODEL (CSM) AND SITE RISK CHARACTERIZATION

If there is a previously approved Record of Remedy Selection for this remedial or corrective action, only new information needs to be entered here.

SAMPLE

- a. Attach figures or tables to illustrate the information provided in Section 6, including the background levels, screening levels or site-specific levels (for each contaminant, affected media and exposure pathway) used.
 - 1. Determine the extent of contamination; and
 - Identify areas that were evaluated for remedy (areas that do not immediately qualify for an unconditional closure based on the investigation data).
 - Document (with figures and tables) areas where screening levels or site-specific levels were exceeded.
 - Organize and label the figures and tables according to the exposure pathway.
 - Figures or tables should include:
 - Sample identifiers
 - Contaminants detected above screening levels or site-specific levels
 - Concentrations of those contaminants
 - Screening levels or site-specific levels that indicate the need for a remedy.)
- b. List all attachments.
 - 1. Figure(s). _____
 - 2. Table(s). _____

8. PUBLIC PARTICIPATION

Types of public participation may include letters to health department officials, direct contact or notification of potentially affected parties, fact sheets, public notices, availability sessions, public meetings or other. Include: 1) the date(s) of the activity, 2) type of activity, and 3) location (for any meeting), name of publication (for any ad or public notice), or address(s) of party(s) notified. If this will amend an approved Record of Remedy Selection, provide only information that has changed. Add lines as needed.

Not applicable. (Check if no participation or notification was necessary.)

<u>Date</u>	<u>Activity</u>	<u>Location/Publication/Address</u>
_____	_____	_____

9. RECORD OF COMMUNICATION

List key documents generated. May include Initial Site Characterization, Further Site Investigation, Corrective Action Plan, Remediation Work Plan, Request for No Further Action, any legal agreements, and any other key documents. Include 1) title, 2) document date, 3) preparer and 4) 8-digit Virtual File Cabinet (VFC) document number. If this will amend an approved Record of Remedy Selection, provide only information that has changed. Add lines as needed.

<u>Title</u>	<u>Date</u>	<u>Preparer</u>	<u>VFC No.</u>
_____	_____	_____	_____

10. SIGNATURE OF PROFESSIONAL CREDENTIAL HOLDER

Site name _____

Site/Incident/FID number _____

Amendment No. _____

Name _____

Position _____

Company _____

Date (month, day, year) _____

Enter professional credential(s) for sites addressed under 329 Indiana Administrative Code (IAC) 9-5-5.1, 329 IAC 9-5-6, or 329 IAC 9-5-7, or if required by a site specific agreement.

Environmental Professional Credential

Signature

11. THIS SECTION TO BE COMPLETED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Approval of Remedy Selection

Approval may be rendered ineffective if new information indicates potentially unacceptable risk to human health and/or the environment.

Some remediation or corrective action procedures may be the subject of claims of patent protection. By approving remediation or corrective action procedures proposed in your work plan IDEM makes no representation about your rights to utilize those procedures and is in no way suggesting, encouraging, or otherwise inducing you to infringe on any patented interest. It is solely your responsibility to ensure that you have all necessary rights and licenses to implement the remedial or corrective action activities proposed in your work plan and to ensure that you do not infringe on the patent rights of others.

Site name _____

Site/Incident/EID number _____

Amendment No. _____

Name _____

Title _____

Date (month, day, year) _____

Signature _____

SAMPLE

Sample 1.2 Record of Site Closure (RSC)



RECORD OF SITE CLOSURE (REMEDIAL ACTION OR CORRECTIVE ACTION)

State Form 54472 (R2 / 11-11)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INSTRUCTIONS:

1. The purpose of this form is to clarify expectations and achieve consistency in investigations, reporting and decision-making for sites addressed under the remediation programs of the Indiana Department of Environmental Management (IDEM). Information in this form should be an executive summary of the Remedial Action or Corrective Action.
2. Complete and submit this form with a Closure Report when you have implemented a Remediation Work Plan (RWP) or Corrective Action Plan (CAP), and seek closure approval from IDEM.
3. You may complete this form electronically; however, a paper copy of this form and all attachments should accompany the Closure Report.
4. You may include additional information on separate sheets where needed.
5. Note: If there was a Record of Remedy Selection, Sections 8, 9 and 10 of this form should contain only new information. See the instructions for each of these sections.
6. Add lines and/or attach pages as needed.
7. All instructions within this form are in italics.

1. SITE INFORMATION

- a. Site name _____
- b. Site/Incident/FID number _____
- c. Date of this submittal (*month, day, year*) _____
- d. Location (*number and street*) _____
- e. County, ZIP code _____
- f. Will this be enclosed in a Pallet (P) Yes (no) _____
- g. IDEM Remediation Services Section (*Leaking Underground Storage tanks, Excess Liability Trust Fund, Voluntary Remediation, State Cleanup, Brownfields*) _____

2. RESPONSIBLE PARTY/PARTICIPANT INFORMATION

- a. Name _____
- b. Address (*number and street*) _____
- c. City, State, ZIP code _____

3. CONSULTANT INFORMATION

- a. Name _____
- b. Address (*number and street*) _____
- c. City, State, ZIP code _____
- d. Telephone number _____
- e. E-mail address _____

4. SITE DESCRIPTION

The answers in this section should describe the site prior to any remediation or corrective action.

- a. Site type (type of industry or release)

- b. Size of affected area (acres). The nature and extent of contamination that would not qualify for unconditional closure as determined in accordance with the most recent revision of the Remediation Closure Guide is considered to be the affected area.

- c. Current and expected land use(s) of the affected area (residential, commercial/industrial or recreational)

- d. Current and expected use(s) of land adjacent to the affected area (Residential, commercial /industrial or recreational). An affected area may be well within the perimeter of an industrial property. In that case, the current use of the adjacent land is industrial. If an affected area is at or near the perimeter of an industrial property, the adjacent land is the neighboring property.

- e. Contaminant types (based on your CSM; list all Significant Metals, CS, metals, volatile organic compounds, semi-volatile organic compounds, PCBs, neurotoxic pesticides, herbicides, or specify other contaminants)

- f. Contaminated Media (based on your CSM; surface soil, subsurface soil, air, indoor air (vapor intrusion, surface water, ground water, sediment, or specify other media)

- g. Is any part of the affected area within a Well Head Protection Area? (Yes or no.) _____

5. SUMMARY OF COMPLETED REMEDIATION OR CORRECTIVE ACTION

- a. Select the basis for remediation objectives for each contaminant and state what contaminants will be addressed (In accordance with Indiana Code 13-25-5-8.5. Complete Indiana Code is published at www.IN.gov/legislative/ic/code/. More than one may apply. Group contaminants if addressed by the same type of remediation objective).
 - Background levels.
Contaminants _____
 - Risk-based levels, using standard equations and default values (screening levels).
Contaminants _____
 - Risk-based levels, using site specific data for default values (screening levels) in standard equations. Contaminants _____
 - Risk-based levels, using site specific factors, including consideration of remediation measures. Contaminants _____
- b. For each potential exposure pathway(s) listed below, check yes or no to indicate if the pathway required remediation or exposure control measures. Then either
 - Briefly describe the remediation or corrective action measures, including risk management approaches; or

- *If contamination was detected above screening levels or site-specific levels that is not considered to pose a risk, discuss the pathway and the magnitude of risk and explain why the contamination does not contribute to unacceptable risk or a complete pathway. (If no such contamination was detected, no explanation is needed here).*

i. Soil direct contact

Did this pathway require remediation/exposure control measures? Yes No

Discuss: _____

ii. Ground water direct contact and migration to ground water

Did this pathway require remediation/exposure control measures? Yes No

Discuss: _____

iii. Vapor intrusion

Did this pathway require remediation/exposure control measures? Yes No

Discuss: _____

iv. Other human health or ecological scenario

Did this pathway require remediation/exposure control measures? Yes No

Discuss: _____

c. List and attach a copy of:

i. Each legally adopted Environmental Restrictive Ordinance (ERO) used for exposure control.

ii. Each recorded Environmental Restrictive Covenant (ER) used for exposure control.

6. UNCONDITIONAL CLOSURE (If closure is not required, proceed to Section 7.)

a. Why is unconditional closure appropriate? (*Explain why: 1) it is unnecessary to remediate or restrict site use based on contaminant levels, or 2) use can be effectively restricted without institutional controls, and/or 3) no ongoing monitoring, maintenance or reporting is necessary.*)

b. Title of report that contains more information including section/page numbers, and/or figure or table with pertinent information. (*Any report referenced here should be listed in Section 10, Record of Communication. More than one may apply, add lines as needed.*)

<u>Title</u>	<u>Section/Page</u>	<u>Figure/Table</u>
--------------	---------------------	---------------------

7. CONDITIONAL CLOSURE AND CONDITIONS SUBSEQUENT TO CLOSURE

a. Where does the contamination remain that does not qualify for unconditional closure. Include media and location (*horizontal and vertical*).

b. What are the conditions of closure that need to be performed or maintained?

c. Describe any third party property interest or other formal agreement. (*If any third party property interest or other formal agreement is needed to ensure that the remedy remains protective, identify the third party property address, and the nature of the property interest or agreement needed.*) _____

- d. List and indicate the frequency of any inspections, status reports, or operation and maintenance (O&M) activities (if O&M is necessary). _____
- e. Describe any financial assurance mechanism (if required to assure remedy effectiveness).
 Type of instrument _____
 Amount _____
 Type of reporting required _____
 Frequency of reporting _____
 Period of effectiveness _____
 Beneficiary _____
- f. List any report that contains more information about items a. through e. above. (Enter title, date and 8-digit Virtual File Cabinet (VFC) document number. Any report referenced here should be listed in Section 10, Record of Communication. More than one may apply, add lines as needed.)

<u>Title</u>	<u>Date</u>	<u>VFC Number</u>
_____	_____	_____

8. ILLUSTRATION OF SITE CONCEPTUAL MODEL AND REMEDY SITE CHARACTERIZATION

If a Record of Site Characterization was approved for this site and previously approved Record of Site Closure, only new information needs to be provided.

- a. Attach figures or tables to illustrate the information provided in Section 5, including the background levels, screening levels or site-specific levels (for each contaminant, affected media and exposure pathway) used to:
1. Determine the nature and extent of contamination; and
 2. Identify areas that were evaluated for a remedy (areas that did not immediately qualify for an unconditional closure based on the investigation data).
- b. Document (with figures and tables) specific areas where a cleanup was performed, or a risk assessment applied, or a risk management approach was employed to achieve closure.
- Document (with figures and tables) areas where screening levels or site-specific levels were exceeded.
 - Organize and label the figures and tables according to the exposure pathway.
 - Figures or tables should include:
 - Sample identifiers
 - Contaminants detected above screening levels or site-specific levels
 - Concentrations of those contaminants
 - Screening levels or site-specific levels that indicated the need for a remedy.)
 - Post-remediation concentrations (Use numerical concentrations if contaminants were treated or removed. This is not necessary if the remedy consists of exposure control, or exposure control measures were considered in the site specific risk assessment).
- c. List all attachments.
1. Figure(s).
 2. Table(s).

9. PUBLIC PARTICIPATION

Types of public participation may include letters to health department officials, direct contact or notification of potentially affected parties, fact sheets, public notices, availability sessions, public meetings or other. Include: 1) the date(s) of the activity, 2) type of participation, and 3) location (for any meeting), name of publication (for any ad or public notice), or address(s) of party(s) notified. If public participation was reported in a Record of Remedy Selection, or if this will amend an approved Record of Site Closure, provide only information that has changed. Add lines as needed.

Not applicable. (Check if no participation or notification was necessary.)

<u>Date</u>	<u>Activity</u>	<u>Location/Publication/Address</u>
_____	_____	_____
_____	_____	_____

10. RECORD OF COMMUNICATION

List key documents generated since the Record of Remedy Selection (if any). May include Corrective Action Plan, Remediation Work Plan, revision or amendment, request for No Further Action, as-built drawings, Remediation Completion Report, Certificate of Completion, Record of Remedy Selection (if any), any legal agreements, and any other key documents. Include 1) title, 2) document date, 3) preparer and 4) 8-digit Virtual File Cabinet (VFC) document number. If this will amend an approved Record of Site Closure, provide only information that has changed. Add lines as needed.

<u>Title</u>	<u>Date</u>	<u>Preparer</u>	<u>Number</u>
_____	_____	_____	_____

11. SIGNATURE OF PREPARER OF THIS REPORT

Site name _____

Site/Incident/FID number _____

Amendment No. _____

Name _____

Position _____

Company _____

Date (month, day, year) _____

Enter professional credential(s) for sites addressed under 329 Indiana Administrative Code (IAC) 9-5-5.1, 329 IAC 9-5-6, or 329 IAC 9-5-7, or if required by a site specific agreement.

Environmental Professional Credential _____

Signature _____

12. THIS SECTION TO BE COMPLETED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Approval of Site Closure

Closure status may be rendered ineffective if new information indicates potentially unacceptable risk to human health and/or the environment or if the terms of any ERC, ERO or other Condition Subsequent to Closure are not met.

Some remediation or corrective action procedures may be the subject of claims of patent protection. By approving remediation or corrective action procedures proposed in your work plan IDEM makes no representation about your rights to utilize those procedures and is in no way suggesting, encouraging, or otherwise inducing you to infringe on a patent. It is your responsibility to ensure that you have all necessary rights and licenses to implement the remediation or corrective action activities proposed in your work plan and to ensure that you do not infringe on the patent rights of others.

Site name _____

Site/Incident/FID number _____

Amendment No. _____

Name _____

Title _____

Date (month, day, year) _____

Signature _____

2. INDIANA BROWNFIELDS PROGRAM

2.1 Purpose and Scope

The Indiana Brownfields Program (IBP) (www.IN.gov/ifa/brownfields) was created by 2005 legislation (*Senate Enrolled Act 578*) that merged the brownfield financial and environmental programs into one program under the management of the Indiana Finance Authority (IFA), thereby combining existing brownfield resources to better assist communities with brownfield redevelopment. The IBP provides financial, technical, legal, and educational assistance, and works in partnership with the U.S. Environmental Protection Agency (U.S. EPA) and other Indiana agencies to assist communities in making productive use of their brownfield properties.

Indiana Defines a Brownfield as:

- A parcel of real estate that is abandoned or inactive, or may not be operated at its appropriate use. and on which expansion, redevelopment, or reuse is complicated because of the presence or potential presence of a hazardous substance, a contaminant, petroleum, or a petroleum product that poses a risk to human health and the environment (*IC 13-11-2-19.3*).

Concerns about cleanup liability for lenders and prospective purchasers are among the main potential obstacles to brownfields redevelopment. Through the issuance of Comfort Letters, the IBP attempts to eliminate liability concerns for stakeholders at sites where either an enforcement discretion policy or an exemption from liability based in statute applies. Through the issuance of Site Status Letters, the program also addresses the potential for IDEM to require a cleanup based on comparing site conditions to objective, risk-based screening levels found in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) or to site-specific risk based levels that provide the basis for remediation objectives. Comfort and Site Status Letters are made available under the IDEM Nonrule Policy Document *Brownfields Program Comfort and Site Status Letters Policy (Waste-0051)* (www.IN.gov/idem/4694.htm).

State Mechanisms for Minimizing and Managing Liability:

- Statutory liability exemptions for political subdivisions, lenders, trustees, fiduciaries, innocent landowners, prospective purchasers, and contiguous property owners
- Risk-based remediation objectives
- Enforcement discretion policies

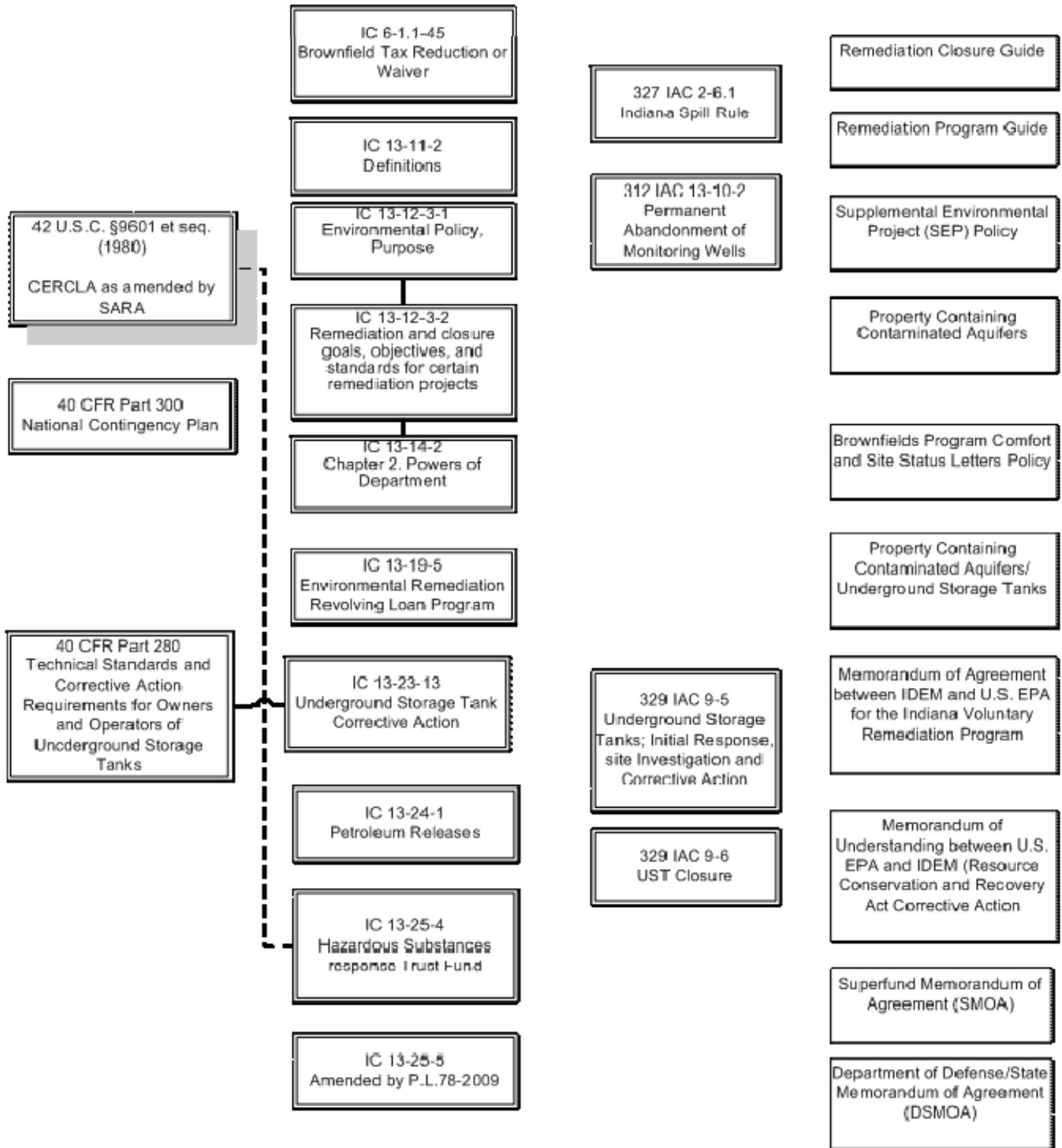
Although not a regulatory program, the IBP is authorized by a statute (*IC 13-19-5*) that allows for the provision of services and the distribution of financial assistance for communities to assess and cleanup brownfield properties. When providing assistance at brownfield sites, the IBP must adhere to all existing laws, regulations and policies that relate to protection of human health and the environment and that apply to other IDEM remediation programs.

The IBP issues the following types of liability determination and closure documentation to promote brownfield site reuse:

- Comfort Letters
- Site Status Letters
- No Further Action Letters

2.2 Rules and Laws

Figure 2.1 Laws, Rules, and Regulations Related to Indiana Brownfields Program



Indiana's Environmental Rules and Statutes

Over the years, several laws have been enacted that expanded landowner liability protections and indirectly encouraged brownfield redevelopment. The scope and nature of risk-based remediation practices also have been modified through legislation. Rulemakings typically affect the IBP to a much lesser extent. Changes to any of the remediation-based statutes or related rules have the potential to impact IBP practices.

Federal Laws and Rules

- *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)* (www.epa.gov/lawsregs/laws/cercla.htm) of 1980; 42 U.S.C. §§ 9601-9675
Section 101 – Definitions
Section 104 – Response Authorities
Section 107 – Liability
- *Standards and Practices for All Appropriate Inquiries (40 CFR Pt. 312)* (www.epa.gov/brownfields/aai/index.htm). Prepurchase due diligence environmental site assessment rule associated with qualifying for certain landowner liability protections.
- *Federal Brownfields Tax Incentive* (www.epa.gov/brownfields/tax/index.htm). Under the Federal Brownfields Tax Incentive, environmental cleanup costs are fully deductible in the year incurred, rather than capitalized and spread over time.
- *National Contingency Plan (40 CFR Pt. 300)* (www.epa.gov/superfund/policy/index.htm). The federal government's blueprint for responding to oil spills and hazardous substance releases. Also promotes overall coordination among responders and contingency plans.
- *Resource Conservation and Recovery Act (RCRA)* (www.epa.gov/brownfields/laws/other_bf_related_laws.htm) of 1976; 42 U.S.C. §§ 6991a – 6991m
Section 9003(h) (9). U.S. EPA response program for petroleum; definition of owner or operator
- *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (40 CFR Pt. 280)* (www.epa.gov/swerust1/fedlaws/index.htm)
40 CFR Pt. 280.200 – 280.230 (*Subpart I - Lender Liability*)
- *Federal Small Business Liability Relief and Brownfields Revitalization Act* (www.epa.gov/brownfields/laws/index.htm) passed 2001

Indiana Statutory Authority (www.IN.gov/legislative/ic_iac)

- Indiana Code (IC) 13-19-5 *Environmental Remediation Revolving Loan Program.* Established to assist in the remediation of brownfields, to encourage the rehabilitation, redevelopment, and reuse of real property by providing grants, loans, forgivable loans, or other financial assistance to political subdivisions.
- IC 6-1.1-45.5 *Brownfield Tax Reduction or Waiver.* The program's role is to make a determination that the property to which the delinquent tax liability is attached is a brownfield.
- IC 13-11-2 *Definitions.* Defines key terms such as brownfield, owner, participate in management, etc.
- IC 13-12-3-2 *Remediation and closure goals, objectives, and standards for certain remediation projects*

- IC 13-23-13 *Underground Storage Tank Corrective Actions*. Requires corrective action of a regulated substance release from an underground storage tank.
- IC 13-24-1 *Petroleum Releases*. Requires removal or remediation of petroleum at a petroleum facility.
- IC 13-25-4 *Hazardous Substances Response Trust Fund*
 - (1) Financing contracts or cooperative agreements
 - (2) Providing state assistance in the form of supplies, materials, services, and equipment
 - (3) Financing response actions
 - (4) Paying expenses related to releases of regulated substances (*other than petroleum from underground storage tanks*), hazardous substances, or contaminants
 - (6) Paying expenses and providing grants for household hazardous waste and conditionally exempt small quantity generator waste collection, recycling, or disposal projects
 - (9) Transferring funds to the environmental remediation revolving loan fund
- IC 13-25-5 *Voluntary Remediation of Hazardous Substances & Petroleum*. Provides an alternative procedure to assure compliance with the law and to encourage the voluntary remediation of hazardous substances and petroleum.

Indiana Administrative Code (IAC) (www.IN.gov/legislative/ic_iac)

- 327 IAC 2-6.1 *Indiana Spill Rule – Spills; Reporting, containment and response*
- 312 IAC 13-10-2 *Permanent abandonment of monitoring wells*
- 329 IAC 9-5 *Underground Storage Tanks (UST); initial response, site investigation, and corrective action*
- 329 IAC 9-6 *UST Closure*

Nonrule Policies (www.IN.gov/idem/4694.htm)

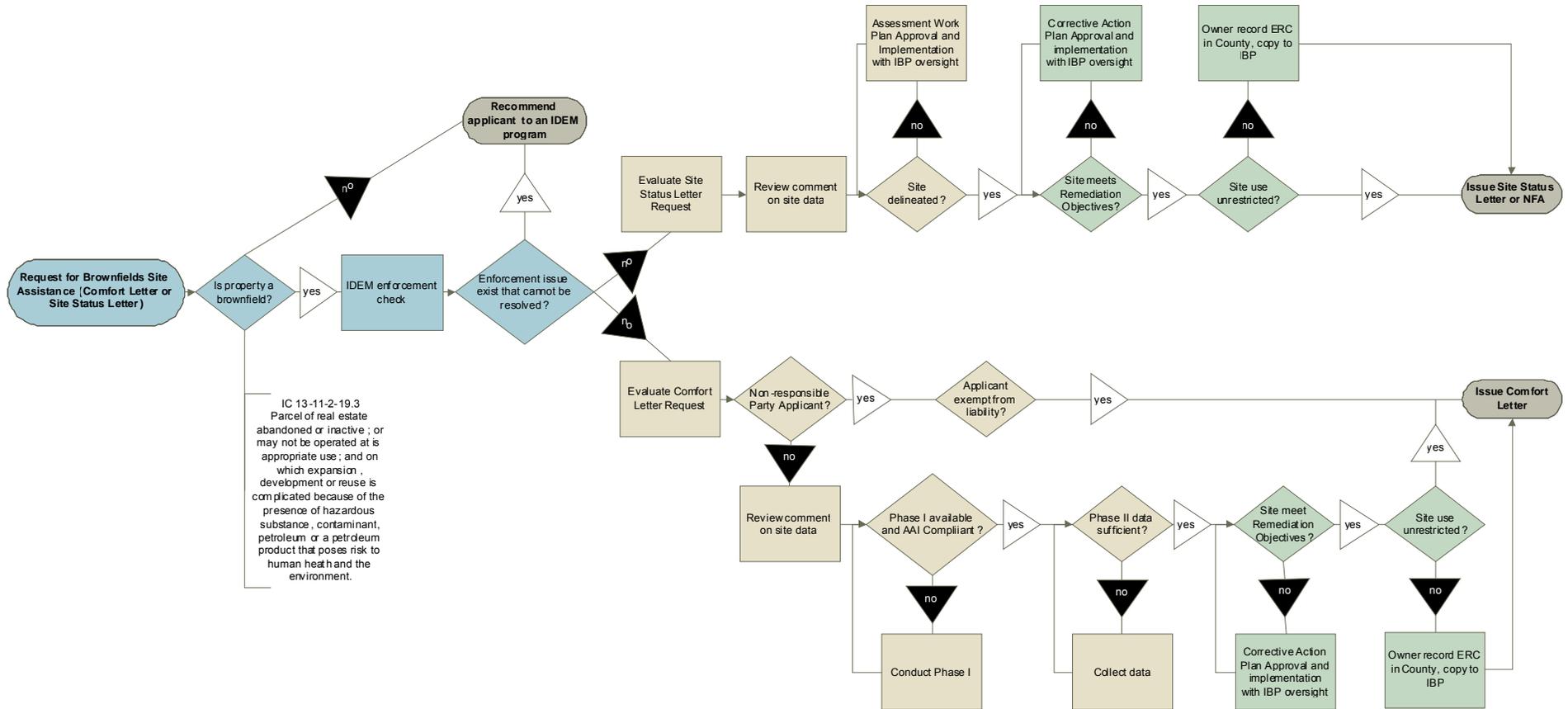
- *Risk Integrated System of Closure (RISC), Technical Guide and Users Guide (Waste-0046, February 15, 2001 and revisions).*
- *Supplemental Environmental Project Policy (ENF-08-003, June 20, 2008).* Policy regarding an enforcement penalty directed toward a brownfield project.
- *Property Containing Contaminated Aquifers (Waste-0047, January 30, 1997).* Policy regarding liability for response costs for cleanup of a release of petroleum or a hazardous substance due to subsurface migration in an aquifer.
- *Brownfields Program Comfort and Site Status Letters Policy (Waste-0051, April 18, 2003).* Policy regarding issuance of a Comfort or Site Status Letter to stakeholders redeveloping contaminated property.
- *Property Containing Contaminated Aquifers/Underground Storage Tanks (Waste-0038, April 20, 2000).* Policy regarding liability for response costs for cleanup of a release of petroleum or a regulated substance due to subsurface migration in an aquifer.

Other

- *Memorandum of Agreement between IDEM and U.S. EPA for the Indiana Voluntary Remediation Program (December 4, 1995) (www.IN.gov/idem/4127.htm).* Under this MOA, for any site receiving a Certificate of Completion from the Voluntary Remediation Program, the U.S. EPA will not plan or anticipate any federal action under the Superfund law, unless it poses an imminent and substantial threat to human health or the environment. This agreement does not apply to sites on the Superfund National Priorities List (NPL) or sites currently subject to orders of enforcement under Superfund.
- *Memorandum of Understanding between U.S. EPA and IDEM Resource Conservation and Recovery Act Corrective Action (September 3, 2004) (www.IN.gov/idem/4127.htm).* To implement RCRA Subtitle C Corrective Action requirements, and to facilitate brownfield redevelopment in Indiana.

2.3 Process Overview

Figure 2.2 Indiana Brownfields Program Process Overview



2.4 How Does a Site Enter the Program?

Sites typically enter the program as a result of a request for technical or legal assistance or as a result of an award of financial assistance by IBP. Applicants typically submit a request for services, such as a Comfort/Site Status Letter Request - State Form 51493 (www.IN.gov/ifa/brownfields/2364.htm). Requests are accepted on an ongoing basis and there is no application fee. A site must meet the definition of a brownfield as defined by IC 13-11-2-19.31 (www.IN.gov/legislative/ic_iac).

Anytime a site is new to the program, the program performs an agency-wide, confidential enforcement check to determine if the site is actively being managed in another IDEM program, if there are any known “imminent and substantial threats to human health and/or the environment,” and if there are any unresolved enforcement issues related to the site. Ongoing enforcement actions or imminent threats may prevent issuance of a letter until such issues are resolved. After the site clears an enforcement check, a brownfields project manager is assigned and conducts a comprehensive review of the submitted data. Based on the information evaluated, the program issues the applicable requested Comfort Letter, Site Status Letter, No Further Action Letter, comment letter, and/or other document, as appropriate. Relative to financial assistance, the enforcement check process is tied to determining site or recipient eligibility for funding.

Eligibility (Comfort Letter)

A Comfort Letter is issued to a party that qualifies for an applicable exemption to liability found in Indiana law and/or an IDEM nonrule policy document (NPD). A Comfort Letter is not a legal release from liability¹. The Comfort Letter outlines the applicable liability exemption and/or IDEM’s exercise of enforcement discretion under an applicable IDEM NPD. Comfort Letters are not transferable to another party; a party desiring liability protection must independently qualify for a liability exemption or an applicable nonrule policy.

There are seven (7) potentially applicable liability exemptions:

1. Stakeholder is a government entity (*political subdivision*) exempt from liability under IC 13-25-4-8(e), IC 13-11-2-150(c), or IC 13-11-2-151(b).
2. Stakeholder is a creditor, lender, or fiduciary exempt from liability under IC 13-23-13-14, IC 13-24-1-10, or IC 13-25-4-8(c); Current/prospective lender or trustee did not participate in the active management of the site.
3. Stakeholder is not the statutory owner of an underground storage tank pursuant to IC 13-11-2-150(a) because the tanks were not used after November 8, 1984, and the stakeholder was not the person who owned the tank immediately before the discontinuation of the tank’s use, or the stakeholder meets one of the exceptions to the owner definition (*for example, bona fide prospective purchaser, nonprofit corporation that acquires a tank site for recreational redevelopment*).

¹ A Comfort Letter is not a legal release from liability because it is an enforcement discretion decision made by IDEM under a nonrule policy, rather than a legal settlement authorized by the agency or a court.

4. Stakeholder satisfies the conditions of IDEM Nonrule Policy Document (NPD) *Property Containing Contaminated Aquifers (Waste-0047) (20 IR 1674, January 30, 1997)*, or IDEM NPD *Property Containing Contaminated Aquifers/Underground Storage Tanks (Waste 0038) (23 IR 2141, April 20, 2000)* (www.IN.gov/idem/4694.htm):
 - Sampling data must verify that identified contamination has been coming from an off-site source onto the subject property via ground water.
 - There can be no on-site source of contamination or off-site contamination co-mingled with site-derived contamination.
 - A Phase I Environmental Site Assessment of the property is required to determine site history and prior ownership.
 - If free product is present and its presence constitutes either an imminent threat or could potentially be an imminent threat, a Comfort Letter may not be issued until the free product has been abated.

5. Stakeholder is exempt from liability or eligible for a defense to liability as a bona fide prospective purchaser (BFPP), contiguous property owner (CPO), or innocent landowner (ILO) pursuant to IC 13-25-4-8(b). Federal laws and rules cited below may be viewed at the U.S. EPA Brownfields and Land Revitalization Laws and Statutes website (www.epa.gov/brownfields/laws/index.htm).
 - a. Bona fide prospective purchaser (BFPP):
 - Purchaser must have acquired title to the property after January 11, 2002.
 - Purchaser also must meet CERCLA § 101(35), CERCLA § 101(40), and CERCLA § 107(r) criteria. (*Also see IC 13-25-4-8[b]*).
 - For the Indiana petroleum BFPP liability exemption, the purchaser also must satisfy IC 13-11-2-150(f) or IC 13-11-2-151(g), including property acquisition after June 30, 2009.
 - BFPPs must perform All Appropriate Inquiry (AAI) prior to acquiring the property and may buy knowing, or having reason to know, of contamination on the property. AAI rule (*40 CFR Pt. 312*) may be satisfied by completing an AAI-compliant Phase I Environmental Site Assessment to ASTM standard E1527-05. Certain activities must be conducted within 180 days of acquisition.
 - Post acquisition, the purchaser must satisfy certain statutory continuing obligations with respect to known site contamination to maintain exemption.
 - BFPP liability exemption does not address RCRA liability.
 - BFPP liability exemption does not include protection from third party lawsuits.

While a Phase II environmental investigation is not a threshold criteria to qualify as a BFPP, a prospective buyer may elect to do a Phase II investigation, especially if indicated by the Phase I Environmental Site Assessment in order to be able to better determine how to comply with a BFPP's reasonable steps/continuing obligations. As part of drafting a comfort letter, the program evaluates all available site information, historical and current, in order to determine whether land use restrictions (*recording of an environmental restrictive covenant*) may be necessary to eliminate exposure pathways, and to inform a technical opinion on appropriate reasonable steps for a BFPP to undertake, to try to maintain the liability exemption. An additional benefit of conducting a Phase II

investigation is that it establishes a baseline of environmental conditions on the site prior to purchase. Having such investigation data could prove useful in the future should questions arise as to a buyer's potential contribution to existing (pre-purchase) contamination.

b. Contiguous property owner (CPO):

- Property owner meets CERCLA § 101(35) and CERCLA § 107(q) criteria. *Also see IC 13-25-4-8[b]*). Owners of property that is or may be contaminated by a release or threatened release and that is not the source of the contamination.
- For the Indiana petroleum CPO liability exemption, the purchaser also must satisfy IC 13-11-2-150(e) or IC 13-11-2-151(f), including property acquisition after June 30, 2009.
- Such property is "contiguous" to or otherwise similarly situated to contaminated real property that is not owned by the person and is the source of the known or suspected contamination.
- CPOs must perform AAI prior to acquiring the property and not know or have reason to know that the property was or could be contaminated by a release or threat of release of contamination from other real property not owned or operated by the person. AAI rule (*40 CFR Pt. 312*) may be satisfied by completing an AAI-compliant Phase I Environmental Site Assessment to ASTM standard E1527-05. Certain activities must be conducted within 180 days of acquisition.
- A person that does not qualify as a CPO because the person had or had reason to have knowledge of contamination may qualify as a BFPP in the alternative if BFPP criteria are met.

c. Innocent landowner (ILO):

- Property owner meets CERCLA §107(b) (3) criteria (*including due care requirements*) and CERCLA § 101(35) criteria. (*Also see IC 13-25-4-8[b]*).
- ILOs must perform AAI prior to acquiring the property and not know or have reason to know that the property was or could be contaminated by a release or threat of release of contamination. AAI rule (*40 CFR Pt. 312*) may be satisfied by completing an AAI-compliant Phase I Environmental Site Assessment to ASTM standard E1527-05. Certain activities must be conducted within 180 days of acquisition.

To maintain liability protection, landowners must meet the following continuing obligations during their property ownership.

Compliance With Land Use Restrictions and Institutional Controls

BFPPs, CPOs, and ILOs must:

- Be in compliance with any land use restrictions established or relied on in connection with the response action
- Not impede the effectiveness or integrity of any institutional control employed in connection with a response action

BFPPs, CPOs, and ILOs also should:

- Comply with land use restrictions and implement institutional controls even if the restrictions/controls were not in place at the time of purchase
- Comply with land use restrictions relied on in connection with the response action even if restrictions haven't been implemented through an enforceable institutional control

Reasonable Steps

BFPPs, CPOs, and ILOs are required to take reasonable steps to:

- Stop any continuing release
- Prevent any threatened future release
- Prevent or limit any human, environmental or natural resource exposure to any previously released hazardous substance

Cooperation, Assistance, and Access

BFPPs, CPOs, and ILOs must provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restoration, including the cooperation and access necessary for the installation, integrity, operation, and maintenance of any complete or partial response action or natural resource restoration.

Compliance With Information Requests and Administrative Subpoenas

BFPPs and CPOs must comply with CERCLA information requests and administrative subpoenas.

Provision of Legally Required Notices

BFPPs and CPOs must provide legally required notices related to the discovery or release of hazardous substances at the facility.

“Legally required notices” may include those required under federal, state, and local laws. Examples of federal notice requirements include: CERCLA § 103 (*notification requirements regarding released substances*); Emergency Planning and Community Right-to-Know Act (EPCRA) § 304 (“*emergency notification*”); and RCRA § 9002 (*underground storage tanks notification provisions*).

Eligibility (Site Status Letter)

Applicants for a Site Status Letter (SSL) must:

- Not have caused, contributed to, or knowingly exacerbated the release or threat of release of the hazardous substance or petroleum through an act or omission
- Not have any ownership interest in any entity that caused, contributed to, or knowingly exacerbated the release or threat of release
- Have no alternative basis for liability for the contaminated property, such as liability as a disposer, generator, or transporter of the contaminants or liability as an owner or operator by reason of the existence of a new source of contaminants on the site
- Be able to demonstrate that current levels of contaminants at the brownfield substantially meet current remediation objectives, as established by IDEM under the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm)

An SSL does not address the potential liability of the party requesting the letter. The SSL states that based on a technical analysis of information pertaining to site conditions submitted, or otherwise available, to IDEM, IDEM concludes that current site conditions do not present a threat to human health or the environment and that IDEM does not plan to take or require a response action at the brownfield site. It is the functional equivalent of a No Further Action (NFA) letter. SSLs:

- Incorporate Indiana's *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) investigation methodology and remediation objectives in the decision making process
- Are potentially transferrable to subsequent owners who similarly qualify for a letter
- Cannot be issued to property owners who owned the site at the time of the release

2.5 *Emergency or Immediate Actions*

The IBP is not designed to address sites with active emergency or immediate action needs. The program may reject an application for assistance if conditions constitute an imminent and substantial threat to human health or the environment. However, once the emergency or immediate action has been resolved, an applicant may apply for program assistance. Regardless of whether the IBP has accepted an application for financial, legal, or technical assistance, the program may determine later that an imminent and substantial threat exists that requires a site to be referred to another IDEM program for remediation and/or enforcement.

2.6 *How Is the Public Involved or Notified?*

While public involvement and participation is preferred, it is not a requirement to receive assistance from the IBP unless certain federal funding is involved. Public participation is typically a factor in applications for financial assistance, and the Comfort/Site Status Letter Request Form - State Form 51493 (www.IN.gov/ifa/brownfields/2364.htm) inquires about any public involvement in the redevelopment project.

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs

IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

2.7 Investigation

Depending on the type(s) of program assistance sought, different levels of site investigation can be conducted. Where the assistance requested involves only a Comfort Letter request, a Phase I Environmental Site Assessment compliant with the AAI rule (*40 CFR Pt. 312*) (*ASTM E1527-05 standard or equivalent*) alone is sufficient to enable the program to issue a letter. However, Phase II site investigative activities may be needed or desired by the applicant in order to make a better informed decision about a property transaction. In addition, Phase II investigation provides additional information for the program to review, which may result in a recommendation that fewer or no land use restrictions are necessary as a condition of closure. Absent such Phase II information, the program may take a more conservative approach to land use restrictions. For an SSL/NFA site or site receiving program financial assistance, a Phase II site investigation is required to determine the full nature and extent of the contamination in soil, ground water, and soil vapor/indoor air (*when applicable*), and to evaluate actual or potential exposure to human and ecological receptors using the conceptual site model (CSM). Delineation of the contaminant source and extents are usually accomplished using the step-out procedures described in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm).

The program follows the reporting requirements discussed in Section 3.11 (*CSM Documentation*) of the *Remediation Closure Guide* to document investigation related activities. Any presampling activities and optional screening data results should be incorporated into the investigation report(s).

2.8 Remedy Decision

The IBP does not follow a formal remedy decision process.

2.9 Remedial Action

The IBP may recommend that the applicant conduct remedial action if the site does not meet appropriate risk-based levels based on the anticipated land use or may require land use restrictions to be recorded in an ERC (www.IN.gov/idem/5959.htm). While the program cannot obligate that remediation take place, the program may decline to issue a letter until *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) criteria have been fulfilled.

2.10 Closure

Closure is achieved when an applicant is able to demonstrate that current levels of contaminants at the brownfield substantially meet remediation objectives, as established by IDEM under the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm). Documentation incorporating *Remediation Closure Guide* closure determinations typically is limited to SSLs or NFA letters (*usually for petroleum only*). An environmental restrictive covenant (ERC) may be required for a site at which environmental conditions do not meet residential screening levels in the *Remediation Closure Guide*, or site-specific residential risk-based levels, regardless of current use or proposed future use.

No Further Action Letter

In addition to SSLs, the IBP may, at its option, alternatively provide an NFA letter, typically for petroleum-contaminated sites only, when environmental conditions at a site meet the remediation objectives in accordance with the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm).

An NFA letter does not address the potential liability of the party receiving the letter. An NFA letter states that based on a technical analysis of information pertaining to site conditions submitted to or otherwise available to IDEM, IDEM concludes that current site conditions do not present a threat to human health or the environment and that IDEM does not plan to take or require a response action at the brownfield site. An NFA letter:

- Incorporates Indiana's *Remediation Closure Guide* investigation methodology and remediation objectives in the decision making process
- Can be issued to owners who owned the site at the time of the release
- Are tied to the land/site conditions, not a stakeholder

Environmental Restrictive Covenant

Indiana Code (IC) 13-14-2-6(5) authorizes IDEM to use and enforce an environmental restrictive covenant (ERC), as defined in IC 13-11-2-193.5². An ERC is a legally enforceable agreement (*and a type of institutional control*) placed by the site owner on the property deed containing land use restrictions designed to eliminate contaminant exposure pathways.³

An ERC is typically needed for any site that does not meet *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) residential screening levels or site-specific risk based residential levels. ERCs are modifiable with IDEM's written agreement and may be terminated under certain conditions. Land use restrictions can be changed in the future due to new or previously unknown conditions, a change in land use, or data evidencing environmental site conditions have changed no longer necessitating a particular restriction.

² IC 13-11-2-193.5 "Restrictive covenant"

"Restrictive covenant", for purposes of IC 13-14-2-6, means, with respect to land, any deed restriction, restrictive covenant, environmental covenant, environmental notice, or other restriction or obligation that:

- Limits the use of the land or the activities that may be performed on or at the land or requires the maintenance of any engineering control on the land designed to protect human health or the environment
- Is intended to run with the land and be binding on successors
- Is recorded with the county recorder's office in the county in which the land is located
- Explains how it can be modified or terminated.

³ An institutional control is a legal or administrative tool or action taken to reduce the potential for exposure to hazardous substances. Institutional controls may include, but are not limited to, use restrictions, environmental monitoring requirements, and site access and security measures.

2.11 Conditions Subsequent

Monitoring/Operations and Maintenance

Active engineering controls associated with a remedy and providing long-term protectiveness at a site may require ongoing operation and maintenance under the terms of a settlement or an ERC. Similarly, land use restrictions contained in an institutional control such as an ERC must be complied with on an ongoing basis. Failure to comply with such restrictions may result in enforcement action by IDEM.

2.12 When Issues Arise

Participation in the IBP is voluntary, and environmental investigations and cleanups are performed cooperatively between the applicant and the program. Most disagreements regarding the technical aspects of a project can be resolved through discussions between the project manager and the project stakeholders. However, in instances where the program identifies a likely immediate risk to human health and/or the environment, sites may be referred to another IDEM program for remediation or enforcement. The program's professional services contracts typically contain a dispute resolution provision that also directs the parties to cooperatively and expeditiously reach a solution to any dispute. In addition, a request for review may be filed with the Indiana Department of Administration in certain circumstances to resolve a contract dispute.

2.13 Forms and Checklists

Sample copies of many forms, templates, and checklists discussed in this RPG may be found at the end of each chapter of this guide. **The sample forms, templates, and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current state forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to the locations of those forms and checklists, and links to many other documents and websites have been provided where the document is discussed in this RPG.

- Sample 2.1 Indiana Brownfields Program Checklist
- Sample 2.2 Procedures to Request a Determination of Petroleum Site Eligibility Required for U.S. EPA Brownfield Grants

Sample 2.1 Indiana Brownfields Program Checklist

Indiana Brownfields Program CHECKLIST			
Comfort Letter		Yes	No
Comfort Letter: BFPP Exemption	Is the site a brownfield?	<input type="checkbox"/>	<input type="checkbox"/>
	Is site suspected to be contaminated or contaminated with a hazardous substance and/or petroleum?	<input type="checkbox"/>	<input type="checkbox"/>
	Has the site cleared an IDEM enforcement check?	<input type="checkbox"/>	<input type="checkbox"/>
	Is a Phase I Environmental Site Assessment included and is it written for the stakeholder requesting the Comfort Letter (Prospective Purchaser or Prospective Tenant)?	<input type="checkbox"/>	<input type="checkbox"/>
	Is the Phase I Environmental Site Assessment completed in accordance with <u>ASTM E1527-05</u> or <u>40 CFR Part 312</u> ?	<input type="checkbox"/>	<input type="checkbox"/>
	Were the Phase I Environmental Site Assessment activities (and report) completed within 180 days prior to acquisition? <ul style="list-style-type: none"> ▪ If no, have the required Phase I Environmental Site Assessment update activities been completed within 180 days of/prior to acquisition? 	<input type="checkbox"/>	<input type="checkbox"/>
	Is the Phase I Environmental Site Assessment signed by qualified Environmental Professionals and the report contains proper certification statement?	<input type="checkbox"/>	<input type="checkbox"/>
	Did the Applicant requesting Comfort Letter answer the User specific questions for the Phase I Environmental Site Assessment?	<input type="checkbox"/>	<input type="checkbox"/>
	Is there any basis for the Applicant to be potentially liable, for example, is the Applicant a Potentially Responsible Party/Responsible Party or affiliated with any Potentially Responsible Party/Responsible Party that caused or contributed to the contamination? <ul style="list-style-type: none"> • Direct or indirect familial relationship? • Any contractual, corporate, or financial relationship (other than property transfer instrument)? • Reorganization of a business entity that was potentially liable? 	<input type="checkbox"/>	<input type="checkbox"/>
	If Comfort Letter request is post acquisition: <ul style="list-style-type: none"> • Did the Applicant acquire after January 11, 2002 (or June 30, 2009 for petroleum-contaminated sites)? • Has the Applicant satisfied continuing obligations since acquisition? <ul style="list-style-type: none"> • Provided all legally required notices with regard to discovery, release of hazardous substances? 	<input type="checkbox"/>	<input type="checkbox"/>

	<ul style="list-style-type: none"> • Taken reasonable steps to stop continuing releases, prevent any threatened future release, prevent or limit exposure to any previously released hazardous substances? • Provided full cooperation, assistance and access to persons conducting response actions? • In compliance with any land use restrictions already established and not impeding the effectiveness or integrity of any institutional control employed at the Site in connection with a response action? • Complied with any request for information or administrative subpoena issued by U.S. EPA? 		
Comfort Letter: Governmental Entity	Is the Applicant a governmental entity exempt from liability under IC 13-25-4-8(e), IC 13-11-2-150(c), or IC 13-11-2-151(b)?	<input type="checkbox"/>	<input type="checkbox"/>
Comfort Letter: Lender/Fiduciary Liability	Is the Applicant a creditor, lender, or fiduciary exempt from liability under IC 13-23-13-14, IC 13-24-1-10, or IC 13-25-4-8(c)? Current/ prospective lender who not participate in the active management of the site?	<input type="checkbox"/>	<input type="checkbox"/>
Comfort Letter: UST Owner/Operator	Is the Applicant the sole or joint owner of an underground storage tank pursuant to IC 13-11-2-10(a) because the tank was used after November 8, 1984 and the Applicant was not the person who owned the tank immediately before the discontinuation of the tank's use? Or, does the Applicant meet an exception to the owner definition?	<input type="checkbox"/>	<input type="checkbox"/>
Comfort Letter: Contaminated Aquifer	Does the Applicant satisfy the conditions of IDEM Nonrule Policy Document, "Property Containing Contaminated Aquifers" (20 IR 1674, January 30, 1997), or IDEM Nonrule Policy Document Waste-0038 "Property Containing Contaminated Aquifers/Underground Storage Tanks" (23 IR 2141, April 20, 2000)?	<input type="checkbox"/>	<input type="checkbox"/>
SITE STATUS LETTER			
Site Status Letter	Is the site a brownfield?	<input type="checkbox"/>	<input type="checkbox"/>
	Has the site cleared an IDEM enforcement check?	<input type="checkbox"/>	<input type="checkbox"/>
	Did the Applicant cause, contribute to, or knowingly exacerbate the release or threat of release of the hazardous substance or petroleum through an act or omission?	<input type="checkbox"/>	<input type="checkbox"/>
	Is there any basis for the Applicant to be potentially liable, for example, is the Applicant a Potentially Responsible Party/Responsible Party or affiliated with any Potentially Responsible Party/Responsible Party that caused or contributed to the contamination? <ul style="list-style-type: none"> • Direct or indirect familial relationship? 	<input type="checkbox"/>	<input type="checkbox"/>

	<ul style="list-style-type: none"> Any contractual, corporate, or financial relationship (other than property transfer instrument)? Reorganization of a business entity that was potentially liable? 		
	Has the site has been delineated to appropriate screening levels?	<input type="checkbox"/>	<input type="checkbox"/>
	Do environmental conditions substantially meet current RCG remediation objectives?	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENTAL RESTRICTION COVENANTS			
ERC	Has a remedial survey monitoring and site level description of the property been provided for each parcel requiring an ERC?	<input type="checkbox"/>	<input type="checkbox"/>
	Have the following maps been submitted? <ul style="list-style-type: none"> One black & white map (non-aerial) showing property lines One black & white map (non-aerial) showing all soil borings and monitoring wells. Borings and wells over applicable cleanup goals should be noted. Contaminant concentration labels are optional. 	<input type="checkbox"/>	<input type="checkbox"/>
	Have the following tables been submitted? <ul style="list-style-type: none"> One table for soil samples over applicable residential and industrial cleanup goals One table for ground water samples over applicable residential and industrial cleanup goals 	<input type="checkbox"/>	<input type="checkbox"/>

Sample 2.2 Procedures to Request a Determination of Petroleum Site Eligibility Required for U. S. EPA Brownfield Grants



Procedures to Request a Determination of Petroleum Site Eligibility Required for U. S. EPA Brownfield Grants

When requesting a petroleum eligibility determination from the Indiana Department of Environmental Management (IDEM), please provide written responses to the items listed below. If you are unable to provide the information related to any of the items, please state why that information is unavailable. Requests should be sent to Michele Oertel, the Indiana Brownfields Program EPA/Community Liaison and Outreach Coordinator by email at: moertel@ifa.in.gov. Subsequent to its review of the request, IDEM will provide a written response determining eligibility for use of federal grant funds on the site. Further information regarding petroleum eligibility determinations may be found in the US EPA's *Guideline for Brownfield Assessment, Revolving Loan Fund, and Cleanup Grants*. The guidelines for all three types of grants are available on the web at: <http://www.epa.gov/brownfields/application>.

SAMPLE

The following information must be provided in order for the IDEM to make a petroleum eligibility determination:

1. **Site Description**. Please provide information regarding the following: a) the name of the site; b) the address of the site; c) whether this site is contaminated by petroleum or hazardous substances; d) the operational history and current uses(s) of the site; and e) environmental concerns, if known, at the site.
2. **Previous Assessments**. Please explain the phase of assessment, if any, that has been completed to date. Provide dates of the assessment(s).
3. **Areas of Concern**. Please identify how the site became contaminated, if known, and, to the extent possible, describe the nature and extent of the contamination.
4. **Current and Immediate Past Owners**. Identify the current and immediate past owner of the site.
5. **Acquisition of Site**. Please identify when and by what method the current owner

acquired the property (for example, purchase, tax foreclosure, donation, eminent domain).

6. **No Responsible Party for the Site.** Please identify whether the current and immediate past owner dispensed or disposed of petroleum or petroleum product, or exacerbated the existing petroleum-contamination at the site, and whether the current and immediate past owner took reasonable steps with regard to the contamination at the site.

7. **Assessed or Cleaned Up by a Person Not Potentially Liable.** Please identify whether you (the applicant) dispensed or disposed of petroleum or petroleum product, or exacerbated the existing petroleum contamination at the site, and whether you took reasonable steps with regard to the contamination at the site.

8. **Relatively Low Risk.** Please identify whether the site is of “relative low risk” compared to other petroleum or petroleum product-only contaminated sites in the state in which the site is located, including whether the site is receiving oil from a Leaking Underground Storage Tank (LUST) or a Tank Farm (TF).

9. **Judgments, Orders, or Third Party Suits.** Please provide information that no Responsible Party is identified for the site through either:

- a. A judgment rendered in a court of law or an administrative order that would require any person to assess, investigate, or clean up the site; or
- b. An enforcement action by federal or state authorities against any party that would require any person to assess, investigate, or clean up the site; or
- c. A citizen suit, contribution action or other third party claim brought against the current or immediate past owner, that would, if successful, require the assessment, investigation, or cleanup of the site.

10. **Subject to RCRA.** Please identify whether the site is subject to any order under section 9003(h) of the Solid Waste Disposal Act (RCRA Corrective Action).

11. **Financial Viability of Responsible Parties.** For any current or immediate past owners identified as responsible for the contamination at the site, provide information regarding whether they have the financial capability to satisfy their obligations under federal or state law to assess, investigate, or clean up the site.

Questions pertaining to this document can be directed to Cindy Klem, Indiana Brownfields Program Counsel, at cklem@ifa.in.gov or (317) 234-6018.

3. LEAKING UNDERGROUND STORAGE TANK PROGRAM AND EXCESS LIABILITY TRUST FUND PROGRAM

3.1 Purpose and Scope

The Leaking Underground Storage Tank (LUST) Program (www.IN.gov/idem/4997.htm) oversees the release reporting and corrective action requirements for owners (as defined in IC 13-11-2-150) and operators (O/Os) (as defined in IC 13-11-2-148) for releases from regulated Underground Storage Tanks (USTs) required under state and federal laws. Corrective action includes determining the full nature and extent of contamination and cleanup when necessary in order to adequately eliminate or control unacceptable risks from the contamination.

The Excess Liability Trust Fund (ELTF) Program (www.IN.gov/idem/5063.htm) oversees a financial assurance mechanism required under state and federal law for O/Os, and utilized by most O/Os to pay for corrective action costs associated with the release from a regulated petroleum UST. The ELTF Program staff determines ELTF eligibility and reimburses corrective action costs and third party claims associated with confirmed releases from regulated petroleum USTs. ELTF does not reimburse costs from releases that occurred before April 1, 1988, or costs of corrective action for releases of hazardous substances. A regulated UST, (as defined under the rules for the LUST program at 329 IAC 9-1-1 and IC 13-11-2-241), includes, but is not limited to:

- A UST in use on or after November 8, 1984. Note: A UST not closed before this date is considered “in use.” A UST not emptied to a *de minimus* quantity of less than one inch of regulated substance is considered to be still “in use” under 329 IAC 9-1-1(b) (5) and the preamble to 40 CFR 280 found at the U.S. EPA OUST website (www.epa.gov/oust/fedlaws/index.htm).
- USTs that contain a regulated substance⁴ including petroleum⁵ or a hazardous substance⁶.

⁴ “**Regulated Substance**” for purposes of USTs include petroleum and hazardous substances, but excludes any substance regulated as a hazardous waste under: Subtitle C of the federal Solid Waste Disposal Act, as amended (42 U.S.C. 6921 through 6939[a]) or IC 13-22-2-3 (IC 13-11-2-183).

⁵ “**Petroleum**” Petroleum and crude oil or any part of petroleum or crude oil that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit (60°F) and 14.7 pounds per square inch absolute) (IC 13-11-2-160). Under the UST rule, a petroleum UST means a UST system that contains petroleum or a mixture of petroleum with *de minimis* quantities of other regulated substances. Such systems include those containing any of the following: motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, or used oils (329 IAC 9-1-36).

⁶ “**Hazardous Substance UST System**” is a UST system containing a hazardous substance as defined in Section 101 of CERCLA (42 U.S. C. 9601) and not regulated as a hazardous waste under 329 IAC 3.1, or any mixture of the preceding substance and petroleum that does not fall under the definition of “petroleum UST system.” Refer to the list of hazardous substances found at www.epa.gov/oust/faqs/hazusts.htm.

- USTs with capacity greater than 110 gallons and the U.S. EPA *de minimus* determination (*residential and farm USTs greater than 1,100 gallons*).
- Heating oil USTs used for on-site consumption are excluded.
- Other exclusions are outlined in IC 13-11-2-241 and 329 IAC 9-1-1(b).

The ELTF Program provides financial assurance mandated by U.S. EPA and Indiana, and provides funding for the cleanup of releases from regulated USTs. Once the O/O submits an Initial Site Characterization Report for a confirmed release (*when required by IDEM*), the O/O may formally apply to the ELTF Program. ELTF Program staff review all information submitted for the release and for the facility where the release occurred to determine if the release is ELTF eligible.

3.1.1 LUST Program Responsibilities

The LUST Program is responsible for the following:

- Receiving UST system release, spill and overfill reports
- Reviewing and commenting on reports and plans including, but not limited to:
 - Spill Recovery and Response Report
 - Abatement and Free Product Recovery Report
 - Initial Site Characterization Report
 - Investigation Work Plan
 - Further Site Investigation Report
 - Pilot Study Work Plan
 - Corrective Action Plan and Amendments
 - Corrective Action Plan Implementation Report
 - Quarterly Monitoring Reports
 - No Further Action request including draft Record of Site Closure, environmental restrictive covenant, etc.
- Ensuring public participation for affected parties regarding corrective action decisions
- Proposing rule changes based on program needs

The LUST process generally includes the following (*see section 3.3 for the LUST process flowchart*):

1. Release confirmation and reporting
2. Site characterization (*first technical approval*)
3. Corrective action (*if necessary and second technical approval*)
4. Corrective action implementation (*third technical approval*)
5. Closure (*fourth technical approval*)
6. Conditions subsequent (*if necessary*)

3.1.2 ELTF Program Responsibilities

The ELTF Program is responsible for the following:

- Reviewing ELTF eligibility applications
- Reviewing ELTF claims for reimbursement of emergency measures, investigation, and corrective action costs
- Referring third party claims to the Office of the Attorney General for review and approval
- Determining substantial compliance (*as defined under 328 IAC 1-1-9*) with LUST and ELTF requirements
- Educating the regulated community regarding ELTF requirements, including payment of UST fees
- Proposing rule changes based on program needs and corrective action costs

The ELTF process generally includes:

1. ELTF application submittal and review for eligibility
2. Review of submitted technical documents
3. Claim application submittal and processing
4. Reimbursement for emergency measures, investigation, corrective action costs, and third party claims

3.1.3 Document Submittal

All documents should be submitted in a form and format consistent with the *OLQ Document Submittal Guidelines* (www.IN.gov/idem/6578.htm). Correspondence should be sent to the section that is managing the site. All ELTF applications and claims should be mailed to the ELTF Program.

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Indiana Department of Environmental Management
Office of Land Quality
Leaking Underground Storage Tank Section
100 N. Senate Avenue, Room 1101
Indianapolis, IN 46204-2251

67-02

Indiana Department of Environmental Management
Office of Land Quality
Excess Liability Trust Fund Technical Section
100 N. Senate Avenue, Room 1101
Indianapolis, Indiana 46204-2251

67-02

Indiana Department of Environmental Management
Office of Land Quality
Excess Liability Trust Fund Claims Section
100 N. Senate Avenue, Room 1101
Indianapolis, Indiana 46204-2251

3.1.4 Related Programs

Underground Storage Tank (UST) Program – The UST Program is responsible for registration (*notification*), fee assessment, compliance inspections, and closure oversight of regulated USTs. The LUST Program often works closely with the UST Program regarding suspected release investigations and response.

Emergency Response (ER) Program– ER documents spill and overfill reports from UST systems and dispensers; and documents and responds to a release when emergency conditions exist (*such as fire and explosion hazards, conditions that necessitate evacuations, and releases to surface water*). Once emergency conditions are mitigated, ER refers the release to the LUST Program.

State Cleanup Program (SCP) – ER documents releases from unregulated USTs and refers them to SCP for corrective action oversight. When other sources of contamination are being addressed on the same site, SCP may direct corrective action for a release from a regulated UST.

Voluntary Remediation Program (VRP) – Upon confirmation of a release from a regulated UST, an applicant (*generally the O/O*) may apply to enter into the VRP. VRP may consider the following criteria to determining eligibility:

- Current or pending enforcement actions related to the release
- Imminent and substantial threat to public health or the environment due to the release

Since VRP is a voluntary program, ELTF will not reimburse IDEM’s VRP oversight costs for document review, field oversight, and sampling in the VRP.

3.2 Rules and Laws

Indiana Statutory Authority (www.IN.gov/legislative/ic_iac)

- IC 13-23 *Underground Storage Tanks*. Statutory authority for UST, LUST and ELTF programs
- IC 13-23-1-2 IDEM authority to develop UST and LUST rules
- IC 13-23-8 Administration and use of the ELTF including corrective action plans, reimbursement caps and deductibles, as well as authority to develop ELTF rules
- IC 13-23-9 ELTF eligibility and payment
- IC 13-23-13 Authorizes IDEM to issue orders for corrective actions and conduct corrective actions. Authorizes contribution actions between private parties for corrective action costs

Indiana Administrative Code (IAC) (www.IN.gov/legislative/ic_iac)

- 328 IAC 1 *Payment of Corrective Action and Third Party Liability Claims from the Excess Liability Trust Fund*
- 329 IAC 9 *Underground Storage Tanks*
- 329 IAC 9-4 Requirements for release investigations, release reporting, and spill and overfill reporting and cleanup

- 329 IAC 9-5 Requirements for initial response and abatement, free product removal, initial site characterization, further site investigation, corrective action, and public participation

Nonrule Policy Documents (NPDs) (www.IN.gov/idem/4694.htm)

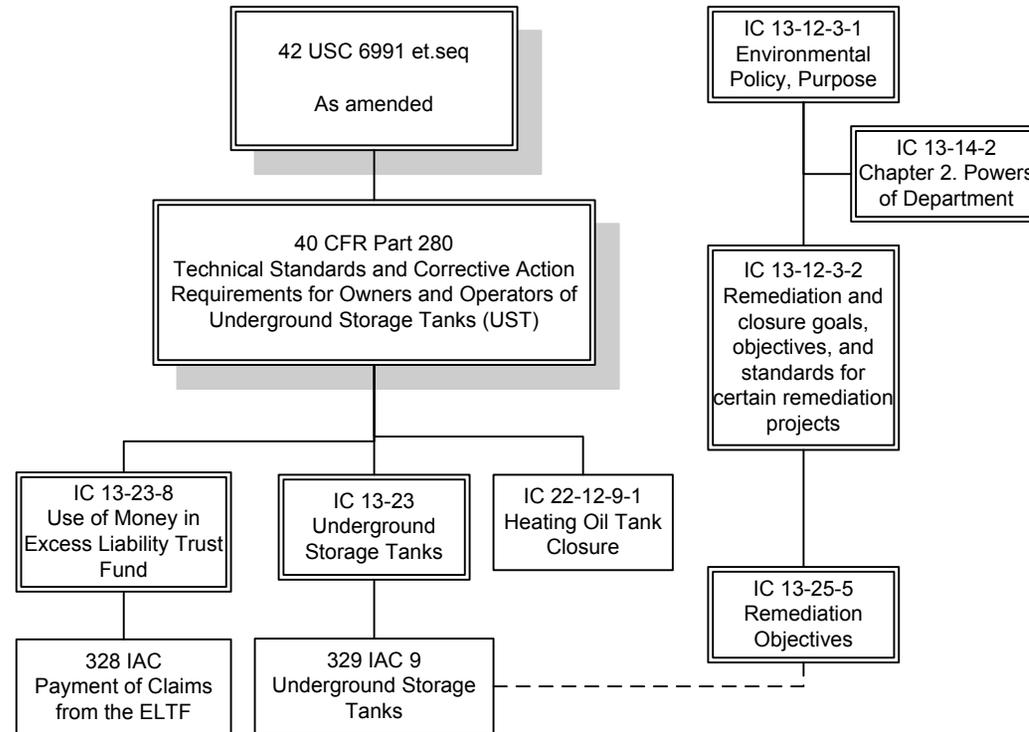
- *Properties Containing Contaminated Aquifers/Underground Storage Tanks (Waste-0038)*. States that IDEM will use its enforcement discretion regarding collection of costs and release response relative to neighboring property owners affected by a LUST site release as long as the neighboring property owner did not contribute to the release and performs due care.
- *Excess Liability Trust Fund/Risk Integrated System of Closure (Waste-0039)*. Addresses reimbursement of costs for transition from the UST Branch Guidance Manual (USTBGM) to RISC and ensuring that the transition is cost effective.
- *Access to Third Party Property (Waste-0043)*. States that in situations where an O/O made a good faith effort to gain access to investigate or perform corrective action on a neighboring property and was refused, IDEM will use its enforcement discretion in regards to the O/Os inability to obtain access.
- *Risk Integrated System of Closure (RISC) Technical Guide and User's Guide (Waste-0046)*. Contains information about risk-based site characterization and default closure objectives. The User's Guide provides program specific requirements. Chapter 3 provides information about UST, LUST, and ELTF.
- *Drilling Procedures and Monitoring Well Construction Guidelines (Waste-0053)*. Provides guidance about installing borings and monitoring wells in compliance with 312 IAC 12 and 312 IAC 13.
- *Monitored Natural Attenuation for Petroleum Contaminated Sites (Waste-0054)*. Establishes criteria to select and implement monitored natural attenuation.
- *Methyl-Tertiary Butyl Ether (MTBE) Remediation (Waste-0055)*. Sets a ground water remediation objective for sites closed under 1994 USTBGM.
- *The Underground Storage Tank Branch Guidance Manual (www.IN.gov/idem/4997.htm)*. The December 1994 Underground Storage Tank Branch Guidance Manual (USTBGM) addresses site characterization, corrective action plans, and cleanup objectives. O/Os with releases reported on or before February 15, 2002, may utilize this guidance for closure.
- *Penalty Policy for Underground Storage Tank/Leaking Underground Storage Tank Requirements (Enf-001)*. IDEM's policy for determining penalties for violations of UST statutes and rules.

- *Compliance and Enforcement Response Policy (Enf-005)*. IDEM's policy on identification of and enforcement for violations by regulated entities.

Other Relevant Documents

- *Investigation of Underground Storage Tank Releases, Quality Assurance Program Plan*, B-001-OLQ-R-XX-09-Q-R0, March 24, 2009, effective April 7, 2009 (www.IN.gov/idem/4997.htm). Outlines requirements for collection of environmental data used to support investigation, corrective action, monitoring and closure of sites with releases, spills and overfills of regulated substances from regulated UST systems.

Figure 3.1 Laws and Rules Related to Underground Storage Tanks



Indiana has state program approval from EPA for the UST/LUST Program

3.3 Process Overview

Figure 3.2 Leaking Underground Storage Tank Program Process Overview

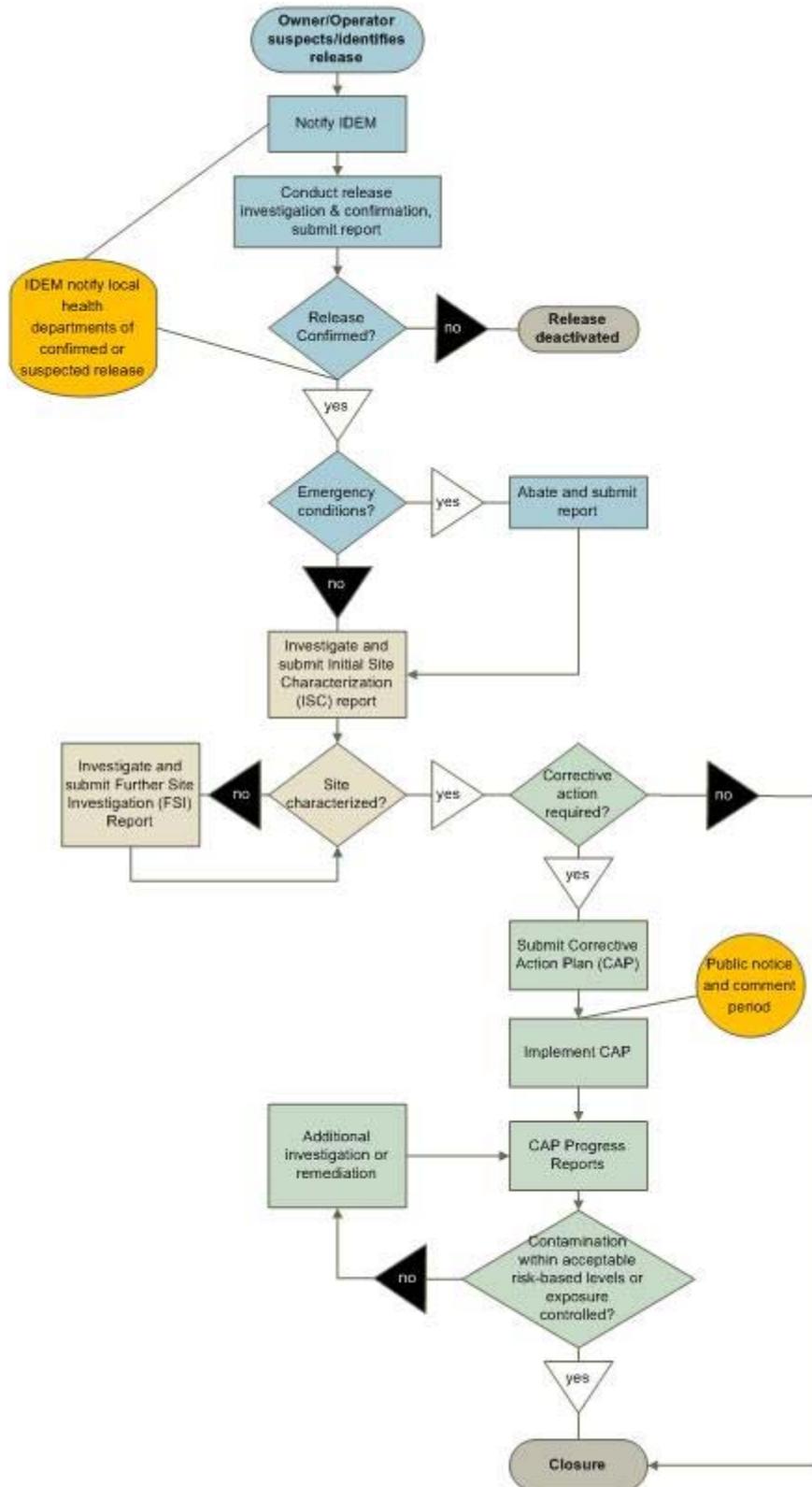


Table 3.1 Potential Petroleum Contaminants

Potential Petroleum Contaminants¹

Petroleum Product or Waste	Soil	Ground Water	Air/ Soil Gas	Typical Products/Wastes
Gasoline Range Product	VOCs ² Naphthalenes ³ Lead and Lead Scavengers ⁴	VOCs ² Naphthalenes ³ Lead and Lead Scavengers ⁴	VOCs ⁵	Automotive Gas Aviation Gas Racing Fuel Mineral Spirits Stoddard Solvent Naphtha Jet Fuel - JP-4 Ethanol fuels
Diesel Range Product	VOCs ² PAHs ⁶	VOCs ² PAHs ⁶	VOCs ⁵	Diesel #1 & 2 Kerosene Jet Fuel-JP #5, 7 & 8 Light Oil Home Heating Oil Biodiesel <100%
Hydrocarbon Oils Range Product	PAHs ⁶	PAHs ⁶	None	#4, 5, & 6 Fuel Oil Bunker C Mineral Oil Virgin Motor Oil Hydraulic Oil
Waste/Used Oil and Unknown Products and Wastes	VOCs ² PAHs ⁶ Lead and Lead Scavengers ⁴	VOCs ² PAHs ⁶ Lead and Lead Scavengers ⁴	VOCs ⁵	Waste/Used Oil Unknown refined petroleum product or waste

¹ Scope and general guidance – This table is intended for use when investigating refined petroleum releases at regulated UST sites. Consult the IDEM Project manager regarding: 1) laboratory methods based on site-specific needs and cost effectiveness; 2) modification of contaminant reporting once the site characterization is completed; 3) potential petroleum contaminants for products not listed in this table; and 4) additional reporting based on site-specific information.

² VOC Methods - During site characterization use SW846 Method 8260B and report all VOCs and naphthalenes. SW846 Method 8021 may be more cost effective during Corrective Action Plan (CAP) Implementation and closure monitoring and should be considered when seeking reimbursement from the Excess Liability Trust Fund (ETLF). Identify which methods are proposed in the CAP.

³ Naphthalenes – Report naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.

⁴ Lead and Lead Scavenger Methods – Report total lead and lead scavengers when investigating aviation gas and racing fuel, and when automotive gas was used or stored before January 1, 1996. Lead scavengers include EDB (ethylene dibromide or 1,2-dibromoethane) and 1,2-DCA (1,2-dichloroethane). Use EPA Methods with appropriate detection limits. Ground water samples for lead analysis should be unfiltered.

⁵ Air VOC Method – Report all VOCs. Use Method TO-15 for VOC.

⁶ PAHs Methods – Report all PAHs. Use SW846 Method 8270 SIM, 8310 or other appropriate method for PAHs.

3.4 How Does a Site Enter the Program?

3.4.1 Releases

A “Release” (*IC 13-11-2-184[a]*) is any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank (UST) into ground water, surface water, subsurface soils or surface soils. A release as relates to UST operation is any spilling or overfilling during the transfer of product to and from the UST system or during any upgrade or maintenance activities. Under 328 IAC 1-1-6.5, effective March 26, 2011, the ELTF Program defines a “fund qualifying occurrence” as an “incident that is the result of a release of product from a registered UST system and dispensing components, except the nozzle and hose connecting the nozzle to the pump.”

A “release” relating to UST operation will emanate from above the shear valve, which is generally located where the piping exits the ground. In the past the LUST program did not address a release emanating from above the shear valve. The LUST program now addresses all releases, including those from above the shear valve.

3.4.2 What Is a Suspected Release?

A suspected release occurs when at least one of the following happens (*329 IAC 9-4-1*):

- Discovery of a regulated substance at or near the UST system as free product or dissolved product or vapor in backfill, soil, ground water, surface water, basements, sewers, or utility lines. This includes the presence of visual staining, odors, or field screening results indicating the presence of a regulated substance.
- Unusual operating conditions including erratic behavior of dispensers, sudden loss of product, or unexplained presence of water in the UST.
- Monitoring results from release detection indicates a release (*for inventory control, two consecutive month’s failure*).
- Discovery of contamination including free product, dissolved product or vapors in soil, water, utilities, buildings or other locations by IDEM staff or another person (*329 IAC 9-4-2*).

For the situations described in the second and third bullets above, the O/O should first check their system to determine if the equipment is working properly. If the system is found to be working properly (*even when repairs, replacement, or calibration are necessary*), no suspected release report is required.

3.4.3 Release Investigation and Confirmation for Suspected Releases

The O/O must investigate suspected releases to determine if a release has occurred (*329 IAC 9-4-2 and 3*). Depending on the circumstances, the O/O must either:

- Conduct tank and/or line tightness testing
- Collect and analyze soil and/or ground water in the area of the suspected release

IDEM will direct the O/O to perform tightness testing or analyses depending on the circumstances.

- Generally, IDEM requires tightness testing based on unusual operating conditions and monitoring results from release detection.
- Generally, IDEM requires sampling based on the discovery of a regulated substance outside the UST system (*on- or off-site*). Examples include:
 - Failure of a line or tank tightness test. (*If a leak is found, the O/O must conduct an initial response, abatement and an Initial Site Characterization.*)
 - Discovery of contamination in soil immediately adjacent to the facility by utility workers
 - Product (“*product*” means regulated substance as defined in 329 IAC 9-1-38.1) or vapors in utility corridors near or adjacent to the facility
 - Product or vapors in buildings near or adjacent to the facility
 - Sheen or product on surface water near or adjacent to the facility

In all cases a written report must be submitted within seven days of discovery. If additional time is required, the O/O should contact the LUST Program to explain:

- Why the report will not be submitted on time
- What work remains to be completed
- When the report will be submitted

If the results of the investigation show that no release occurred and IDEM concurs, IDEM will issue a “Deactivation Letter.” If the results of the investigation confirm a release, the owner and operator must report the release within 24 hours, perform an initial response, and begin corrective action (*by characterizing the release*). ***Although the O/O must report a release within 24 hours, ELTF eligibility is based on substantial compliance; reporting within 14 days.***

3.4.4 What Is a Confirmed Release?

A release is confirmed when either:

- Product is seen leaking from any part of the UST system including the tank and connected piping (*not the dispenser*) into areas not equipped with secondary containment.
- Laboratory analytical results identify **any contaminant above laboratory detection limits in soil or ground water samples** collected during a UST closure, Phase II Environmental Site Assessment, or release investigation.

3.4.5 Sources and Causes of Releases

IDEM provides the *Energy Policy Act Public Record Summary Information On Underground Storage Tanks (USTs)* (www.IN.gov/idem/4997.htm) regarding the number of confirmed releases, as required by the *Energy Policy Act* of 2005. Table 3.2 lists common sources and causes.

Table 3.2 Common Sources and Causes of Confirmed UST Releases

<u>Sources</u>	<u>Causes</u>
Tank	Spill
Piping	Overfill
Dispenser	Physical or Mechanical Damage
Submersible Turbine Pump	Corrosion
Delivery Problem	Installation Problems
Other	Other
Unknown	Unknown

Most releases are found during a UST Closure or while performing a Phase II Environmental Site Assessment (*subsurface investigation*) prior to a property transaction. As a consequence, the source and cause of the release may not be known, but must be investigated and determined based on the UST records, field observations and laboratory results.

IDEM assigns a separate incident number for each release. Scenarios such as the following suggest that there is more than one release:

- Contamination found at two locations horizontally, for example, under the dispenser and the USTs
- Contamination found at two locations vertically, for example, in shallow and deep soil with clean soil in between
- Laboratory analysis shows the presence of different product types, for example, gasoline and diesel

An O/O who believes that the contamination is from one source should provide an explanation in the release report and demonstrate this interpretation during the subsequent investigation.

3.4.6 Reporting Releases From the UST System

Reporting requirements differ under the UST Rule (329 IAC 9) and the Spill Rule (329 IAC 2-6.1). Suspected and confirmed releases must be reported to IDEM within 24 hours of discovery (329 IAC 9-4-1 and 9-5-2) in one of three ways:

- Telephone:
 - During normal business hours call LUST Program staff at (317) 232-8900 or toll free at (800) 451-6027 ext. 28900
 - After hours and weekends call the Emergency Response Program (ER) at (317) 233-7745 or toll free at (888) 233-7745. Releases subject to reporting requirements under the Spill Rule (329 IAC 2-6.1) must be reported by telephone to the Emergency Response Program within two hours
- Fax the completed Initial Incident Report - State Form 54487 (www.IN.gov/idem/5157.htm) to (317) 234-0428
- E-mail the completed Initial Incident Report form to LeakingUST@idem.IN.gov

The following sections, 3.4.7 (*Reporting Emergency Conditions Subject to the Spill Rule* [329 IAC 2-6.1]) and 3.4.8 (*Reporting Spills and Overfills*), and Table 3.3 (*Leaking Underground Storage Tank Timeframes Summary*) clarify when a release must be reported within 24 hours per the UST Rule, and when a release must be reported within 2 hours per the Spill Rule. Releases

reported under the UST Rule are reported to LUST. ***The LUST Program prefers that non-emergency release reports be submitted via e-mail.***

3.4.7 Reporting Emergency Conditions Subject to the Spill Rule (327 IAC 2-6.1)

Confirmed releases must be reported immediately, but no later than within two hours of discovery to ER via telephone at (317) 233-7745 or (888) 233-7745. Releases subject to reporting under the Spill Rule include:

- Releases of petroleum that cause sheen on surface water
- Releases of hazardous substances equal to or greater than the reportable quantity.
- Conditions that create an actual or imminent threat to public safety and/or acute risk to human health or the environment such as fire and explosion hazards, free product in utility corridors or other conduits, vapors requiring evacuations of buildings, etc.

ER may document a release and refer it to the LUST Program. LUST Program staff will contact the O/Os or their consultant with follow-up questions.

To ensure that the release report is in substantial compliance with IDEM requirements, the O/O should retain a record of the report. Examples of information to retain include:

- Incident number assigned by IDEM
- E-mail record
- Fax record
- Telephone report notes with date, time and name of the IDEM person who took the report

3.4.8 Reporting Spills and Overfills

Spills and overfills that must be reported, investigated and cleaned up include:

- Overfills at the UST fill port or into a vehicle (*overflow*)
- Overfills from dispenser (*spill*), i.e., a “drive-off” with dispenser hose attached to vehicle
- Any leak from a dispenser above the shear valve (*spill*)
- Spills from the delivery truck during filling of the UST (*spill*)
- Spills from the UST system that occur during maintenance, repair or replacement of any part of a system (*spill*)

The RP must report spills and overfills subject to reporting requirements under the Spill Rule (327 IAC 2-6.1) to the ER by telephone (*See Section 3.4.7: Reporting Emergency Releases pursuant to the Spill Rule [327 IAC 2-6.1]*). These spills include but are not limited to:

- Spills and overfills of petroleum equal to or greater than 25 gallons (*report within 24 hours*)
- Spills and overfills of petroleum that cause sheen on surface water (*report within two hours*)
- Spills and overfills of hazardous substances equal to or greater than the reportable quantity (*report within two hours*)

3.4.9 LUST Site Prioritization

The LUST and ELTF Programs prioritize oversight of releases to best allocate resources, based on information provided at the time of the release report and as more information becomes available. This allows priorities to shift when necessary based upon the changing nature and

extent of contamination and the potential for greater harm to human health and the environment. These physical criteria are applied:

- Low priority– soil contamination only
- Medium priority– ground water contamination
- High priority – any of the following exist:
 - Habitable buildings with vapors present
 - Drinking water contamination
 - Surface water – product or oil sheen on surface water
 - Utility conduits with vapors or free product present
 - Ecologically susceptible area affected
 - Free product present – for purposes of this priority scheme, free product is measurable product in an excavation or on ground water greater than or equal to one millimeter or one sixteenth of an inch
 - Ground water contamination within a 1-year time of travel to a designated wellhead protection area or 750 feet for fixed radius (*IDEM will make this determination*)

The O/O should notify the LUST Program within 24 hours if high priority conditions are discovered at anytime during an investigation.

3.4.10 ELTF Application

A UST owner, UST operator, or the property owner where the UST is located may submit an Excess Liability Trust Fund Application - State Form 47139 (www.IN.gov/idem/5157.htm) after a release is confirmed. A consultant or other person assigned the right of reimbursement by the O/O may submit the application (*328 IAC 1-3-1*). IDEM will not complete the eligibility review until the O/O submits the Initial Site Characterization (ISC) or Limited Subsurface Investigation (LSI) Report (*328 IAC 1-3-3[a] [2]*). Adequate information must be available for the ELTF staff to make an accurate eligibility determination. If new information becomes available after an eligibility determination has been made, the decision may be changed. When an ISC or LSI is not required in order for IDEM to grant a No Further Action (NFA) Approval, the eligibility review process begins at the NFA approval.

The O/O must be in substantial compliance at the time a release is first suspected by the O/O, or agent of the O/O (*328 IAC 1-1-9*):

- The O/O has met the requirements for substantial compliance in IC 13-23-8-4(a), with the exception of minor violations of statutory deadlines, regulatory deadlines, or regulatory requirements that have not caused an imminent threat to harm human health or the environment, and
- A minimum of 50 percent of the UST registration fees have been paid (*IC 13-23-12 and 328 IAC 1-3-3*).
- An O/O is not in substantial compliance if the release has not been reported within 14 days of the date the release was required to be reported under the UST spill reporting rule *329 IAC 9-4-4*.

328 IAC 1-3-3 requires a percentage reduction of reimburseable costs if submission of the ISC or LSI is not timely, or payment of tank fees is not timely or if the O/O fails to request environmental investigation results.

3.4.11 Status of Fee Payments and ELTF Eligibility

An O/O or prospective purchaser may submit the Notice of Intent to Purchase UST and Reinstate Eligibility Form – State Form 48079 (www.IN.gov/idem/5157.htm) to determine if all UST fees and associated penalties and interest are paid. Since eligibility is based in part on fee payment (328 IAC 1-3-3), these fees and penalties must be paid prior to the discovery of a suspected or confirmed release.

Eligible Releases

Eligible occurrences (*releases*) from a UST system that is substantially compliant include:

- Release from the UST
- Release from the fill port
- Release from connected underground piping
- Release from testing and monitoring equipment that is part of the UST system

Ineligible Releases

Ineligible occurrences (*releases*) from a UST system that is substantially compliant include:

- Spills and overfills from the dispenser
- Releases caused by acts or omissions on the part of a contractor, owner, or operator that result in disabling of any part of the UST system resulting in a release, spill or overfill (*for example, spill and overfill equipment being disabled*)
- Releases caused by the acts or omissions on the part of a contractor, owner, or operator that result in damage to a UST system, dispensing components or exacerbation of an existing condition (*for example, drilling, construction and other activities*)

3.4.12 ELTF Claim Categories and Priorities for Payment

When the balance of the ELTF is less than \$25,000,000, IDEM categorizes claims based on release conditions. If the balance of the ELTF then approaches \$5,000,000, IDEM uses those categories to prioritize claims for payment such that the fund balance does not drop below \$5,000,000. The categories and procedures for prioritization of claims are in 328 IAC 1-4.

IDEM may require that the O/O submit a completed ELTF Site Categorization for Prioritization of Claims Form – State Form 59120 (www.IN.gov/idem/5157.htm) for eligible occurrences (*releases*) that have technical approval, in order for IDEM to process the claims. If not provided, LUST and ELTF staff will assign a priority rating based on the known site conditions.

3.4.13 ELTF Application for Reimbursement Review and Processing

Upon receipt of an ELTF application - State Form 47139 (www.IN.gov/idem/5157.htm) for reimbursement of investigation, emergency measures and corrective action costs, the ELTF Program:

- Determines whether or not the release is eligible for reimbursement:
 - If eligibility has not been determined, the claim is denied and returned to the applicant with the instructions to submit an eligibility application.
 - If eligibility has been denied, the claim for reimbursement is denied in full.
 - If eligibility has been approved, the claim is processed for reimbursement (328 IAC 1-5-1).
- Determines if release is eligible for emergency measures or has a technical approval such as Site Characterization or CAP approval.
- Determines which costs are part of the technical approval.
- Reviews invoice(s), pay requests and all other backup documentation based on reimbursable (*allowable*) costs as contained in the ELTF Rule (328 IAC 1) in effect when the actual work was completed and the costs incurred. Costs are currently contained in 328 IAC 1-3-5 (*reimbursable and not reimbursable costs*). Some specific costs allowed in the ELTF Rule are:
 - Fixed costs such as soil borings, monitoring wells, laboratory analysis, personnel, travel expenses (*per diem and lodging*), transportation, site preparation, excavation, staging and disposal, equipment rental, and site restoration
 - Markup shall not exceed 10 percent for subcontractors, disposable material or rental equipment
 - Bids such as corrective action system construction and installation
 - Actual costs for item(s) that are not listed but approved
- O/Os must pay a deductible ranging from \$20,000 to \$35,000. The deductible is based on whether the UST and piping are single or double-walled (*IC 13-23-8*). O/Os of 100 or less USTs may be reimbursed up to \$2,000,000 for each occurrence (*release*) for reasonable corrective action and third party costs.

If an ELTF claim is for third party liability, a copy of the application must be submitted to the Office of the Attorney General (OAG). The OAG reviews the claim based on injury, costs and damage suffered by a third party as a result of a release (*including bodily injury and property damage and reasonable attorney fees*) (328 IAC 1-1-10). IDEM completes the claims processing based on the OAG approval, in the same manner as above (328 IAC 1-6-1 and 328 IAC 1-6-2).

3.5 Emergency or Immediate Actions

3.5.1 Initial Response

In addition to reporting a release, spill or overflow to IDEM, the O/O must:

- Take immediate action to prevent any further release of a regulated substance to the environment, regardless of eligibility for the ELTF Program; typically, this includes one or more of the following:
 - Repair or replace the leaking part of the UST system
 - Empty the UST system to ensure that further releases do not occur
- Identify and mitigate fire, explosion and vapor hazards
- Mitigate to the extent practicable adverse effects to human health and the environment. These actions may be on-going
- Initiate corrective action (329 IAC 9-5)

3.5.2 Emergency Conditions

The IDEM Emergency Response Program (ER) will respond when emergency conditions exist due to a spill, overflow or release. Once mitigated, ER will refer the release to the LUST Program for follow-up. Costs incurred during the mitigation of emergency conditions, even when approved by ER staff, are not automatically approved for ELTF reimbursement. ELTF staff must determine eligibility based on a completed eligibility application. Once eligibility is determined, claims are reviewed for costs allowed under 328 IAC 1.

3.5.3 Spill Response

The O/O should submit a Spill Recovery and Response (SRR) Report within 45 days when a reportable spill or overflow event occurs. An SRR Report should contain the following:

- Facility and Owner Information:
 - UST Facility ID Number
 - Name and address of facility
 - Name and address of facility owner
 - Name and address of contractors performing work
- Spill or incident description, including the following:
 - A detailed description of the spill incident including the time, date, and duration
 - Date reported to IDEM
 - The release incident number given by the agency at the time of the initial incident
 - A description of the spilled material including the volume lost
 - A listing of the areas affected such as pavement, surface soils, subsurface soils, ground water, surface water and subsurface conduits
 - A detailed description of actions taken to mitigate, contain, investigate, and clean-up the spill
 - The amount of product recovered and documentation of proper disposal of contaminated soil, water, or product waste
 - A scaled site map indicating the location of the spill, location of all sampling performed, neighboring properties, and property improvements

If IDEM believes that additional investigation or cleanup is necessary, IDEM will require corrective action (329 IAC 9-5). Sampling and laboratory analysis will be required for sites that

have impacted surface soils, subsurface soils, surface water or ground water. Samples for laboratory analyses must be taken in the areas most likely to be contaminated. Adequate delineation of the contaminant impact must be demonstrated.

3.5.4 Abatement and Site Check

The O/O must perform initial abatement measures and a site check (329 IAC 9-5-3.2). The site check must assess:

- Presence of free product greater than one millimeter thick
- Presence of oil sheen on surface water
- Presence of vapors in utility conduits
- Presence of vapors in a habitable building
- Contamination of a drinking water supply at levels that exceed residential screening levels
- Other conditions related to the migration of the release and determined by IDEM to require mitigation

If one or more of these conditions exist, the O/O must submit a 20-day Abatement Report to IDEM, within 20 days from the date the release is confirmed (329 IAC 9-5-3.2). Free product discovery and abatement activities performed and documented on the 20-day Abatement Report will satisfy the free-product abatement and reporting requirements of 329 IAC 9-5-4.2.

3.5.5 ELTF Emergency Measures

An applicant may apply for reimbursement of costs associated with emergency measures taken as part of a corrective action and receive reimbursement, as long as the actions:

- Meet the definition of Emergency Measure in 328 IAC 1-1-5.1
- Are approved by the IDEM project manager assigned to the release

Emergency Measures are necessary to directly abate:

- Vapors in occupied buildings above short-term risk levels
- Vapors in conduits that exceed 10 percent of the lower explosive limit
- Free product or sheen detected in conduits or surface water
- Free product off-site (*not including easements and rights-of-way*)
- Contamination above a residential screening level in drinking water or within a one year time of travel from a public drinking water well and the well is in imminent danger of being contaminated
- Any other conditions requiring direct abatement as determined by the IDEM project manager in order to mitigate a potential threat to human health and the environment, including minimizing the potential for a third party liability claim

3.6 How is the Public Involved or Notified?

3.6.1 Release Notification

As of July 1, 2007, the following notifications are required:

- The LUST Program must notify the county health officer of each county in which the release, spill, or overfill occurred within seven calendar days of the discovery.
- The County Health Officer must publish notice in a newspaper of general circulation in the County Health Officer's county, and provide any other notice the County Health Officer considers necessary or appropriate within seven calendar days of receiving the notice from IDEM.

3.6.2 Administrative Record

IDEM maintains the administrative records for all spills, overfills, and releases from regulated USTs. These records are available in:

- IDEM's Virtual File Cabinet (VFC) (www.IN.gov/idem/6551.htm) where they are accessible to the public
- The *Energy Policy Act Public Record Summary Information On Underground Storage Tanks (USTs)* posted on the LUST website (www.IN.gov/idem/4997.htm)

The VFC contains documents such as permits, inspections, notifications, registrations, releases, investigation, and corrective action.

The LUST Report, *Energy Policy Act Public Record Summary Information On Underground Storage Tanks (USTs)* (www.IN.gov/idem/4997.htm), contains information about all suspected and confirmed releases from registered UST facilities including facility identification numbers, incident numbers, name, address, disposition (*status of release*), and affected areas.

The IDEM File Room is also available. Visit or contact the IDEM File Room at:

Indiana Government Center North
MC 50-07 Room 1201
100 North Senate Avenue
Indianapolis, IN 46204
Phone: (317) 234-0965 or (800) 451-6027, Fax (317) 232-8659

3.6.3 Public Participation

The LUST Program must notify the public in a manner designed to reach those members of the public directly affected by the release and the planned corrective action. This notice may include:

- Public notice in local newspapers
- Block advertisements
- Public service announcements
- Publication in the Indiana Register
- Letters to individual households
- Personal contacts by field staff

Personal contacts by field staff are the most common method used to provide direct notification. IDEM decides on a site-by-site basis if another method is needed.

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs

IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

3.7 Investigation

IDEM requires that all detections of contamination be reported as confirmed releases. The reason for this is that IDEM must verify that sampling was performed correctly and that the laboratory results are validated. In some cases, such as a UST Closure, minimal contamination is present. IDEM reviews the results to determine which of the following is appropriate:

- Perform a complete ISC as described in 329 IAC 9-5-5.1(a) and (b)
- Perform a Limited Subsurface Investigation (LSI) that provides substantially equal protection for human health and the environment as the ISC
- Grant a No Further Action determination based on the information that is already available

3.7.1 Conceptual Site Model During Site Characterization

Properties with releases must be fully characterized based on the UST Rule (329 IAC 9-5). A conceptual site model (CSM) should be developed as described in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm).

3.7.2 Site Characterization

Site characterization is required when a release is confirmed, or when a spill or overfill cannot be adequately cleaned up during the spill response. The U.S. EPA Office of Underground Storage Tanks (OUST) (www.epa.gov/oust/cat/index.htm) website is a good source of information about conducting site characterization. The most comprehensive reference is the *Leaking Underground Storage Tank Corrective Action Compendium* (www.epa.gov/oust/lust/intro.html).

Initial Site Characterization (ISC) (329 IAC 9-5-5.1)

The purpose of the ISC is to timely gather and submit the following information:

- Site history
- Source and cause of the release (*including copies of the most recent tank and line tightness tests and inventory reports for the past 12 months*)
- Regulated substance(s) released
- Soil lithology and bedrock
- Minimum three soil borings with one soil and one ground water sample from each boring
- Ground water flow direction
- Preferential flow pathways (*potential or actual, natural and manmade*)
- Human and ecological receptors (*potential or actual*)
- FSI Work Plan for any additional work necessary to determine the full nature and extent of contamination
- Schedule for start and completion of proposed work (*including any anticipated delays for gaining access*)
- Scope of Work- State Form 51955_ (www.IN.gov/idem/5157.htm)

The O/O must use the ISC Report and Checklist templates available at the LUST website (www.IN.gov/idem/4997.htm) (329 IAC 5-5.1[b][2] and [3]). The ISC Report and Checklist must be submitted within 60 days of the confirmed release date (329 IAC 9-5-5.1). IDEM cannot approve extensions. If this requirement is not met, the ELTF eligibility percentage will be reduced by five percent on the ninety-first day. An additional five percent will then be deducted for every six months that passes prior to the ISC being submitted to the department.

Limited Subsurface Investigation (LSI)

Where an LSI is appropriate, IDEM will direct the O/O to either perform specific activities (*such as collection of soil or ground water samples*) or request a work plan for an LSI. The LSI Report must be submitted within 60 days of a confirmed release (329 IAC 5-5.1[c]) since this submittal qualifies as an ISC Report. IDEM cannot approve extensions.

Further Site Investigation (FSI) Work Plans

A Further Site Investigation (FSI) Work Plan may be submitted prior to conducting an FSI when IDEM and the O/O agree that one is needed. This Work Plan should be included with the previous investigation report. Typically, the Work Plan will include:

- Narrative including:
 - Interpretation of known extent of contamination
 - Interpretation of the unknown extent of contamination
 - Estimate of what needs to be done to define the full nature and extent
 - Estimate of number and location of sampling points
 - Number of samples per location
 - Sampling or investigation methodology
 - Proposed sample analysis and laboratory methods
- Map(s) showing proposed sample locations
- Schedule for start and completion of proposed work (*including any anticipated delays for gaining access*)
- Scope of Work- State Form 51955 (www.IN.gov/idem/5157.htm)

IDEM will provide due dates for submittal of the FSI report based on the proposed work and schedule.

Further Site Investigation (329 IAC 9-5-6)

The FSI is performed to determine the full nature and extent of contamination, and to evaluate actual or potential exposure to human and ecological receptors (*using the CSM*). Source soils and ground water are usually delineated using the step-out procedures described in Section 3.7 of the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm). Soil and ground water are typically delineated to residential screening levels both vertically and horizontally. The FSI report must be submitted in a format required by the agency (329 IAC 9-5-6[c]). Four pathways are evaluated:

- Drinking water ingestion via ground water and soil migration to ground water
- Direct contact via surface soil contact
- Vapor intrusion via vapor encroachment into indoor air from soil, ground water or preferential pathways
- Ecologically susceptible areas such as surface water, wetlands, shallow bedrock, and karst terrains

The FSI Report must include the following:

- Investigation results concerning:
 - The full extent of soil and ground water contamination
 - Preferential pathways
 - Surface water
 - Human and ecological receptors
- FSI Work Plan if any additional investigation is necessary to complete the site characterization
- Summary of the following for remediation and closure alternatives:
 - Overall effectiveness of the technology
 - Ability to achieve cleanup objectives
 - Expected treatment duration
 - Treatment reliability
 - Pilot Study Proposal
 - Permits required

FastTRACK

The LUST Program goal is to have O/Os complete site characterization as quickly as possible. In order to achieve this goal, IDEM is currently developing a streamlined approach called *FastTRACK* for sites that require less detailed review by IDEM during the delineation process. Not all sites will be candidates for *FastTRACK*. Some sites will follow a traditional process that involves more detailed review of reports and plans by IDEM, as well as active participation by IDEM during the investigation. The LUST Program will post information on the LUST website (www.IN.gov/idem/4997.htm) as it becomes available.

Traditional

Sites not using *FastTRACK* will submit FSI Reports that follow a prescribed work plan and schedule using the FSI Report Form available at the LUST website (www.IN.gov/idem/4997.htm). When using the traditional approach, FSI Reports should be submitted within 90 days. This timeframe may vary depending on the scope of the work to be performed as well as other factors such as site access. The O/O may request an extension. IDEM will grant an extension if it is warranted. Extension requests should be written, submitted timely by electronic mail or letter, provide an expected date for submittal of the FSI and include a justification for the request.

3.7.3 Investigation of Non-UST Releases

IDEM will require investigation of contamination found as part of a LUST investigation that is not or may not be associated with the UST system(s), under:

- IC 13-22-13 *Hazardous Waste Management – Corrective Actions*
- 329 IAC 3.1 *Hazardous Waste Management Permit Program and Related Hazardous Waste Management*
- IC 13-24-1 *Petroleum Releases*
- IC 13-25-4 *Hazardous Substances Response Trust Fund*

If the source of the non-UST contamination is found to be off-site, IDEM will require continued monitoring. The O/O should consider the off-site contamination when evaluating corrective action alternatives for an on-site source. The O/O should select corrective actions that minimize the risk of causing further migration of, or exposure to the contamination from the off-site source. The O/O is not responsible for cleaning up contamination from an off-site source.

If the source of the contamination is found to be on-site, IDEM will require further investigation and cleanup. IDEM will determine the best management approach depending on the nature and extent of the non-UST contamination. Options include:

- Investigate and clean-up all sources as one site within the LUST Program
- Refer entire site to another program
- Refer non-UST contamination to another program and continue investigation and cleanup of UST contamination under the LUST Program

IDEM cannot reimburse the costs associated with the investigation, and eventual remediation, of a non-UST release when required during the work performed for an ELTF eligible UST release, once the full nature and extent of the ELTF eligible UST release is defined. Costs must be tracked separately for the eligible and noneligible ELTF UST releases.

3.7.4 Quarterly Monitoring During Site Characterization

IDEM typically requires quarterly monitoring reports (QMRs) for ground water sampling and other field activities during the site characterization and beyond. This provides information concerning any seasonal fluctuation in ground water depth, ground water flow direction, and ground water contamination that will enhance the development of the final remediation decision. **Only quarterly monitoring results and relevant information (*operation and maintenance activities, sampling results, etc.*) should be included in the QMR.** Mitigation and corrective action activities must be submitted in a separate report as directed by the LUST Program.

QMRs must be submitted four times per year (*about every 90 days*). IDEM will not grant extensions.



3.7.5 Site Characterization Approval

Site Characterization approval is the first technical approval in the LUST process. When IDEM determines that the nature and extent of contamination is adequately determined, IDEM sends a written approval to the O/O. If for any reason new information becomes available that indicates the site characterization is not complete, IDEM may suspend approval and require additional investigation.

If the O/O anticipates that sample results will be used for Site Characterization approval, the O/O must submit full quality assurance and quality control (QA/QC) documentation.

With this technical approval, the ELTF Program will review ELTF claims and approve reimbursement of eligible site characterization costs including costs for:

- Soil borings
- Monitoring well installation
- Soil and ground water sampling
- Soil and ground water laboratory analyses
- Quarterly monitoring
- Preferential pathway investigations
- Vapor intrusion investigations

If an ELTF claim for site characterization costs is submitted to IDEM without a current technical approval from the LUST Program, the ELTF Program will suspend the claim until the technical approval is obtained.

3.7.6 Quality Assurance Program Plan

When reviewing information submitted for releases from UST systems, spill or overfills, IDEM follows the *Investigation of Underground Storage Tank Releases, Quality Assurance Program Plan* (QAPP) (www.IN.gov/idem/4997.htm) dated March 24, 2009. Documentation consistent with the Minimum Data Documentation Requirements (MDDR) must be submitted for all sampling performed during release confirmation or sampling assessment during a UST Closure. If the information will be used for Site Characterization approval or No Further Action (NFA) approval, full QA/QC documentation is required. Typically, soil samples collected during the last mobilization of an investigation and one complete round of ground water samples will suffice for Site Characterization approval. Generally, IDEM will require some amount of soil confirmation sampling as well as a complete round of ground water samples for NFA approval.

The O/O or their consultant should contact the IDEM project manager regarding which samples require full QA/QC documentation or MDDR. During implementation of an approved Corrective Action Plan (CAP), matrix spike and matrix spike duplicate (MS/MSD) samples are not required. The O/O should consult the IDEM project manager regarding the requirement for a specific release. All plans should include the QAPP elements that identify data quality objectives for the proposed work.

3.8 *Remedy Decision*

IDEM will determine if corrective action is necessary based on the CSM. When IDEM requires corrective action, the O/O must submit a Corrective Action Plan (CAP) (329 IAC 9-5-7) and Record of Remedy Selection (RRS) - State Form 54471 (www.IN.gov/ideM/5157.htm) along with other relevant information. If corrective action is not required, the O/O skips this step and proceeds to the closure process outlined in Section 3.10.

3.8.1 Free Product Recovery

Free product recovery and reporting is required throughout site characterization and corrective action. The following documents may contain free product recovery information:

- 20-Day Abatement Report
- Free Product Removal Report
- Initial Site Characterization (ISC) Report
- Further Site Investigation (FSI) Report
- Quarterly Monitoring Report prior to or after Corrective Action Plan approval

3.8.2 Pilot Study

A Pilot Study may be necessary prior to a remedy decision to determine the effectiveness and design of a selected remediation technology. An IDEM-approved Pilot Study report may be submitted prior to or with the CAP as directed by the IDEM project manager. Typically the Pilot Study Report is included with the CAP.

The O/O may request an extension for Pilot Study Report submittal. Extension requests should be timely, provide an expected date for submittal and include a justification for the request. IDEM may grant an extension.

3.8.3 Corrective Action Plan

The CAP contains detailed information about the proposed remedy including, but not limited to:

- Remediation objectives
- Alternative remediation technologies evaluated
- Brief summary of each technology evaluated including estimated time and costs for implementation, monitoring, operations and maintenance
- Reason(s) for not selecting technology(s)
- Reason(s) for selecting technology
- Narrative of selected remediation technology that may include:
 - Design information for an engineered system
 - Volume or mass to be treated by chemical or biological treatment
 - Location and mass of source to be excavated and disposed and/or monitored
- natural attenuation information
- Scope of Work Form - State Form 51955 (www.IN.gov/idem/5157.htm)
- Sampling and Analysis Plan (SAP)
- Health and Safety Plan (HASP)
- Required federal, state and local permits and approvals
- Schedule of proposed activities

The O/O and their consultant should use published resources when evaluating remediation alternatives. The U.S. EPA OUST Remediation/Cleanup Technologies website is a good source for information. The IDEM Remediation Technology & Other Guidance website (www.IN.gov/idem/6514.htm) also has useful information.

Typically, CAPs must be submitted within 60 days of the CAP request, in a format required by the agency (329 IAC 9-5-7[a][2] and 329 IAC 9-5-7[ff]). The O/O may request and IDEM may grant an extension. Extension requests should be written, submitted by electronic mail or letter, timely, provide an expected date for submittal, and include a justification for the request.

3.8.4 Record of Remedy Selection

The Record of Remedy Selection (RRS) - State Form 54471 (www.IN.gov/idem/5157.htm) is a companion document to the CAP. It must be submitted with the CAP. It includes:

- General site information including location and identifiers, O/Os and consultant
- Site description
- Completed and proposed remediation
- Overview of CSM and site risks based on the exposure pathways
- Description of public participation
- Record of communication (*Administrative Record*)
- Other information such as permits that will be required

If no corrective action is necessary, then the RRS and CAP are not required. A No Further Action Request Report (*including a plan for closing a release*) should be submitted. A Record of Site Closure (RSC) - State Form 54472 (www.IN.gov/idem/5157.htm) must be submitted with the Closure Strategy report in this situation. For more information about the No Further Action Request Report, refer to the Closure Section 3.10.



Second ELTF Technical
Approval Milestone – CAP
Approval

3.8.5 Corrective Action Plan Approval

The CAP approval is the second technical milestone approval in the LUST process. When IDEM determines that the remedy selected is acceptable and the plan is complete and accurate, IDEM sends a written approval to the O/O. The approval letter requires the O/O to implement the CAP immediately in accordance with the schedule in the CAP.

With this technical approval, the ELTF Program will review ELTF claims and approve reimbursement of eligible CAP costs including items such as:

- Pilot study
- Quarterly ground water and monitoring events
- CAP development

If an ELTF claim for CAP costs is submitted to IDEM without a current technical approval from the LUST Program, the ELTF Program will suspend the claim until the technical approval is obtained.

3.8.6 Corrective Action Plan Amendment

Modifications may be necessary during or after implementing the approved CAP when:

- System operation is complete
- System operation is modified
- System design is modified
- Sampling and analysis plan is modified
- Technology is determined to be ineffective

Whenever changes are necessary, a CAP Amendment must be submitted. Do not include these recommendations or modifications in Quarterly Monitoring Reports (QMRs). The CAP Amendment must include the Scope of Work Form - State Form 51955 (www.IN.gov/idem/5157.htm).

3.8.7 Transition Details

Section 1.4 of this *Remediation Program Guide* (RPG) explained how IDEM will manage the transition of sites from the *Risk Integrated System of Closure (RISC)* (Waste-0046) (www.IN.gov/idem/4694.htm) and other existing policies to the *Remediation Closure Guide* (Waste-0046-R1) (www.IN.gov/idem/4694.htm). Many LUST projects may have begun following earlier guidance. If a CAP has not been submitted prior to the end of the six-month transition period of the *Remediation Closure Guide* (RCG), then IDEM will use the RCG and applicable rules and laws when evaluating the proposed CAP and remediation objectives.

If a proposed CAP *has* been submitted **prior to the end of the six-month transition period** of the RCG, a O/O may choose to follow either the previously applicable guidance or the RCG . These previous guidelines include:

USTBGM 1994: For releases reported before February 15, 2002, the O/O may have followed the 1994 USTBGM (www.IN.gov/idem/4997.htm) for:

- a. Releases reported before January 1, 2002, if an ISC or equivalent was submitted before February 15, 2002
- b. Releases reported between January 1, 2002, and February 14, 2002, if an ISC or equivalent was submitted within 45 days of the release report or an extended time approved in writing by IDEM
- c. If an ISC or equivalent was not submitted by the deadline and IDEM granted a written request

RISC 2001: For releases reported before February 15, 2002, the O/O may have followed RISC 2001, if requested in writing before July 1, 2004.

RISC 2004: For releases reported before February 15, 2002, the O/O may have followed RISC 2004, if requested in writing on or after July 1, 2004.

RISC 2004: For investigations begun using RISC 2001, the O/O may have followed RISC 2004, if requested in writing to IDEM on or before July 1, 2006.

RISC 2006: For investigations begun using USTBGM 1994, RISC 2001, or RISC 2004; the O/O may have followed RISC 2006, if requested in writing to IDEM when using the default closure tables.

3.9 Remedial Action

3.9.1 Corrective Action Plan Implementation

An approved CAP must be implemented immediately in accordance with the approved schedule outlined in the CAP. A CAP Implementation Report must be submitted for all sites with an IDEM-approved CAP. Normally, this must be submitted 60 days after successful completion of construction/implementation. The LUST Program may require a CAP Implementation Report for a CAP Amendment.



3.9.2 Corrective Action Plan Implementation Report Approval

The CAP Implementation report approval is the third technical milestone approval in the LUST process. When IDEM determines that the CAP was fully implemented as described in the CAP Implementation Report, IDEM sends a written approval to the O/O. The approval letter requires

continued implementation and monitoring. The CAP Implementation Report must be submitted in a form required by the agency (329 IAC 9-5-7[c]).

With this technical approval, the ELTF Program will review ELTF claims and approve reimbursement of eligible CAP implementation costs including items such as:

- Treatment system construction and installation
 - System construction
 - Installation of treatment wells
 - Piping
 - Trenching
 - Cutting pavement
 - Restoration
- Excavation and disposal of contaminated soil and water
- System operation and maintenance
- Quarterly monitoring and reporting

3.9.3 Corrective Action Plan Amendment

CAP modifications may be necessary during the CAP implementation if:

- System operation is complete
- System operation is modified
- System design is modified
- Sampling and analysis plan is modified
- Subsurface conditions changed
- Technology is determined to be ineffective (*this determination may affect ELTF reimbursement under 328 IAC 1-3-1.3[d]*)

Do not include these recommendations or modifications in QMRs. All changes must be submitted as a CAP Amendment. Consult the IDEM project manager to determine what is needed in the CAP Amendment submittals. An RRS form is required if the remediation objectives are modified or there is a significant modification in the remediation approach.

3.9.4 Quarterly Monitoring During Corrective Action Implementation

Quarterly sampling is often necessary to determine if an implemented remedy exhibits a rebound of dissolved contaminants or free product in the ground water once the remedy stabilizes. The results of corrective action monitoring must be submitted during CAP implementation. The duration of quarterly sampling depends on the contaminant(s), remedy and site conditions. Quarterly Monitoring reports must be submitted in a format required by the agency (329 IAC 9-5-7[c]).

3.10 Closure

3.10.1 Conceptual Site Model at Closure

As with the determination of nature and extent of contamination and CAP development and implementation, the CSM should be applied during the closure process. The closure strategy must adequately demonstrate that the remedy (*when required, which may include institutional*

controls) and site conditions adequately control current and future risk to human health and the environment due to a release of contamination.

3.10.2 Quarterly Monitoring During Closure Monitoring

Closure monitoring begins after a mechanical, chemical or biological remedy is stabilized. Following the CAP implementation, IDEM requires ground water monitoring and sometimes soil confirmation sampling. Ground water monitoring is performed to:

- Determine if ground water rebound occurs after the shutdown of an engineered remediation system. Typically, this takes at least two quarters.
- Determine if ground water rebound occurs after the application of materials for bio-augmentation such as an Oxygen Release Compound (ORC[®]). Typically, this takes two to four quarters following application or injection.
- Determine if the remaining contaminated ground water plume is stable or shrinking. Typically, this takes four quarters. IDEM may require more quarters to verify acceptable closure conditions depending on many factors. Common factors include:
 - Contaminant concentrations
 - Areal extent of contamination
 - Ground water zone impacted is being used or is likely to be used for drinking water in close proximity to the release
 - Proximity to drinking water receptors

Quarterly Monitoring reports must be submitted in a format required by the agency (329 IAC 9-5-7[f][1]).

3.10.3 No Further Action Request

Most No Further Action (NFA) approvals are in response to an NFA request submitted by the O/O. A O/O or consultant who believes that a release is eligible for an NFA approval should prepare an NFA request that includes:

- NFA request cover letter
- Completed Record of Site Closure (RSC) - State Form 54472 (www.IN.gov/idem/5157.htm)
- Supporting documentation for the RSC including full QA/QC documentation when required
- Draft environmental restrictive covenant (ERC) when necessary (*IDEM encourages the use of the LUST ERC template*) (www.IN.gov/idem/4997.htm)
- Local ground water ordinance proposed as an environmental restrictive ordinance (ERO)
- Any other information supporting the NFA request (*such as notification to a state or local government agency that contamination remains under a roadway*)

If IDEM believes that a site may be eligible for an NFA approval, IDEM may request that the O/O submit an NFA request. The NFA request must include a closure strategy based on the existing soil and ground water conditions. A completed RSC must be included.

If the release has been ELTF eligible, the ELTF Program cannot reimburse for continued remediation when contaminant levels fall below their appropriate risk-based industrial remediation objectives (329 IAC 1-1-8.3) except in certain circumstances (*such as an on-site*

drinking water well or a site located within a locally designated wellhead protection area). If the O/O chooses to continue remediation, the eligibility for ELTF reimbursement ends at that time.

When reviewing NFA approval requests, IDEM follows the *Investigation of Underground Storage Tank Releases, Quality Assurance Program Plan (QAPP)* (www.IN.gov/idem/4997.htm). The QAPP requires the submittal of full QA/QC documentation, and data validation by IDEM in order to approve an NFA approval request.

3.10.4 Record of Site Closure – The Record of Site Closure (RSC) - State Form 54472 (www.IN.gov/idem/5157.htm), is a companion document to the NFA request. It must be submitted in order to obtain closure from the LUST Program. The RSC includes information supporting the NFA decision including items such as:

- Site information
- Owner and consultant information
- Site description
- Corrective action completed
- Basis for closure
- Conditions subsequent
- Overview of CSM
- Public participation
- Record of communication (*key decision documents*)
- Other supporting documentation

3.10.5 Institutional Controls (www.IN.gov/idem/5959.htm)

Environmental Restrictive Covenant – An ERC is a legal and administrative measure to protect human health and the environment at sites where contamination is left in place. The intent of the ERC is to limit human exposure by restricting activity, use, and access to properties with contamination. Controls may include administrative and engineering controls. Administrative controls typically include restrictions on land use and ground water. Engineering controls, on the other hand, typically include vapor mitigation systems and caps or covers that are designed to prevent direct contact or migration of contamination to ground water.

Environmental Restrictive Ordinance – An ERO is a local ordinance that may be used to restrict ground water use in lieu of, or in addition to, an ERC.



3.10.6 No Further Action Approval

The LUST Program issues an NFA approval letter upon approval of the RSC. When an ERC is utilized as a component of the remediation, IDEM will issue the NFA approval letter upon receipt of the recorded ERC. The NFA determination is based on information provided to and reviewed by IDEM. The NFA approval letter summarizes the information used to determine and implement the remediation, the use of any institutional control(s), residual contamination at the

time of the closure, and the responsibilities the O/O may have in maintaining the NFA approval status.

NFA approvals may be:

- *Unconditional closures.* Closures that leave the site environmentally suitable for any future use.
- *Conditional closures.* Closures that require some continued operation, maintenance, monitoring; or that require site use or exposure controls. Approval depends on one or more ongoing activities or restrictions that prevent exposure to levels of contamination above the screening levels or site-specific risk-based levels upon which the remediation objectives for a particular land use were based. Most LUST conditional closures utilize an ERC. The most common restrictions are:
 - Ground water use
 - Land use
 - Contamination under building or pavement requiring areas to remain unchanged

The NFA approval is the last technical approval milestone for cost reimbursement. The O/O may apply for reimbursement of all costs (*site characterization, quarterly ground water monitoring and sampling, CAP development, CAP implementation, and closure work*) at this time.

- The O/O must submit claims for all costs associated with an ELTF eligible release given an NFA approval prior to March 26, 2011, by December 25, 2011. IDEM must receive any subsequent re-submittal of denied claims no later than December 25, 2012.
- The O/O must submit claims for all costs associated with an ELTF eligible release given an NFA approval on or after March 26, 2011, within nine months of the NFA approval date. IDEM must receive any subsequent re-submittal of denied claims within twelve months of the claim denial.

3.11 Conditions Subsequent

When the LUST Program approves a conditional closure, the No Further Action (NFA) letter will include conditions subsequent to closure that must be monitored or maintained to ensure the continued effectiveness of the remedy. An ERC may also detail any condition that requires monitoring or maintenance.

Engineering Controls

Often passive engineering controls such as pavement and buildings are used at LUST sites. Vapor mitigation may be required in current or future buildings within the Exposure Control Area (ECA). If there are any engineering controls, an ERC may specify the location of the controls, and requirements for compliance with the ERC.

Monitoring

If monitoring is required as a condition of closure, an ERC may specify the specific monitoring requirements. IDEM may conduct post-closure monitoring to verify compliance with the conditions of closure.

Reporting

If reporting is required as a condition of closure, an ERC may specify the specific reporting requirements for the site.

3.12 When Issues Arise

Sometimes issues arise as part of the normal course of business. These issues usually center on technical and policy decisions related to denials of work proposed or performed rather than regulatory requirements and deadlines. When these issues arise and the O/O or environmental consultant is not satisfied with the resolution, IDEM recommends contacting the LUST or ELTF Technical Section Chief via telephone or e-mail. If unsure which person at IDEM to contact, the O/O or consultant should ask the project manager or call (317) 232-8900. If a satisfactory solution is not reached, IDEM recommends that the O/O or consultant contact the Remediation Services Branch Chief at (317) 232-4535.

Claimants who wish to appeal an ELTF reimbursement determination must first submit the claim under 328 IAC 1-3-1(c) and (d). Final appeals can be made by filing a written request for review with the Indiana Office of Environmental Adjudication not later than 18 days after receiving notice of the determination (*IC 13-23-9-4*). Claimants can request that the Office of Environmental Adjudication conduct a hearing to review the determination in its entirety, or to review specific portions of the determination (*IC 4-21.5-3*).

When significant violations are identified, typically the LUST Program issues a Violation Letter that identifies the violation(s) and timeframe for corrective measures. If the violations are not corrected in a timely and complete manner, the LUST Program may refer the violations for consideration of a formal enforcement action. Normally, a Notice of Violation and draft Agreed Order (AO) are sent to the O/O for signature. An AO includes corrective measures, civil penalties for past violations, stipulated penalties for noncompliance, and procedures for Dispute Resolution. Where applicable, ELTF eligibility may also be affected when IDEM issues a Violation Letter, Notice of Violation or Commissioner's Order (*i.e., the O/O is not in substantial compliance under 328 IAC 1-1-9*).

3.13 Forms and Checklists

Sample copies of many forms, templates and checklists discussed in this RPG may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current State Forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as links to many other documents and websites have been provided where the document is discussed in the text.

All LUST Site Characterization and CAP reports must be signed by an environmental professional and submitted in a form and format as required by the Commissioner (329 IAC 9). Detailed information is contained in:

- 329 IAC 9-5-5.1 (b) (3)
- 329 IAC 9-5-5 (c)
- 329 IAC 9-5-7 (f) (1) (K)
- 329 IAC 9-5-7 (f) (1) (L) (vi)
- 329 IAC 9-5-7 (f) (1) (M)

The following forms, outlines and checklists are used for LUST reporting:

- Sample 3.1 Initial Incident Report - State Form 54487 (*The O/O or the LUST Program or both must complete this form when submitting a release report via the Internet or facsimile. The LUST Program will complete the form for releases reported via telephone.*)
- Sample 3.2 Environmental Restrictive Covenant (*Optional template*)
- Sample 3.3 Excess Liability Trust Fund Application - State Form 47139
- Sample 3.4 Notice of Intent to Purchase UST and Reinstate Eligibility - State Form 48079
- Sample 3.5 ELTF Site Categorization for Prioritization of Claims - State Form 59120
- Sample 3.6 Scope of Work - State Form 51955

These forms appear in Chapter 1 of this RPG:

- Sample 1.1 Record of Remedy Selection - State Form 54471
- Sample 1.2 Record of Site Closure - State Form 54472

The LUST Program is developing the following forms and outlines. These are often refined. Please always check the LUST Program Website (www.IN.gov/idem/4997.htm) for current versions.

- 20-Day Abatement Report
- Initial Site Characterization Report and Checklist
- Further Site Investigation Report and Checklist
- Corrective Action Plan
- Corrective Action Implementation Report
- Quarterly Monitoring Report

Table 3.3 outlines actions and reports required by law for the LUST process, from releases to closure. It also includes timeframes not specifically defined in law to provide typical timeframes required by IDEM. IDEM may adjust these timeframes based on the scope of the request. IDEM recommends that the O/O or their consultant propose a reasonable timeframe to complete a task when there is no specific timeframe in law. IDEM cannot grant extensions for actions and reports required by law. However, IDEM will use its enforcement discretion in consideration of delayed response actions and late submittals.

Table 3.3 Leaking Underground Storage Tank Timeframes Summary

Report, Plan or Action	Time	Rule or Guidance	Rule Reference(s)	Notes
Suspected Release Report	24 hours	Rule	329 IAC 9-4-1 329 IAC 9-6-2.5(a)(3)	Refer to "What is a Suspected Release" in Section 3.4; use the Initial Incident Report Form when reporting to LUST.
Investigation of Off-site Impacts	Immediately	Rule	329 IAC 9-4-2	Refer to "What is a Suspected Release" in Section 3.4.
Release Investigation and Confirmation Steps	Immediately	Rule	329 IAC 9-4-2 329 IAC 9-4-3	Refer to "Release Investigation and Confirmation for Suspected Releases" in Section 3.4.
Release Investigation and Confirmation Steps Report	7 days	Rule	329 IAC 9-4-3	Refer to "Release Investigation and Confirmation for Suspected Releases" in Section 3.4.
Spill and Overfill Cleanup	Immediately	Rule	329 IAC 9-4-4	Refer to "What is a Spill or Overfill?" in Section 3.4; in some cases spills and overfills are subject to requirements of the Indiana Spill Rule (327 IAC 2-6.1).
Spills and Overfills Report	2 hours (Spill Rule) 24 hours (UST Rule)	Rule	327 IAC 2-6.1-5 327 IAC 2-6.1-7(3) 329 IAC 9-4-4(a) 329 IAC 9-4-4(b)(2)	Refer to "Reporting Spills and Overfills" in Section 3.4; in some cases, spills and overfills are subject to requirements of the Indiana Spill Rule; use the Initial Incident Report Form when reporting to LUST.

Report, Plan or Action	Time	Rule or Guidance	Rule Reference(s)	Notes
Initial Response	Immediately	Rule	329 IAC 9-5-2	Refer to "Initial Response" in Section 3.5; upon confirmation of release, an initial response must be initiated.
Confirmed Release Report	2 hours (Spill Rule) 24 hours (UST Rule)	Rule	327 IAC 2-6.1-5 327 IAC 2-6.1-7(3) 329 IAC 9-5-2(1) 329 IAC 9-6-2.5(a)(4)	Refer to "What is a Confirmed Release" in Section 3.4; in some cases spills and overfills are subject to requirements of the Indiana Spill Rule; use the Initial Incident Report when reporting to LUST.
Initial Abatement Measures and Site Check	Immediately	Rule	329 IAC 9-5-3.2(a)	Refer to "Abatement and Site Check" in Section 3.5; in some cases, actions taken are in compliance with the Indiana Spill Rule as well.
Abatement Report	20 days	Rule	329 IAC 9-5-3.2(b)	Refer to "Abatement and Site Check" in Section 3.5.
Free Product Removal	Immediately	Rule	329 IAC 9-5-4.2	Refer to "Emergency or Immediate Actions" in Section 3.5 and "Free Product Recovery" in Section 3.8.
Free Product Removal Report	60 days	Guidance	329 IAC 9-5-4.2(4)	Include with Abatement, ISC and Quarterly Monitoring Reports as directed by IDEM.
Initial Site Characterization	Upon request	Rule	329 IAC 9-5-5.1(a)	Refer to "Initial Site Characterization (ISC)" in Section 3.7
Initial Site Characterization Report	60 days	Rule	329 IAC 9-5-5.1(b)	Refer to "Initial Site Characterization (ISC)" in Section 3.7; submit using the ISC Report and Checklist.
Limited Subsurface Investigation	Upon request	Rule	329 IAC 9-5-5.1(c)	Refer to "Limited Subsurface Investigation (LSI)" in Section 3.7
Limited Subsurface Investigation Report	30 days	Guidance	329 IAC 9-5-5.1(c)	Refer to "Limited Subsurface Investigation (LSI)" in Section 3.7

Report, Plan or Action	Time	Rule or Guidance	Rule Reference(s)	Notes
Further Site Investigation	Upon request	Rule	329 IAC 9-5-6(a) and (b)	Refer to "Further Site Investigation (FSI)" in Section 3.7
Further Site Investigation Report	90 days	Guidance	329 IAC 9-5-6(c)	Refer to "Further Site Investigation (FSI)" in Section 3.7
Pilot Study Work Plan	30 days	Guidance	329 IAC 9-5-6(d)	Pilot Study Work Plans should be included with the FSI Report whenever possible.
Pilot Study Work Report	60 days	Guidance	329 IAC 9-5-6(d)	Pilot Study Work Plans should be included with the CAP whenever possible.
Corrective Action	Upon request	Rule	329 IAC 9-5-7(a)	Refer to "Corrective Action Plan (CAP)" in Section 3.8
Corrective Action Plan	60 days	Guidance	329 IAC 9-5-7(f)	Refer to "Corrective Action Plan (CAP)" in Section 3.8
CAP Amendment	30 days	Guidance	329 IAC 9-5-7(c)	Refer to "Corrective Action Plan Amendment in Section 3.8
Correction Action Plan Implementation	Upon CAP Approval	Rule	329 IAC 9-5-7(b) and (c)	Refer to "Corrective Action Implementation" in Section 3.9
Corrective Action Implementation Report	60 days	Guidance	329 IAC 9-5-7(f)(1)(L)	Refer to "Corrective Action Implementation" in Section 3.9
Quarterly Monitoring	90 days	Guidance and Rule	329 IAC 9-5-7(f)(1)(L)	Refer to "Quarterly Monitoring" in Section 3.7 and 3.8
Quarterly Monitoring Report	90 days	Rule	329 IAC 9-5-7(f)(1)(L)	Refer to "Corrective Action Implementation" in Section 3.9

Report, Plan or Action	Time	Rule or Guidance	Rule Reference(s)	Notes
No Further Action Request Report	30 days	Guidance	329 IAC 9-5-7(f) (1) (M)	Refer to "Final Report - No Further Action Request in Section 3.10

Sample 3.1 Initial Incident Report Form 54487



LEAKING UNDERGROUND STORAGE TANK (UST) INITIAL INCIDENT REPORT

State Form 54487 (11-10)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 LEAKING UNDERGROUND STORAGE TANK SECTION

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF LAND QUALITY
 LEAKING UNDERGROUND STORAGE TANK SECTION
 100 N. Senate Ave., MC 67-18
 Indianapolis, IN 46204-2251
 Telephone number: (317) 232-8900
 Fax number: (317) 234-0428
 E-mail: LeakingUST@idem.in.gov

- INSTRUCTIONS:**
- In accordance with 329 IAC 9-4 and 9-5, owners and operators must report all releases within 24 hours of discovery.
 - Fill out the form completely.
 - Complete one report for each release or spill (source area).
 - In accordance with 329 IAC 9-4-3, all suspected releases must be Confirmed or negated within 7 days. Any release that is not negated within 7 days will be considered a confirmed release.
 - E-mail to LeakingUST@idem.in.gov or fax to (317) 234-0428

INCIDENT / PRIORITY INFORMATION

IDEM USE ONLY	PRIORITY
Incident #	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High

REPORTING / FACILITY / OWNER INFORMATION

Reported / /	DATE	Discovered / /	TYPE	REPORTED VIA
			<input type="checkbox"/> Confirmed <input type="checkbox"/> Suspected	<input type="checkbox"/> Fax <input type="checkbox"/> E-mail <input type="checkbox"/> Telephone

Reporter: Contact/Title	Facility: Contact/Title		
Company	Facility Name	Facility ID#	
Street Address (number and street)	Street Address (number and street)		
City/State/ZIP	Telephone Number	City/State/ZIP	Telephone Number

UST Owner Name	Responsible Party		
Street Address (number and street)	Street Address (number and street)		
City/State/ZIP	Telephone Number	City/State/ZIP	Telephone Number

RELEASE INFORMATION

UST LEAKING	UST REGISTERED	TANK SIZE	CONTENTS	CURRENTLY IN USE
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Gas <input type="checkbox"/> Kerosene <input type="checkbox"/> Diesel <input type="checkbox"/> Used Oil <input type="checkbox"/> Other	<input type="checkbox"/>

UST SYSTEM CHECK/INSPECTION

Last tank tightness test (TTT)	Sump(s) last inspected	Last line tightness test (LTT)	Spill bucket last inspected
Date / /	Date / /	Date / /	Date / /

KNOWLEDGE OF RELEASE

Failed <input type="checkbox"/> TTT <input type="checkbox"/> LTT	<input type="checkbox"/> Inventory loss	<input type="checkbox"/> UST closure	<input type="checkbox"/> Phase II ESA	<input type="checkbox"/> Catastrophic release	<input type="checkbox"/> Other
Date / /	Date / /	Date / /	Date / /	Date / /	Date / /
Estimated volume of release _____ gallons					

SOURCE AND CAUSE

SOURCE	CAUSE						
	Spill	Overfill	Corrosion	Physical or Mechanical Damage	Install Problem	Other	Unknown
Tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Piping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dispenser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Submersible Turbine Pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delivery Problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AFFECTED AREAS

<input type="checkbox"/> Soils Impacted	Predominant Soil Type Affected			
HIGHEST LAB SAMPLE RESULT (mg/kg)				
TPH	Benzene	Toluene	Ethyl benzene	Xylene
MTBE	Naphthalene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene
Benzo(a)pyrene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Other
<input type="checkbox"/> Groundwater Impacted	Depth to groundwater below ground surface		feet	
HIGHEST LAB SAMPLE RESULT (µg/l)				
TPH	Benzene	Toluene	Ethyl benzene	Xylene
MTBE	Naphthalene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene
Benzo(a)pyrene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Other

HIGH PRIORITY FACTORS

FACTORS			YES	NO
Free Product	Thickness	feet	<input type="checkbox"/>	<input type="checkbox"/>
	Area	square feet	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water well impacted	Highest lab sample result	µg/l	<input type="checkbox"/>	<input type="checkbox"/>
Vapors in inhabitable building	Concentration	<input type="checkbox"/> % LEL <input type="checkbox"/> ppm (field screening)	<input type="checkbox"/>	<input type="checkbox"/>
Utility corridors affected	Concentration	<input type="checkbox"/> % LEL <input type="checkbox"/> ppm (field screening)	<input type="checkbox"/>	<input type="checkbox"/>
Wellhead protection area within 1 year time of travel or 1000'	Distance	feet	<input type="checkbox"/>	<input type="checkbox"/>
Surface water impacted	Type	Name	<input type="checkbox"/>	<input type="checkbox"/>
Other			<input type="checkbox"/>	<input type="checkbox"/>

MEDIUM PRIORITY FACTORS

FACTORS	YES	NO
Groundwater impacted with dissolved contaminants	<input type="checkbox"/>	<input type="checkbox"/>

LOW PRIORITY FACTORS

FACTORS	YES	NO
Soil Contamination	<input type="checkbox"/>	<input type="checkbox"/>
Over excavation	<input type="checkbox"/>	<input type="checkbox"/>
Amount	tons	Disposal Facility Name
		City
		State

ADDITIONAL SITE INFORMATION

ADDITIONAL FACTORS	YES	NO
Nearest inhabitable building	<input type="checkbox"/>	<input type="checkbox"/>
Nearest surface water	<input type="checkbox"/>	<input type="checkbox"/>
Potable water supply within 100 feet	<input type="checkbox"/>	<input type="checkbox"/>
Karst/fracture bedrock	<input type="checkbox"/>	<input type="checkbox"/>
Anticipated groundwater flow direction	<input type="checkbox"/>	<input type="checkbox"/>

INCIDENT INFORMATION	HI	CA	REL	RES
Incident #	<input type="checkbox"/> Active	<input type="checkbox"/> NF	DEM	ect Manager
Incident #	<input type="checkbox"/> Active	<input type="checkbox"/> NF	DEM	ect Manager

COMMENTS

Describe in detail information including, but not limited to, the source and cause of release, nature of contamination and reason for sampling:

Report received by (IDEM Signature)

Report submitted by (Signature)

X

Date

X

Date

Report received by (IDEM Printed Name)

Report submitted by (Printed Name)

Sample 3.2 Environmental Restrictive Covenant (Optional template)

Environmental Restrictive Covenant

THIS ENVIRONMENTAL RESTRICTIVE COVENANT ("Covenant") is made this _____ day of [month], 20____, by [insert name and address of property owner].

WHEREAS: Owner is the fee owner of certain real estate in the County of _____, Indiana, which is located at [insert address of site] and more particularly described in the attached Exhibit "A" ("Real Estate"), which is hereby incorporated and made a part hereof. This Real Estate was acquired by deed on _____, and recorded on _____, as Deed Record _____, in the Office of the Recorder of _____ County, Indiana. The Real Estate consists of approximately _____ acres and has also been identified by the county as parcel identification number[s] [insert 18-digit parcel identification number(s) as described in 50 IAC 23-8-1]. [Optional: The Real Estate, to which this Covenant applies, is depicted on a map attached hereto as Exhibit ____.]

WHEREAS: Corrective action was implemented in accordance with IC 13-23 and other applicable Indiana law as a result of a release of petroleum [if applicable, insert] and hazardous waste and hazardous substances relating to the [insert name of clean-up site]. The incident number assigned by the Indiana Department of Environmental Management ("IDEM") for this release is _____ and the relevant identification number is _____.

WHEREAS: Certain contaminants of concern ("COCs") remain in the [insert appropriate media: soil, groundwater, or groundwater and soil] of the Real Estate following completion of corrective action. The Department has determined that the COCs will not pose an unacceptable risk to human health at the remaining concentrations, provided that the land use restrictions contained herein are implemented [if applicable, insert] and engineering controls maintained] to protect human health. These COCs are [list the COCs remaining above residential land use criteria; if there are numerous COCs, consider the following language instead: The remaining COCs are listed in Exhibit _____, which is attached hereto and incorporated herein.]

WHEREAS: Environmental investigation reports and other related documents are hereby incorporated by reference and may be examined at the offices of the Department, which is located in the Indiana Government Center North building at 100 N. Senate Avenue, Indianapolis, Indiana. The documents may also be viewed electronically in the Department's Virtual File Cabinet by accessing the Department's Web Site (currently www.in.gov/idem/).

NOW THEREFORE, [insert name of Owner] subjects the Real Estate to the following restrictions and provisions, which shall be binding on the current Owner and all future Owners:

I. RESTRICTIONS

1. Restrictions. The Owner: *[Select from the list below those restrictions that are applicable to the site. Delete those that are not applicable and renumber list. Additional site specific restrictions may be appropriate based on site conditions, and are to be negotiated between the property owner and the Department.]*

- (a) Shall not use or allow the use of the Real Estate for residential purposes, including, but not limited to, daily child care facilities or educational facilities for children (e.g., daycare centers or K-12 schools).
- (b) Shall not use or allow the use or extraction of groundwater at the Real Estate for any purpose, including, but not limited to: human or animal consumption, gardening, industrial processes, or agriculture, except that groundwater may be extracted in conjunction with environmental investigation and/or remediation activities.
- (c) Shall not use the Real Estate for any agricultural use.

SAMPLE

[Include the following soil disturbance restriction if COCs remain in soil at levels above residential worker criteria.]

(d) Shall neither engage in nor allow excavation of soil [at depths greater than ____ feet] in the area identified via *[choose* GPS coordinates *or* legal survey, *as applicable*] as the "Construction Worker Restriction Area" on the attached Exhibit ____ (which is incorporated herein), unless soil disturbance obligations listed in the preceding paragraph are followed. In addition, the Owner shall provide written notice to the Department in accordance with paragraph 14 below *[edit as necessary* at least ____ days *[before or after]* the start of soil disturbance activities]. The owner, upon the Department's request, shall provide the Department evidence showing the excavated and restored area does not represent a threat to human health or the environment. This determination shall be made in accordance with the Department's Risk Integrated System of Closure ("RISC") Technical Guidance Document. Upon the Department's request, the Owner shall provide the Department written evidence (including sampling data) showing the excavated and restored area, and any other area affected by the excavation, does not represent such a threat. Contaminated soils that are excavated must be managed in accordance with all applicable federal and state laws, and disposal of such soils must also be done in accordance with all applicable federal and state laws.

[In addition to the preceding general soil disturbance restriction, additional soil disturbance restrictions may be appropriate for high levels of contamination and should be tailored accordingly. The following is an example restriction illustrating the case where COCs remain in soil at levels above construction worker criteria.]

- (e) Shall neither engage in nor allow excavation of soil [at depths greater than ____ feet] in the area identified via *[choose* GPS coordinates *or* legal survey, *as applicable*] as the "Construction Worker Restriction Area" on the attached Exhibit ____ (which is incorporated herein), unless soil disturbance obligations listed in the preceding paragraph are followed. In addition, the Owner shall provide written notice to the Department in accordance with paragraph 14 below *[edit as necessary* at least ____ days *[before or after]* the start of soil disturbance activities]. The owner, upon the Department's request, shall provide the Department evidence showing the excavated and restored area does not represent a threat to human health or the environment.

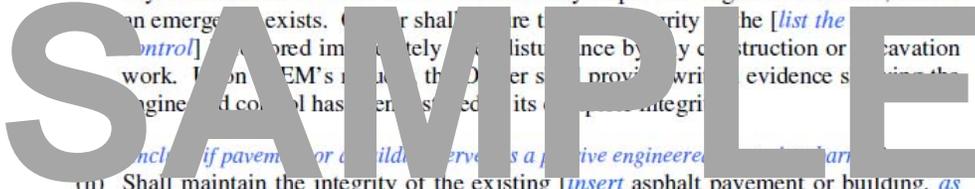
[Include the following if there is a potential future vapor intrusion threat at undeveloped or

unoccupied sites; sites that are already occupied and have vapor intrusion issues should instead include the restriction below requiring operation and maintenance of an engineered control.]

- (f) Shall not construct or allow occupancy of a dwelling or work space on the Real Estate unless a vapor mitigation system is installed, operated, and maintained within the dwelling or work space. IDEM may waive this restriction in writing if the Owner has provided data and analysis demonstrating to IDEM's satisfaction that there is no unacceptable risk to human health via the vapor intrusion exposure pathway.

[Include if an active engineered control (vapor mitigation system, etc.) has been implemented at the site]

- (g) Shall operate and maintain the *[list engineered control, depicted in Exhibit ____]* so as to protect its functional integrity *[in accordance with insert title and date of the document containing operations and maintenance requirements]*. Owner shall notify the Department in writing at least fifteen (15) days in advance of conducting any construction or excavation work that may impact an engineered control, unless an emergency exists. Owner shall ensure the integrity of the *[list the control]* is not impaired immediately or disturbance by any construction or excavation work. Upon IDEM's request, the Owner shall provide written evidence showing the engineered control has been maintained to protect its functional integrity.



- (h) *[Include if pavement or building serves as a passive engineered control]* Shall maintain the integrity of the existing *[insert asphalt pavement or building, as appropriate]*, which is depicted on Exhibit ____ via *[choose GPS coordinates or legal survey, as applicable]*; this asphalt area serves as an engineered barrier to prevent direct contact with the underlying soils and must not be excavated, removed, disturbed, demolished, or allowed to fall into disrepair.

[Include the following if groundwater monitoring is being conducted]

- (i) Shall prohibit any activity at the Real Estate that may interfere with the groundwater monitoring or well network.
- (j) *[Insert other site specific restriction(s) here.]*

II. GENERAL PROVISIONS

- 2. Restrictions to Run with the Land. The restrictions and other requirements described in this Covenant shall run with the land and be binding upon, and inure to the benefit of the Owner of the Real Estate and the Owner's successors, assignees, heirs and lessees and their authorized agents, employees, contractors, representatives, agents, lessees, licensees, invitees, guests, or persons acting under their direction or control (hereinafter "Related Parties") and shall continue as a servitude running in perpetuity with the Real Estate. No transfer, mortgage, lease, license, easement, or other conveyance of any interest in or right to occupancy in all or any part of the Real Estate by any person shall affect the restrictions set forth herein. This Covenant is imposed upon the entire Real

IV. TERM, MODIFICATION AND TERMINATION

- 9. Term. The restrictions shall apply until the Department determines that the contaminants of concern no longer present an unacceptable risk to the public health, safety, or welfare, or to the environment.
- 10. Modification and Termination. This Covenant shall not be amended, modified, or terminated without the Department's prior written approval. Within thirty (30) days of executing an amendment, modification, or termination of the Covenant, Owner shall record such amendment, modification, or termination with the Office of the Recorder of _____ County and within thirty (30) days after recording, provide a true copy of the recorded amendment, modification, or termination to the Department.

V. MISCELLANEOUS

- 11. Waiver. No failure on the part of the Department at any time to require performance by a person of a term of this Covenant shall constitute or be held to be a waiver of such term or in any way affect the Department's right to enforce such term, and no waiver on the part of the Department shall constitute or be held to be a waiver of any term hereof or of the breach of any term hereof.
- 12. Conflict and Compliance with Laws. If any provision of this Covenant conflicts with the subject of any law or regulation established by any federal, state, or local government, the strictest standard or requirement shall apply. Compliance with this Covenant does not relieve the Owner of its obligation to comply with any other applicable laws.
- 13. Change in Law, Policy or Regulation. In no event shall this Covenant be rendered unenforceable if Indiana's laws, regulations, RISC guidelines, or remediation policies (including those concerning environmental restrictive covenants, or institutional or engineering controls) change as to form or content. All statutory references include any successor provisions.
- 14. Notices. Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other pursuant to this Covenant shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Owner: *[insert owner's name and address]*

My Commission Expires:

Residing in _____ County, _____

This instrument prepared by:
[insert name and address]

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law:
[insert name and address]

SAMPLE

EXHIBIT A
LEGAL DESCRIPTION OF REAL ESTATE

SAMPLE

EXHIBIT ____

Instructions: Attach separate sheets as necessary, labeled as 'Exhibit B', 'Exhibit C', etc. The following are some examples of additional Exhibits.

1. A scaled map of the site (optional).
2. List, description, or table of COCs (optional for non-CERCLIS sites and non-hazardous waste facilities).
3. Scaled map(s) with GPS coordinates¹ showing the location of engineered barriers or other engineering controls.
4. Scaled map(s) with GPS coordinates showing the location of contamination above construction worker levels, identifying the relevant area as the "Construction Worker Restriction Area" (requested if contaminant concentrations remain above that level).
5. Scaled map(s) showing the legal boundary (by survey, GPS coordinates, etc.) of areas within a property (i.e. "carve outs") subject to specific restrictions or obligations (required if such areas exist).

CERCLIS sites and current and former hazardous waste facilities (defined in 11-2-100 to mean a plant or site where hazardous waste is subjected to treatment, storage or disposal) are required by 11-5-4-1(e) to describe the identity, quantity, and location of hazardous substances remaining on the property. Two methods of relating this information include the following exhibit types:

- a. Scaled map(s) identifying the location of contamination exceeding residential land use criteria for each contaminant of concern. For clarity purposes, it is recommended that analytical information (identification and quantity of hazardous substances) be showed separately in a table.
- b. A narrative summary of the identity, quantity, and location of hazardous substances remaining on the property.

¹ The presence of any of the following will likely necessitate the collection of GPS data: engineered barriers or controls; a restriction that applies to only a portion of the site; and areas labeled 'construction worker restriction area.' GPS data should be collected with a mapping or survey-grade GPS receiver, and data deliverable information should be submitted in accordance with the document *IDEM Office of Land Quality Spatial Data Collection Standards*, which is available on IDEM's Website.

Excess Liability Trust Fund Application



SAMPLE

Indiana Department of Environmental Management
100 North Senate Avenue
Mail Code 67-02
Indianapolis, IN 46204-2251

State Form 47139 (R6 / 1-12)



APPLICATION

State Form 47139 (R6 / 1-12)

TO BE COMPLETED BY IDEM
Date submitted (month/day/year)
ELTF control number

TO BE COMPLETED BY APPLICANT (continued)
Most recent technical determination (check one):
<input type="checkbox"/> Emergency measures (Attach a completed "Confirmation of Emergency Response Status" form signed by the IDEM project manager, or the IDEM Emergency Response On-Scene Coordinator.)
<input type="checkbox"/> Site characterization performed in accordance with the UST Guidance Manual and 329 IAC 9-5 (Attach a copy of the letter from IDEM stating that the site is fully characterized.)
<input type="checkbox"/> Approved CAP (Attach a copy of your "Corrective Action Plan Approval" letter from the IDEM.)
<input type="checkbox"/> Approved CAP Implementation (Attach a copy of your "Corrective Action Plan Implementation Approval" letter from the IDEM if available.)
<input type="checkbox"/> No further action required (Attach a copy of your "No Further Action" letter from the IDEM.)
<input type="checkbox"/> Site conditions do not warrant preparation of a CAP (You must provide documentation that IDEM has determined that a CAP should not be prepared. Please contact the IDEM project manager.)

SECTION 5 - SIGNATURE OF OWNER/OPERATOR, ATTORNEY-IN-FACT OR ASSIGNEE	
I swear or affirm to the best of my knowledge and belief that the costs presented herein represent the reimbursable costs actually incurred in the performance of site characterization or corrective action related to this site during the period of time indicated on this application. I also swear or affirm that all information submitted as part of this application was necessary to complete the site characterization or corrective action pursuant to Indiana Code 13-23-9 and I am not subject to any criminal and civil penalties for submitting false and/or inaccurate information on this application.	
Signature of owner/operator, attorney-in-fact or assignee	Date signed (month/day/year)
Printed name	Title
If applicable, a copy of the signed Assignment of Rights under 329 IAC 9-1 must be attached. If applicable, the Assignment of Rights or the Power of Attorney must also be attached. If the Assignment of Rights or the Power of Attorney has been modified or amended, a current copy must be attached.	

EXCESS LIABILITY TRUST FUND APPLICATION

INSTRUCTIONS

THE APPLICATION FORM - STATE FORM 47139 (R6 / 1-12)

Underground storage tank registration fee: For an eligibility determination, you must show proof of payment for all tank fees. **You must enclose copies of UST fee receipts or copies of your cancelled checks for all years since the tanks were registered.**

SECTION 1 - APPLICANT INFORMATION

Name of applicant: For eligibility determinations, the applicant name must be the name which appears on the "Underground Storage Tank Registration" as the owner or operator of the USTs. **For reimbursement requests,** the applicant name is the owner/operator or the entity who has been assigned rights as the first party through an assignment of rights. A copy of an *Assignment of Rights* document (see instructions for Section 5) must be attached. Please note that the reimbursement check will be issued through direct deposit (for single party checks) or mailed (for joint checks) to the address listed on the application.

Federal Tax ID number: The applicant's Federal Tax ID number (must be included for all reimbursement requests).

Mailing address: This address must be the complete current mailing address (street address or P.O. Box) and must match the vendor information supplied on State Form 53788 to the State Auditor's office. All correspondence from IDEM regarding this claim will be mailed to this address.

Name of second party for joint check: Complete this section if you would like a joint check to be issued from the ELTF, otherwise write "not applicable." The check will be issued to the applicant and the second party listed, but will be mailed to the address listed on the application.

Name and title of contact person: This section should be completed by the name of the person who should be contacted concerning questions about the claim. Refer to the person who completed the claim.

Contact telephone number: Telephone number of contact person, if known previously.

Contact email address: Email address for contact person, if known previously.

SECTION 2 - SITE INFORMATION

Facility identification number: This is the number assigned by the Underground Storage Tank section for your facility.

Date incident reported to IDEM: This date, if not known, can be obtained from the Leaking Underground Storage Tank Section at (317) 232-8900.

LUST incident number: This is the number assigned to your site when you reported the incident to IDEM. If you do not know this number, it can be obtained from the Leaking Underground Storage Tank section at (317) 232-8900.

Name of facility: This should be the name listed under Section II of your "Notification For Underground Storage Tanks" form.

IDEM project manager: If your site has been assigned to an IDEM project manager, list his/her name here. If you do not know the name of your project manager, enter "unknown" or "not applicable". Not all sites are assigned to LUST/ELTF project managers.

Address of facility: This should be the address listed under Section II of the "Notification For Underground Storage Tanks" form.

SECTION 3 - ELIGIBILITY DETERMINATIONS

An application requesting a determination of the LUST incident's eligibility to be reimbursed for cleanup costs from the Excess Liability Trust Fund. Do not complete pay requests. The claimed amount for eligibility determination claims is \$0. New costs submitted with eligibility determination applications will not be evaluated. Costs must be submitted in a dollar claim application after eligibility has been determined.

EXCESS LIABILITY TRUST FUND APPLICATION

INSTRUCTIONS

SECTION 4 - REIMBURSEMENT REQUESTS

Type of work performed: Check the box that best describes the work that was performed for the costs being claimed.

Identify the type of claim application:

Read the descriptions provided and check the box next to the type of claim you are submitting. If costs denied in previous claims are being resubmitted, you must check the "Subsequent claim application and Resubmittal of denied costs" box.

If you are resubmitting a claim that was denied completely, check the "Complete Claim Resubmittal" box. A separate application must be submitted for each complete claim resubmittal.

Note: For Complete Claim Resubmittals or Resubmittals of Denied Costs, you must also include (1) the original amount requested (from the original claim submittal) and (2) the IDEM claim number relating to that previous claim in the spaces provided on the application.

Total costs for the claim from the attached "Pay Requests": This is the total requested amount of the claim. The total costs for the claim would include subsequent and resubmitted costs.

Total resubmitted costs: This is the total requested amount of resubmitted costs, if they are included in the claim. If there are no resubmitted costs, this line should be left blank.

Most recent technical determination: In order to receive reimbursement from the ELTF, one of the situations listed should apply to this site. Check only one box on the Application form.

Emergency measures - The work for which reimbursement is sought was performed in response to a petroleum release that created the need for emergency measures, as defined in 328 IAC 1-1-5.1. A completed (signed by an IDEM Incident Manager or the Incident Response On-Scene Coordinator) "Notification of Emergency Response Status" form must be submitted with your ELTF application.

Characterization - Work for which reimbursement is sought is complete to characterize a release with the background criteria. Technical Guidance manual and 328 IAC 9-5. Attach a copy of the letter from IDEM indicating that the site has been fully characterized.

Approved CAP - A Corrective Action Plan (CAP) has been approved or deemed approved for purposes of ELTF eligibility by IDEM. Attach a copy of your "Corrective Action Plan Approval" letter from the IDEM.

Approved CAP Implementation - A Corrective Action Plan Implementation has been approved or deemed approved for purposes of ELTF eligibility by IDEM. Attach a copy of your "Corrective Action Plan Implementation Approval" letter from the IDEM if available.

No further action required - IDEM has determined that no additional corrective action activities are necessary. You must provide a copy of your "No Further Action" letter from the IDEM. Also, DNR well abandonment logs must be included if costs pertain to well abandonment.

The site conditions do not warrant the preparation of a Corrective Action Plan - You must provide documentation that IDEM has decided that a CAP should not be prepared.

If more than one of these technical determinations has been issued for the release, indicate which occurred most recently. For example, if IDEM has determined that the site has been fully characterized, then approves a CAP, you would indicate that a CAP has been approved.

SECTION 5 - SIGNATURE

The application must be submitted with an original signature and date. If the signator is signing as an Attorney-in-Fact, a copy of the Power of Attorney must be attached.

A copy of any Power of Attorney and/or Assignment of Rights must be attached to each claim application. A Power of Attorney must specify the incident number and what authority the Attorney-In-Fact has been granted. An Assignment of Rights must specify the incident number and what reimbursement rights have been assigned by the owner/operator for value received. Both documents must be notarized and must include the telephone number, address, and e-mail address of the person granting the Power of Attorney or assigning the right to reimbursement (the Assignor).

EXCESS LIABILITY TRUST FUND APPLICATION

INSTRUCTIONS

PAY REQUEST

The purpose of the Pay Request form is to itemize any / all charges requested for reimbursement in an initial or subsequent claim application. This form is not to be altered from the original format.

Definition of Terms

- 1. Description - List the item for which you are seeking reimbursement, including personnel classifications.
2. Task Performed - Describe the activity for which the item was used. Please list specific tasks as listed in the 328 IAC 1-3-5. Do not restate personnel classifications.
3. Units - The number of units requested.
4. Unit Type - The type of unit requested (ex. hours, days, tons, gallons).
5. % Mark-up - Specify percentage of consultant mark-up for subcontractor or equipment purchase costs, if any. Please note, if this column is left blank, ELTF will not approve costs greater than the back-up documentation.
6. Amt Requested - Amount claimed.
7. Amt Allowed - To be used by ELTF staff only.
8. Ref - To be used by ELTF staff only.
9. Subtotal - The total costs requested for this page.
10. Total Requested for this Invoice - Once you have listed all the costs associated with an invoice, enter the total costs requested.



For the following expense types, the purpose, the information requested in the manner described

Bid Expenses - Enter the bid items on pay request enter "bid item" in Description column. In the Task column enter a description of the bid activity (ex. install of a pump and treatment system). In the Unit Type column enter "1". In the Amt Requested column enter the amount requested. Reimbursement for work performed after February 8, 1997, will be reimbursed on the basis of the lowest of three competitive bids on the work specified in the Corrective Action Plan that is approved or deemed approved by the Department. Copies of the three bids must be provided for evaluation; however, information from the three bids does not need to be summarized or listed on the "Pay Request", or anywhere else on the application. If a mark-up is applied, the correct/allowable % mark-up must be indicated on the "Pay Request" in the appropriate column.

Please note: Bids should not include lodging, per diem and mileage. These items will be reimbursed as separate line items on the invoice and pay request. Please refer to the instructions specific to these expenses.

Disposal Expenses - Enter type of material being disposed in the Description column (ex. soil disposal). In the Task column enter the source and nature of the material (ex. petroleum contaminated soil generated during monitoring well installation). Please note that signed waste manifests and/or disposal tickets must be submitted for reimbursement consideration.

Mileage / Vehicle Expenses - In the Description column enter the type of cost requested (ex. car mileage, pick-up mileage, support trucks for drilling). In the Task column enter the purpose of the trip (vehicle mileage for monitoring well sampling, support truck for monitoring well installation). Mileage is calculated at the federal rate for a privately owned automobile under 41 CFR 301-10.303, in effect on January 1 of each year.

EXCESS LIABILITY TRUST FUND APPLICATION

INSTRUCTIONS

Expense Types (Continued)

Soil Boring / Monitoring Well Expenses - In the Description column enter the drilling subcontractor. In the Task column enter the names of monitoring wells/soil borings installed. **The total cost for the drilling event should be entered in the units column as a lump sum. The correct/allowable % mark-up must be indicated if applied.**

1. mobilization of drill rig
2. decontamination
3. linear drilling expenses
4. well materials (filter pack, riser)
5. flush-grade well cover
6. conversion to monitoring well
7. concrete / asphalt cutting expenses (for monitoring wells installed in concrete or asphalt, as indicated on the accompanying well diagram)
8. split spoon sampling
9. lodging/per diem (back-up must be included)
10. miscellaneous equipment (drums, pressure washer, pump, etc.)

These costs are to be figured into the cost for completion of a soil boring / monitoring well (**expenses must be itemized on the corresponding invoice**). **Soil boring and well logs must be submitted for reimbursement consideration.**

Lodging and Per Diem Expenses - In the Description column enter the type of travel cost requested (ex. per diem, lodging). In the Task column enter the person's activity with the travel cost (ex. telephone, log so borings). Lodging and per diem costs will be reimbursed in accordance with the most current Indiana Department of Administration financial policy memorandum covering state travel policies and procedures and per diem rates. Only reimbursement for actual overnight stay is allowed to complete work on more consecutive days. The items should be itemized on the invoice and pay request from the contractor. Lodging receipts are required for reimbursement consideration.

Subcontractor Expenses - These costs should be itemized. Specify the percentage of consultant mark-up for subcontractor costs, if any. Provide subcontractor invoices.

Excavation / Transportation & Hauling / Stockpiling / Backfilling Expenses - In the Description column enter the type of activity (ex. soil excavation, transportation of soil, soil hauling, soil stockpiling, backfilling, hauling backfill to site). These costs will include equipment and labor charges. In the Task column identify under what circumstances the soil was removed (ex. contaminated soil encountered during UST removal, contaminated soil encountered during remediation system installation). For hauling list the number of tons and miles hauled in the Units column (ex. 40 / 100). In the Unit Type column you will enter "tons / miles". Please submit the number of trucks used, the hours of operation and the miles traveled from the site to the disposal/backfill facility (also include a map). Mileage must be documented.

Laboratory Expenses - In the Description column enter the contracted laboratory. In the Task column enter the reason the analysis was performed (site characterization, remediation system evaluation). **Chains of custody (COCs) corresponding to the invoiced samples must be submitted for reimbursement consideration.**

Miscellaneous Expenses - In the Description column enter the type of in-house expense (ex. pressure washers, bailers, photoionization detectors, copies) or the store name on the purchase receipt/invoice. In the Task column enter the use of the item (ex. system hook-up, system housing construction material). **Please be descriptive in the Task column; why it is needed and how it relates to the specific site. Individual receipts should be listed separately.**

EXCESS LIABILITY TRUST FUND APPLICATION

INSTRUCTIONS

Expense Types (Continued)

Equipment Rental and Capital Expenditures - In the Description column enter the type of equipment rented or purchased (as part of a corrective action plan). Include operating costs associated with the remediation equipment. In the Task column enter the use of the item (ex. remediation system installation). In the Units and Unit Type columns enter the amount of time the equipment was rented for or the number of items purchased (ex. 4 hours, 1 pump). In the Mark-up column enter the amount of mark-up applied to the actual purchase price of the item.

Personnel Expenses - In the Description column enter the ELTF classification for the personnel requested (ex. principal, senior project manager, project manager, staff project person, field technician, drafting person, word processor/clerical). If you are unsure of the ELTF classification for a particular position or job title, please refer to 328 IAC 1-3-5. In the Task column enter the activity the person was performing (ex. CAP preparation, general project management). Please refer to 328 IAC 1-3-5 for approved task descriptions. In the Units column enter the number of hours the employee spent performing this task.

Tank Removal Expenses - All tank removal costs must be itemized. NOTE: UST removal and disposal costs are not reimbursable unless the removal and disposal are a part of the **previously approved CAP**.

PAY REQUEST FOR RESUBMITTAL OF DENIED COSTS

Complete this form for the resubmittal of denied costs (some costs in a claim were denied). Do not complete this form for Complete Claim Resubmittals (the entire claim was denied). As back-up for this pay request, you should submit copies of the pay requests previously submitted, invoices and supporting documentation, and a copy of the IDEM Decision Letter. This request for pay must explain why the costs are now eligible for reimbursement.

Denial of Terms

1. **Item Number** - The number assigned by IDEM to each of your costs on the Cost Review Summary report. This report generated the Cost Review Summary report listing the processing of your application.
2. **Reason(s) for Reconsideration of Denied Cost** - Use this column to explain why this cost should be approved for reimbursement by the ELTF.
3. **Attachments** - If you need additional documents assign a unique number to each document. Write that number on the document and in the Attachment column.
4. **Amt Denied** - Enter the total amount denied by the ELTF during the previous review of this cost.
5. **Amt Requested** - Of the total amount denied by the ELTF during the previous review of this cost, enter the dollar amount for which you are seeking reevaluation. This cannot be more than the denied amount or the amount originally requested.
6. **Amt Allowed** - To be used by ELTF staff only.
7. **Ref** - To be used by ELTF staff only.
8. **Subtotal** - The total costs requested for this page.
9. **Total Requested for this Invoice** - Once you have listed all the costs associated with an invoice, enter the total costs requested.

COMPLETE CLAIM RESUBMITTAL

If a previous claim was denied in full, complete a new application form when you resubmit the claim. You do not need to fill out new pay requests for a complete claim resubmittal. However, if you choose to submit revised pay requests, you must use the **Subsequent Pay Request** form. The application for a complete claim resubmittal must contain copies of the pay requests previously submitted, invoices and supporting documentation, and a copy of the IDEM Decision Letter. In addition, please explain why the claim is now eligible for reimbursement from the ELTF and provide supporting documentation. New costs submitted with complete claim resubmittal applications will not be evaluated. New costs must be submitted in a subsequent claim application.

EXCESS LIABILITY TRUST FUND APPLICATION

INSTRUCTIONS

AFFIDAVIT

The affidavit and invoice summary sheet may be used when cancelled checks are difficult to provide as proof of payment for corrective action costs. This form may not be altered. The Indiana Department of Environmental Management reserves the right to deny any application that is submitted with an altered affidavit. The Indiana Department of Environmental Management reserves the right to require cancelled checks as proof of payment at any time.

CONFIRMATION OF EMERGENCY RESPONSE STATUS

See instructions on form.

SECTION 1 - APPLICANT INFORMATION

See instructions above for the applicant information section on the Application Form.

SECTION 2 - SITE INFORMATION

See instructions above for the site information section on the Application Form.

SECTION 3 - SITE CONDITIONS

Check all of the conditions present at or around the site at the time of the emergency response situation.

SECTION 4 - REPORTS SUBMITTED

Of the reports listed, indicate which reports have been submitted to IDEM as a result of this incident.

SAMPLE

**THE INDIANA UNDERGROUND STORAGE TANK
EXCESS LIABILITY TRUST FUND**

STATE OF _____

COUNTY OF _____ } SS:

AFFIDAVIT REGARDING PAYMENT OF COSTS INCIDENT NUMBER: _____

_____, being of sound mind and majority, and being duly cautioned and sworn in accordance with law (*in accordance with IC 13-23-9-6, I may be subject to criminal and civil penalties for submitting false and/or inaccurate information on this affidavit*), make the following statement based upon personal information and under penalty of perjury:

1. I certify that I have been duly authorized to sign this affidavit on behalf of the applicant submitting a claim for the qualifying occurrence listed above to the Indiana Excess Liability Trust Fund. I have obtained all necessary or applicable approvals for such authorization.
2. **Per 328 IAC 1-3-5**, all costs incurred and/or paid for work performed in the identified claim are reflected in the attached invoice summary listing and pay requests.
Per 328 IAC 1-5-1 (c), proof of payment documentation is and will be maintained on file for a minimum of four (4) years after the date the application for payment was submitted or four (4) years after completion of remedial action, whichever is later.*
Credits, rebates, refunds, or other similar payments or inducements made to the owner/operator or recipient of the cover/contract by the applicant have been from the contract listed for this claim.
The following is the correct business address and telephone at which I can be reached:

Address (number and street or rural route)		Telephone number
City	State	ZIP code
Signature of affiant		Date signed (month/day/year)

STATE OF _____

COUNTY OF _____ } SS:

Sworn to and subscribed in my presence this _____ day of _____, 20_____

Signature of Notary Public	County of residence
Printed or typed name of Notary Public	Date commission expires (month/day/year)

* The Indiana Department of Environmental Management reserves the right to require cancelled checks as proof of payment at any time.

This form may not be altered. The Indiana Department of Environmental Management reserves the right to deny any application that is submitted with an altered affidavit.

The Notary Seal must be included and must be legible when copied.

CONFIRMATION OF EMERGENCY RESPONSE STATUS

State Form 47139 (R6 / 1-12)

INSTRUCTIONS

To be submitted by an owner or operator seeking reimbursement from the Excess Liability Trust Fund for emergency measures pursuant to 328 IAC 1-3-5 (a)(2)(B)(iii)

Please complete the following form and forward to the IDEM LUST section, ELTF section, or Emergency Response section for concurrence by your project manager. Your project manager will complete this form and return it to you for submission with your claim application. Prior to the approval of site characterization activities or a Corrective Action Plan (CAP) costs cannot be reimbursed unless the need for emergency measures defined in 328 IAC 1-1-5.1 is verified by an IDEM project manager no more than thirty (30) days prior to submitting the claim application. **Approval provided on this form by an IDEM project manager does not guarantee the eligibility of future submittals to the ELTF. This form must be submitted prior to filing each emergency measures claim application. Eligibility of the LUST incident must be determined before reimbursement can occur.**

TO BE COMPLETED BY CLAIMANT

SECTION 1 - APPLICANT INFORMATION

Name of applicant	Mailing address of applicant (number and street, city, state, ZIP code)	
-------------------	---	--

Name or contact person	Contact telephone number (with area code)	Contact fax number (with area code)
------------------------	---	-------------------------------------

SECTION 2 - SITE INFORMATION

Name of facility	Date incident reported to IDEM (month/day/year)	LUST incident number
------------------	---	----------------------

Address of facility (NOTE: enter number and street address. Do not use a P.O. Box number).

SECTION 3 - SITE CONDITIONS (check all that apply)

- Inhabitable buildings affected
- Free product or sheen present in conduits or surface water
- Drinking water affected
- Utility lines affected
- Odors present in building or cond...
- Other

Note: Conditions which are products not leaving the site and/or are not accepted for disposal are not considered emergency response conditions.

SECTION 4 - REPORTS (check all that apply)

- Statewide Report
- Program Reports
- Free Product Recovery Report
- Other(s) _____

I swear or affirm under penalty of perjury, to the best of my knowledge and belief, that these statements are true and accurately represent the conditions at and around the site in question. I understand that pursuant to Indiana Code 13-23-9-6, I may be subject to criminal and civil penalties for submitting false and/or inaccurate information on this application.

Signature of applicant	Date signed (month/day/year)
------------------------	------------------------------

Printed Name	Title
--------------	-------

TO BE COMPLETED BY IDEM PROJECT MANAGER

- I concur that the site conditions reported above are true and accurately represent the conditions at and around the site in question and constitute an emergency response situation requiring emergency measures.
- The conditions at the site do not constitute an emergency response situation and do not require emergency measures.

Comments: _____

Signature of IDEM project manager	Date signed (month/day/year)
-----------------------------------	------------------------------

Please fax completed forms to (317) 234-0428 or mail to:

IDEM Office of Emergency Response
 100 N. Senate Ave.
 Mail Code 66-30
 Indianapolis, IN 46204-2251

EXCESS LIABILITY TRUST FUND APPLICATION

Checklist

1 - THE APPLICATION FORM

- All fields in Sections 1 and 2 of the application are completed.
- Section 3 of the application is checked for eligibility determinations. **The claimed amount is \$0.**
- Section 4 of the application is checked for claim type (initial, subsequent, subsequent and resubmittal, complete claim resubmittal, third party).
 - For resubmitted costs: Original amount requested and the claim number assigned by IDEM are included on application.
 - The type of eligibility (ER, SC, CAP, CAPI, NFA) is checked. **Letters sent from IDEM confirming the corresponding eligibility are attached.**
- The total costs calculated from the attached "Pay Requests" are entered on the application.
- For subsequent claims that include resubmitted items: The total resubmitted costs are entered on the application.

2 - THE AFFIDAVIT

- For initial and subsequent claims: An original, unaltered affidavit is included for all costs incurred and
- For applications with resubmitted costs: A copy of the original, unaltered affidavit is acceptable for these expenses.

3 - THE INVOICE SUMMARY

- Every pay request that includes costs is listed with the name of vendor, invoice number, invoice amount, and proof of payment. Cancelled check copies, both front and back, or an affidavit are needed as proof of payment.

4 - INITIAL/SUBSEQUENT PAY REQUEST

- All of the fields on the "Pay Request" are completed.
 - Invoice number
 - Incident number
 - Name of Applicant
 - Name of Vendor
 - Description
 - Task Performed
 - Units
 - Unit type
 - % Mark-up
 - Amt Requested
 - Subtotal
 - Total requested for this invoice
- The invoice and all back-up documentation are included.
- Pay requests (including invoice and back-up) are separated by colored sheets of paper or clips.

5 - RESUBMITTAL OF DENIED COSTS PAY REQUEST & COMPLETE CLAIM RESUBMITTAL

- All of the applicable fields on the "Pay Request" are completed.
 - Invoice number
 - Incident number
 - Name of Applicant
 - Name of Vendor
 - Description
 - Reason(s) for reconsideration of denied costs
 - Attachments
 - Amt Denied
 - Amt Requested
 - Subtotal
 - Total requested for this invoice
- Copies of the letter and Cost Review Summary report generated by IDEM during the processing of the original claim are included.
- The invoice and all necessary back-up documentation for the denied costs are included.
- Pay requests (including invoice and back-up) are separated by colored sheets of paper or clips.

6 - BACK-UP DOCUMENTS

- For drilling: all pertinent soil boring logs and groundwater monitoring well diagrams are included with the drilling invoice.
- For lab costs: chains of custody are included with the laboratory invoices.
- For disposal costs: manifests/certificates of disposal are included with all soil and/or water disposal invoices.
- For all equipment/materials rented or purchased: receipts or invoices are included. An explanation of the equipment and the need for the equipment is included on the receipt/invoice or pay request.

Sample 3.4 Notice of Intent to Purchase UST and Reinstate Eligibility Form 48079



NOTICE OF INTENT TO PURCHASE UST AND REINSTATE ELIGIBILITY State Form 48079 (R / 12-00)

- INSTRUCTIONS:**
- To be completed by current owner.
 - If the scheduled purchase date is postponed, you must resubmit this form at least sixty (60) days prior to the revised planned purchase date.
 - This form will be destroyed, and the information will be invalid ninety (90) days after the scheduled date of closing unless the closing occurs.

SITE INFORMATION	
Name	Facility ID number
Address (number and street or rural route)	
City, state and ZIP code	Number of registered UST tanks at this location
LUST incident numbers attributed to this site	

CURRENT OWNER INFORMATION	
Name of current owner	Current owner ID number
Address (number and street or rural route)	
City, state and ZIP code	
Signature of current owner	Date signed (month, day, year)

NEW OWNER INFORMATION	
Name of new owner	New owner ID number
Address (number and street or rural route)	Federal ID or Social Security number (if applicable)
City, state and ZIP code	
Scheduled date of closing (month, day, year)	Scheduled closing date must be at least sixty (60) days after the Indiana Department of Environmental Management receives this form.
I swear or affirm under penalty of perjury, to the best of my knowledge and belief, that these statements are true and accurately represent the conditions around the site in question. I understand that pursuant to Indiana Code 13-23-14-2, IC 13-30-4-1 and IC 13-30-6-1 I may be subject to criminal and civil penalties for submitting false and/or inaccurate information on this application.	
Signature of new owner	Date signed (month, day, year)

DISTRIBUTION: White - Agency; Canary - New Owner; Pink - Current Owner

Sample 3.5 Site Categorization for Prioritization of Claims Form 51920



SITE CATEGORIZATION FOR PRIORITIZATION OF CLAIMS
 State Form 51920 (R / 8-08)
 328 IAC 1-3-3(a)(1)
 Indiana Department of Environmental Management
 Excess Liability Trust Fund

Indiana Department of Environmental Management
 Office of Land Quality
 Excess Liability Trust Fund
 Telephone: (317) 234-0990
 Fax number: (317) 234-0428

- INSTRUCTIONS:**
1. Please submit **two** copies of the completed form and **one** copy of any supporting documentation.
 2. Document references are required in order for the form to be processed. List appropriate supporting documentation references, in the section below, for each line item criteria checked on the form.
 3. Check all line item criteria that apply to the release.
 4. After completing the form and determining the prioritization category, enter the appropriate category number into the **SITE CATEGORY FOR CLAIMS PRIORITIZATION** box located at the bottom of the form.
 5. To adjust a sites prioritization category, submit a letter requesting that the site be re-categorized, along with the appropriate justification(s). Include an updated Site Categorization for Prioritization of Claims Form, along with any supporting documentation, to the Department for review.

NOTE: Forms will not be processed with incomplete information (all sections of this survey must be completed) or if required supporting documentation is not provided as described in the instructions below. Claims cannot be processed without site categorization. The Department may request additional supporting documentation if it is deemed necessary to validate selected categorization criteria.

RETURN COMPLETED FORM TO:		Indiana Department of Environmental Management Office of Land Quality/ELTF Section 100 North Senate Avenue Indianapolis, IN 46204-2251	Facility ID Number:	
			UST Incident Number:	
			Received:	
Check the appropriate box:		Initial Site Categorization	Request to Recategorize	IDEM Site Categorization
OWNER CERTIFICATION:	I certify that I am not a minor and am familiar with the information submitted in this and all attachments, and that based on my inquiry of the individuals immediately responsible for the information submitted, the information is true, accurate, and complete.			
	NAME AND TITLE OF OWNER OR AUTHORIZED REPRESENTATIVE			
	SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE		DATE (MM / DD / YYYY)	
SUPPORTING DOCUMENT REFERENCES:	EXAMPLE CITATIONS: (1) Initial Site Characterization Report, dated October 27, 2003, p. 5; or (2) Further Site Investigation Report, dated December 10, 2003, Appendix B			
	Line 1.A _____			
	Line 1.B _____			
	Line 1.C _____			
	Line 2.A _____			
	Line 2.B _____			
	Line 3.A _____			
	Line 3.B _____			
	Line 3.C _____			
	Line 3.D _____			
Line 4.A _____				
Line 4.B _____				

CATEGORY 1 CRITERIA		<input type="checkbox"/> Not Applicable
If any of the following criteria apply, the site is prioritized in Category 1		
<input type="checkbox"/>	1.A	Petroleum or petroleum constituents are detected in a structure or a utility conduit, such as a storm sewer, sanitary sewer, or utility conduit that exceed ten percent (10%) lower explosive limit (LEL).
<input type="checkbox"/>	1.B	Vapors for petroleum or petroleum constituents are detected in an inhabitable building in levels greater than long term, risk-based exposure for contaminants of concern. <i>[Contact the IDEM project manager for guidance]</i>
<input type="checkbox"/>	1.C	Petroleum or petroleum constituents are detected in a drinking water well at or above maximum contamination levels (MCLs) or RISC residential groundwater cleanup objectives at the point of compliance (sampling point) or at the tap. <i>[Reference 327 IAC 8-2-5]</i>
CATEGORY 2 CRITERIA		<input type="checkbox"/> Not Applicable
If the site does not qualify as Category 1 and any of the following criteria apply, the site is prioritized in Category 2		
<input type="checkbox"/>	2.A	Petroleum or petroleum constituents are detected in free phase in a thickness of at least one (1) foot in any one (1) well, or at least one (1) inch in two (2) or more wells where the wells are at least twenty (20) feet apart, provided that the wells are not screened in the UST cavity backfill.
<input type="checkbox"/>	2.B	Petroleum or petroleum constituents are detected in surface water above water quality standards under rules of the water pollution control board at 327 IAC 2.
CATEGORY 3 CRITERIA		<input type="checkbox"/> Not Applicable
If the site does not qualify as Category 2 and any of the following criteria apply, the site is prioritized in Category 3		
<input type="checkbox"/>	3.A	Petroleum or petroleum constituents are detected in site groundwater concentrations exceeding RISC Residential Default Closure Levels (IDLs).
<input type="checkbox"/>	3.B	Petroleum or petroleum constituents are detected in site soil at concentrations exceeding RISC Residential Default Closure Levels (IDLs).
<input type="checkbox"/>	3.C	Petroleum or petroleum constituents are present in free phase in a thickness of at least one-sixteenth (1/16) inch in any well.
<input type="checkbox"/>	3.D	Petroleum or petroleum constituents, attributable to a gasoline release, are detected in the groundwater at concentrations exceeding RISC Default Closure Levels. For the purpose of this clause, gasoline is defined as set forth in 45 IAC 12-1-7.
CATEGORY 4 CRITERIA		<input type="checkbox"/> Not Applicable
If the site does not qualify as Category 3 and any of the following criteria apply, the site is prioritized in Category 4		
<input type="checkbox"/>	4.A	Petroleum or petroleum constituents are detected in on-site groundwater at concentrations exceeding RISC Industrial Default Closure Levels (IDCLs) in two (2) or more wells, where the wells are at least twenty (20) feet apart, where neither well is screened in the UST cavity backfill.
<input type="checkbox"/>	4.B	Petroleum or petroleum constituents are detected in on-site soil at concentrations exceeding RISC Industrial Default Closure Levels (IDCLs) in at least two (2) boring holes at least twenty (20) feet apart.
CATEGORY 5 CRITERIA		
<input type="checkbox"/>	5.A	A release that does not qualify as a Category 1, 2, 3, or 4 will be considered a Category 5 release.
SITE CATEGORY FOR CLAIMS PRIORITIZATION		<input style="width: 50px; height: 20px;" type="text"/>
NAME OF IDEM PROJECT MANAGER RE-CATEGORIZING THE SITE [FOR IDEM USE ONLY]		DATE (MM/DD/YYYY)

Sample 3.6 Scope of Work Form 51955



SCOPE OF WORK
 State Form 51955 (R / 12-08)
 Pursuant to 328 IAC 1-3-3(a)(1)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF LAND QUALITY
 EXCESS LIABILITY TRUST FUND
 Telephone: (317) 234-0990
 Fax number: (317) 234-0428

- INSTRUCTIONS:**
1. This form must be included for all proposed corrective actions submitted after September 29, 2004, [328 IAC 1-3-3(a)(1)] and should be included with technical documents related to the below referenced phases.
 2. Detail each proposed activity on a separate line and provide a detailed description of each in the appropriate field.
 3. Table 1 is to provide a detailed breakdown of proposed work activities utilizing the Activity Code Classification Key below. Table 2 and Table 3 are to provide detailed technical specifications for proposed wells and borings along with detailed specifications of proposed pilot studies and/or remedial systems.

NOTE: This form does not constitute pre-approval of corrective action related costs, as provided for in 328 IAC 1-3-1.6.

SUBMIT	Indiana Department of Environmental Management	Facility ID Number:	
COMPLETED	Attention: ELTF Section	Incident Number:	
FORM TO:	100 North Senate Avenue Indianapolis, IN 46204-2251		
RP Name: _____		Site Name: _____	
RP Address: _____		Site Address: _____	
RP Phone: _____		Contractor Name: _____	
[RP = _____]			
Phase Categorization			
Check only <u>one</u> Phase below:			
Site Characterization / FSI	<input type="checkbox"/>	Pre-CAP Approval Monitoring	<input type="checkbox"/>
FSI / CAP Development	<input type="checkbox"/>	CAP Addendum	<input type="checkbox"/>
		CAP Implementation	<input type="checkbox"/>
		Site Closure	<input type="checkbox"/>
Activity Code Classification Key			
Please use the codes listed below when filling in the form:			
A. Office Activities / Report Generation		C. Site Activities	
Labor	A010	Labor	C010
Supplies & Materials	A020	Equipment Rental	C020
		Subcontractor	-
		Labor	C031
		Materials	C032
		Other	C033
		Disposal	C040
		Permits	C050
		Site Prep / Demolition	C060
		Site Restoration	C070
		Supplies	C080
		Other	C090
		Site Investigation Specifications	(see TABLE 2)
		Remediation Technical Specifications	(see TABLE 3)

LUST Incident number: _____

TABLE 3 Proposed Remediation Technical Specifications	
I. Proposed Pilot Study Specifications	
Type: <input type="checkbox"/> MNA <input type="checkbox"/> ORCs <input type="checkbox"/> Pump & Treat <input type="checkbox"/> SVE / AS <input type="checkbox"/> VER <input type="checkbox"/> EFR <input type="checkbox"/> DPE/ MPE <small>(see below)</small> <input type="checkbox"/> Other: _____	
Equipment: <input type="checkbox"/> Direct Push Equipment <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Vacuum Pump / Blower <input type="checkbox"/> Liquid Ring Pump <input type="checkbox"/> Submersible Pump <input type="checkbox"/> Air Compressor <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	
II. Proposed Remedial System Specifications <small>[check / fill out all that apply]</small>	
<input type="checkbox"/> Monitored Natural Attenuation (MNA) Sampling for MNA Parameters: <input type="checkbox"/> Yes <input type="checkbox"/> No Number of Monitoring Wells: _____	<input type="checkbox"/> Vacuum Enhanced Recovery (VER) Number of SVE/Recovery Wells: _____ Number of Submersible Pumps: _____ Number of Blowers/Vacuum Pumps: _____ Number of Air Strippers: _____ Number of Carbon Vessels (GAC): _____ Number of Transfer Pumps: _____ Capacity of Knockout Tank (gallons): _____ Number of Bag/Sediment Filters: _____
<input type="checkbox"/> Oxygen Releasing Compounds (ORCs) Number of Injection Points: _____ Total Pounds of ORCs: _____ Number of Injection Events: _____	<input type="checkbox"/> Enhanced Fluid Recovery (EFR) LPH Present: <input type="checkbox"/> Yes <input type="checkbox"/> No Number of Extraction Points: _____ Number of Approved Events: _____
<input type="checkbox"/> Pump & Treat Number of Extraction Wells: _____ Number of Submersible Pumps: _____ Number of Air Strippers: _____ Number of Carbon Vessels (GAC): _____ Number of Transfer Pumps: _____ Capacity of Knockout Tank (gallons): _____ Number of Bag/Sediment Filters: _____	<input type="checkbox"/> Dual or Multi Phase Recovery (DPE / MPE) Number of Extraction Points: _____ Number of Liquid Ring Pumps (LRPs): _____ Number of Air Strippers: _____ Number of Carbon Vessels (GAC): _____ Number of Transfer Pumps: _____ Capacity of Knockout Tank (gallons): _____ Number of Bag/Sediment Filters: _____
<input type="checkbox"/> Soil Vapor Extraction / Air Sparge (SVE / AS) Number of SVE Points: _____ Number of AS Points: _____ Number of Blowers/Vacuum Pumps: _____ Number of Air Compressors: _____ Capacity of Knockout Tank (gallons): _____ Radius of Influence (ROI) in Feet: _____	<input type="checkbox"/> Excavation / Trenching Number of Cubic Yards: _____ Number of Tons (yds ³ * 1.36): _____ Depth of Excavation: _____ feet Linear Footage of Trenching: _____ feet
<input type="checkbox"/> Other: _____	

4. RCRA CLOSURE AND CORRECTIVE ACTION

4.1 Purpose and Scope

The goal of the Resource Conservation and Recovery Act (RCRA) Program (www.IN.gov/idem/4995.htm) is “cradle-to-grave” management of hazardous wastes, from the point of generation through final disposition. IDEM has an authorized hazardous waste management program that operates in lieu of, and under the oversight of, the U.S. EPA for delegated portions of the program, using U.S. EPA’s guidance documents. IDEM’s authorized RCRA program issues permits to facilities that store, treat, or dispose of hazardous wastes to:

- Ensure proper management of hazardous waste
- Ensure closure of inactive hazardous waste facilities
- Ensure post-closure care of closed units, if required

Regulatory requirements apply to permitting, closure, and post-closure of hazardous waste management units for treatment, storage or disposal facilities (TSDs)

Corrective Action requirements apply to any facilities that:

- Are operating or have operated as a TSD facility
- Had interim status at any time
- Operated without a permit when they should have had one

Those facilities are required to investigate and remediate contamination resulting from any activity at the facility. TSD facilities are required to implement corrective action for all releases of hazardous waste or hazardous constituents that may cause a threat to human health or the environment. Corrective action also can be required for releases of hazardous waste or hazardous constituents that have migrated beyond the owner or operator’s property boundary. While IDEM has the authority to require corrective action through enforcement orders under IC 13-22-13, EPA did not delegate their corrective action enforcement authority to any state agency.

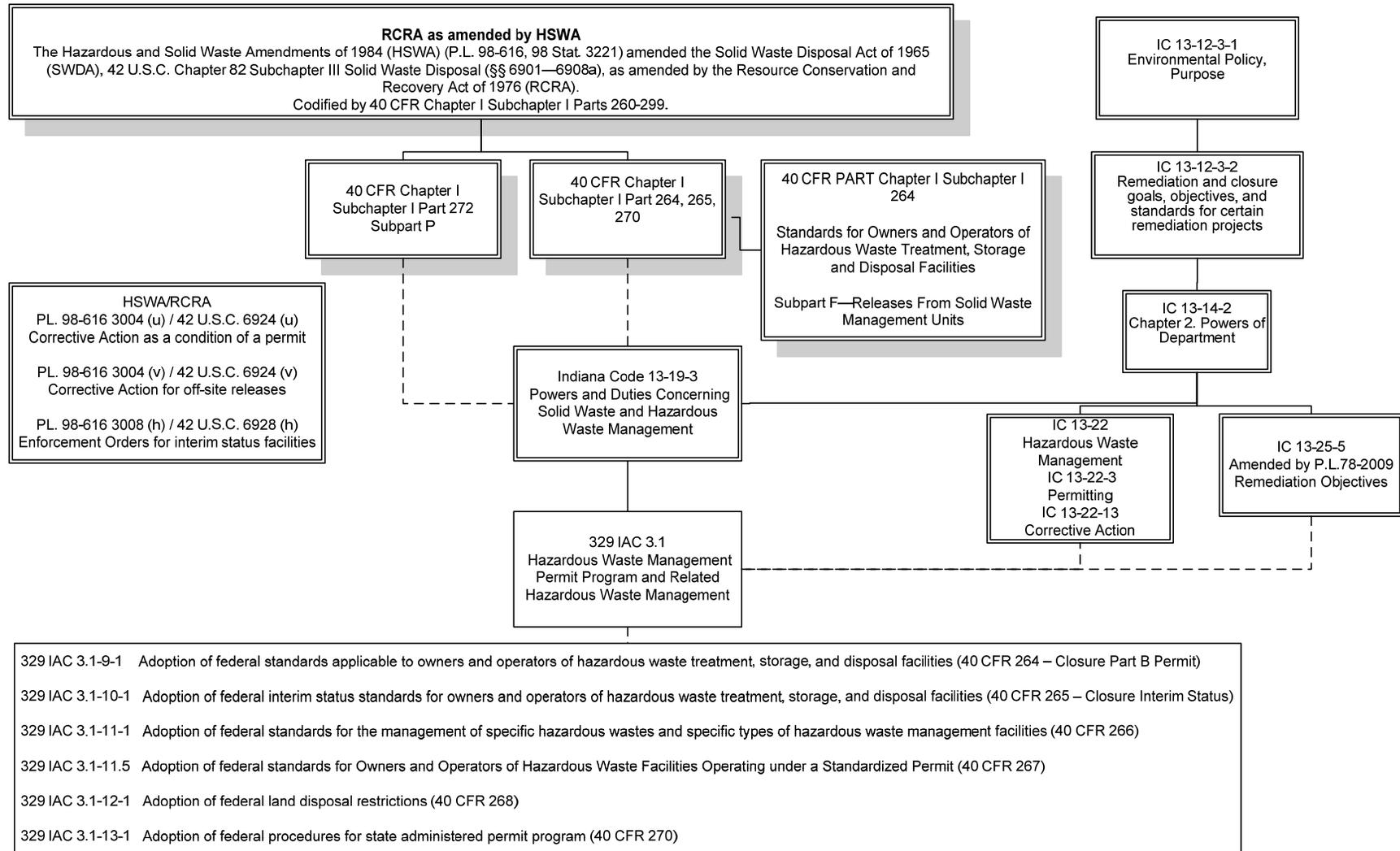
Therefore, EPA may compel corrective action through their federal enforcement authority under sections 7003 (emergency orders) or 3008(h) (corrective action orders) of RCRA at any time. EPA will generally confer with IDEM prior to filing a federal order pursuant to the 2004 RCRA Memorandum of Understanding (MOU). The 2004 MOU sets out both the conditions facilities must meet to be protected by it (the corrective action objectives), and the conditions under which U.S. EPA may overfile.

Further information can be found in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm). The *Remediation Closure Guide* supplements RCRA standards. The *Remediation Closure Guide* provides guidance to determine the cleanup levels necessary to control, minimize, or eliminate threats to human health and the environment.

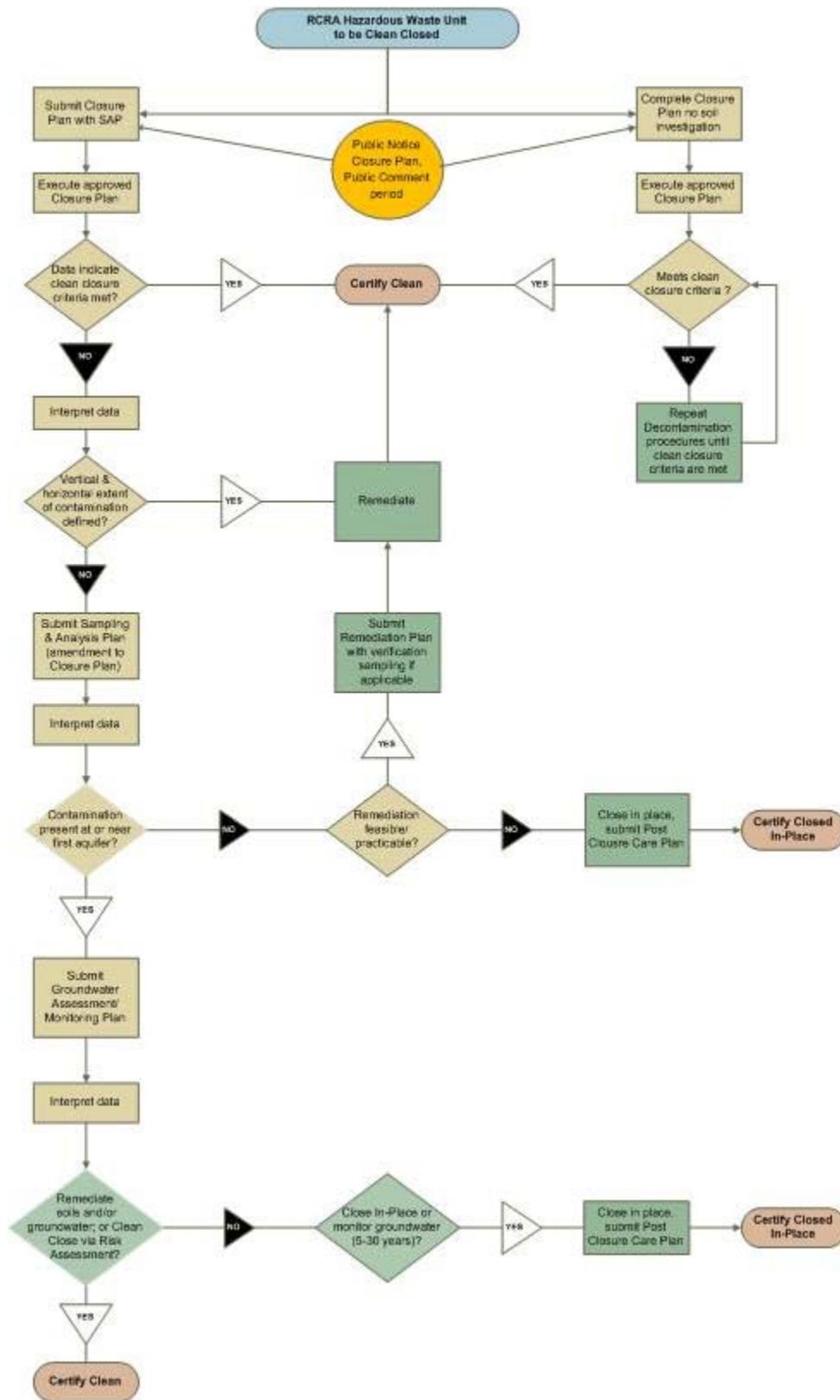
The new *Closure Guidance, RCRA Closure and Corrective Action Program* is under development at the time of this publication. Please check the RCRA Program website at www.IN.gov/idem/4995.htm for announcements and any new publications.

4.2 Rules and Laws

Figure 4.1 Laws and Rules Related to RCRA Corrective Action



4.3 Process Overview



4.4 How Does a Site Enter the Program?

At the time of closure, a permitted facility must implement the approved closure plan contained within their permit.

A facility regulated under RCRA Corrective Action may begin the process by implementing the permit conditions or by entering into a Voluntary Corrective Action Agreement or IDEM may issue a Corrective Action Order.

4.5 Emergency and Immediate Actions

Permit conditions require permitted facilities to notify the IDEM Spill Line (888) 233-7745, within 24 hours of any noncompliance which may endanger health or the environment.

A facility should handle emergencies that develop during corrective action remediation in accordance with the Health and Safety Plan.

4.6 How Is the Public Involved or Notified?

IDEM notifies the public of permit actions in accordance with 329 IAC 3.1-13-10 (www.IN.gov/legislative/ic_iac). Permit actions are often of interest to a broad segment of the public who may or may not live in the immediate area. IDEM prepares a Fact Sheet, sends notices to all interested parties, announces the public notice via radio broadcast, publishes the notice in the largest newspaper near the facility, and publishes the notice on the IDEM website (www.IN.gov/idem/5474.htm). In order to most effectively reach the interested audience, IDEM prefers to publish the notice in a daily newspaper of large circulation.

When facilities propose corrective action remedies, IDEM seeks public input on the findings of the RCRA Facility Investigation (RFI) and the Corrective Measures Study (CMS) by publishing public notices in the nearest newspaper. This newspaper may have a smaller circulation and may not be printed daily, but is selected based on whether it will reach the nearest community members, who are most likely to be interested in and/or affected by the corrective action.

For new permits, prior to the submittal of an application, facilities are required to hold a public meeting in accordance with 329 IAC 3.1-13-18.

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs

IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

4.7 Investigation

The RCRA Corrective Action Program identifies and prioritizes facilities that need to be investigated based on the National Corrective Action Prioritization System list, which U.S. EPA developed based on information compiled by subcontractors in the early 1990's. For facilities that are subject to RCRA corrective action other than via an operating or post-closure permit, IDEM may initiate RCRA Corrective Action through a Corrective Action Order or Voluntary Agreement. If the findings of the RCRA Facility Assessment indicate the need for further investigation or corrective action, the facility will be required to perform a RCRA Facility Investigation (RFI). The RFI may propose that no further action is necessary. If, however, corrective measures are determined to be necessary, the facility must conduct a Corrective Measure Study (CMS) and submit the results in a CMS Report for IDEM approval.

A facility may perform the investigation and any necessary remediation simultaneously through the RCRA Program and the Voluntary Remediation Program, or through an enforcement tool such as an Agreed Order. Investigations are tailored to unit or site circumstances, and should generally be conducted in accordance with the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm).

4.8 Remedy Decision

After the investigation has been completed and public comment has been received, IDEM may approve or require revision of the CMS Report. IDEM will indicate its approval of the selected remedial option or combination of options by issuing a Final Decision and Response to Comments. If the RFI indicates no corrective measures are necessary, IDEM may public notice a Statement of Basis recommending "no further action." Based on the administrative record and any public comments received, IDEM will make a Corrective Action Completion determination for the facility or a portion of the facility.

4.9 Remedial Action

RCRA facilities carry out the approved remedy by performing Corrective Measures Implementation Plan (CMIP). A facility with RCRA permitted hazardous waste management units must conduct closure of those units in accordance with the approved closure plan.

A facility must conduct RCRA corrective actions for releases to the environment from solid waste management units (SWMUs) or Areas of Concern (AOCs), in accordance with permit conditions, a Voluntary Corrective Action Agreement, or a Corrective Action Order.

4.10 Closure

A facility may accomplish closure of interim status and permitted hazardous waste management units by following the IDEM-approved closure plan. When the facility has completed closure, the facility will submit a Closure Certification Report. Upon review and acceptance of the Closure Certification Report, IDEM will issue a closure certification letter.

A Corrective Action Complete determination will be issued to facilities that have investigated and addressed all contamination related to SWMUs and AOCs. Corrective Action Complete determinations may be made “With” or “Without” controls in place. The approved controls may be engineered controls and/or administrative controls. Engineered controls will require the use of an administrative control such as an environmental restrictive covenant to ensure that the engineered control remains protective over time.

Further information can be found in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) and the upcoming *Closure Guide RCRA Closure and Corrective Action Program* (see Section 4.1).

4.11 Conditions Subsequent

When contamination above industrial risk-based levels remains in place, RCRA post-closure measures may be required. These measures will be discussed in the *Closure Guide RCRA Closure and Corrective Action Program*.

4.12 When Issues Arise

Issue resolution can be informal or formal. Most disagreements regarding the technical aspects of a proposed closure plan or corrective action remediation requirement can be resolved through discussions with the project manager and the other parties. The facility representative or consultant should first discuss project specific disagreements with the project manager. If it is not possible to resolve issues between the technical staff, the facility representative or consultant may ask the Hazardous Waste Permit Section Chief to intervene. An issue may be raised through the IDEM chain of command for resolution.

However, in some cases, formal dispute resolution procedures may be necessary. When facilities do not agree to perform the cleanup in accordance with an approved closure plan or voluntary corrective action agreement, the IDEM may issue an administrative order (*Commissioner's Order*) or a Corrective Action Enforcement Order to compel a response and remediation.

A facility may appeal IDEM's decisions using the procedures established in IC 4-21.5, *Administrative Orders and Procedures* (www.IN.gov/legislative/ic_iac).

4.13 Forms and Checklists

Sample copies of many forms, templates and checklists discussed in this *Remediation Program Guide* (RPG) may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.** There are no forms specific to RCRA Corrective Action at this time.

Current State Forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as links to many other documents and websites have been provided where the document is discussed in the text.

5. SITE INVESTIGATION PROGRAM

5.1 Purpose and Scope

The Site Investigation (SI) Program was established in 1983, to fulfill the assessment role of the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) of 1980 (www.epa.gov/superfund/policy/index.htm) or Superfund Program for the State of Indiana.

SI evaluates sites for their potential to be placed on the National Priorities List (NPL) (www.epa.gov/superfund/sites/npl/npl_hrs.htm) or referred to another cleanup program.

SI assesses a site to evaluate the potential for releases of hazardous substances to impact human health or the environment.

5.2 Rules and Laws

The following federal laws can be found at the U.S. EPA Superfund Laws, Policy and Guidance website (www.epa.gov/superfund/policy/index.htm):

- *Comprehensive Environmental Response Compensation and Liability Act of 1980* (CERCLA) 42 U.S.C. § 9601 et. seq.
- *Superfund Amendments and Reauthorization Act of 1986 (SARA)* P.L. 99-499, 100 STAT.16613 et. seq.
- *The National Oil and Hazardous Substances Pollution Contingency Plan (NCP)*, 40 CFR Parts 300 - 399

The following rule can be found on the U. S. EPA National Priorities List HRS Toolbox website (www.epa.gov/superfund/sites/npl/hrsres)

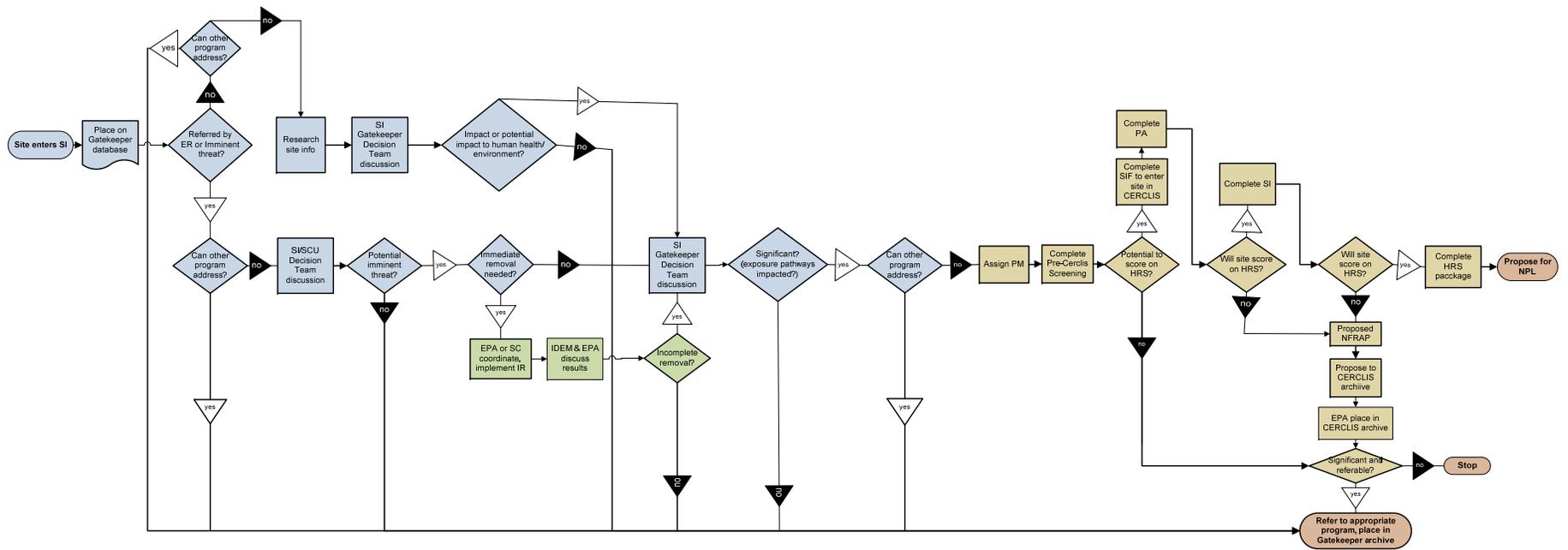
- 40 CFR Part 300, App. A *Hazard Ranking System*

The following state law can be found on the Indiana General Assembly website (www.IN.gov/legislative/ic_iac):

- IC 13-25-4 *Indiana Hazardous Substance Response Trust Fund*

5.3 Process Overview

Figure 5.1 Site Investigation Process Overview



5.4 How Does a Site Enter the Program?

Sources of sites for SI to investigate include but are not limited to:

- Citizen complaints
- Referral by other governmental entities
- Independent studies
- Research by the SI Section

A SI gatekeeper committee reviews the sites to determine if they have the potential to score high enough to warrant action under CERCLA authority before recommending them for CERCLA consideration. Sites are scored via the Hazard Ranking System (HRS) (www.epa.gov/superfund/sites/npl/npl_hrs.htm) developed by the U.S. EPA. Sites are prioritized for further action primarily based on their potential to harm human health and the environment. Every effort is made to investigate the sites that appear to present the highest risks first.

5.5 Emergency and Immediate Actions

SI refers sites that warrant emergency or immediate actions to the U.S. EPA Emergency Response Program (www.epa.gov/emergencies/content/er_cleanup.htm) or IDEM's Immediate Removal Program (www.IN.gov/idem/4298.htm) to conduct activities to abate the immediate threat.

5.6 How Is the Public Involved or Notified?

SI publishes Fact Sheets for each investigation that involves environmental samples. The Fact Sheets explain IDEM's investigation and how it may affect the community. The Fact Sheets are made available as handouts and on the IDEM Site Investigations Updates website (www.IN.gov/idem/4278.htm). SI holds public meetings and availability sessions for high profile sites or if it is otherwise warranted.

SI reports are available in IDEM's Virtual File Cabinet (www.IN.gov/idem/6551.htm) once they are finalized.

5.7 Investigation

The site assessment process (www.epa.gov/superfund/cleanup/pasi.htm) evaluates sites to determine and implement the appropriate responses to releases of hazardous substances to the environment. During the site assessment process, U.S. EPA and states collect data to identify, evaluate and rank hazardous waste sites based on HRS criteria (www.epa.gov/superfund/sites/npl/npl_hrs.htm) using the requirements set forth in the current SI Program Quality Assurance Project Plan.

Once a site is identified, the site undergoes a minimal screening process (*gatekeeper evaluation, pre-CERCLIS Screening [PCS]*) to determine whether the CERCLA site assessment process or other options are appropriate.

If the site is selected for the federal site assessment process, SI will conduct a Preliminary Assessment (PA) (www.epa.gov/superfund/cleanup/index.htm). PA investigations collect readily available information about a site and its surrounding area. The PA is designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA also identifies sites that require assessment for possible response actions. If the PA results in a recommendation for further investigation, a Site Inspection (www.epa.gov/superfund/cleanup/index.htm) is performed.

The Site Inspection identifies sites that should enter the NPL Site Listing Process (www.epa.gov/superfund/sites/npl/npl_hrs.htm) and provides the data needed for HRS scoring and documentation. SI investigators typically collect environmental and waste samples to determine what hazardous substances are present at a site. They determine if these substances are being released to the environment and assess if they have reached nearby targets. The Site Inspection can be conducted in one stage or two. The first stage tests hypotheses developed during the PA and can yield information sufficient to prepare an HRS Scoring Package. If further information is necessary to document an HRS score, an expanded Site Inspection is conducted.

An HRS Scoring Package can be prepared for sites that are considered candidates for inclusion on the NPL. The HRS Scoring Package or Documentation Record compiles evidence collected during the PA and the Site Inspection into a legally defensible record to support the HRS score and the proposal for the NPL.

Sites not considered candidates for inclusion on the NPL can be given a No Further Remedial Action Planned (NFRAP) designation and/or referred to another cleanup authority after any stage of assessment.

IDEM's Site Decision Team, a team of management and representatives from different IDEM programs, determines which program may most effectively manage a site that does not qualify for the NPL after the SI Program has conducted an evaluation.

5.8 Remedial Action

SI is a preremedial program. As SI completes each phase of environmental investigation, SI conveys its decisions to the U.S. EPA via Memoranda of Decision. Ultimately, U.S. EPA decides whether a site warrants remediation or cleanup under the federal Superfund Program and cleanup is conducted at the federal level.

5.9 *When Issues Arise*

If IDEM personnel and other technical personnel or the general public disagree, and the disagreement cannot be resolved through cooperative efforts, the disagreement can be directed through the chain of command starting at either the state or federal level. Ultimately, CERCLA site assessment work is conducted by IDEM to fulfill U.S. EPA requirements under a Cooperative Agreement. Final decisions are at the discretion of the U.S. EPA.

5.10 *Forms and Checklists*

Sample copies of many forms, templates and checklists discussed in this *Remediation Program Guide* (RPG) may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current State Forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as links to many other documents and websites have been provided where the document is discussed in the text.

Site Investigations Program staff use the following instruments:

- Sample 5.1 Sampling Work Plan Template

Sample 5.1 Sampling Work Plan Template

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SITE INVESTIGATION PROGRAM

SAMPLING
WORK PLAN FOR
REASSESSMENT

SITE NAME: _____
LOCATION: _____
EPA ID#: _____

SAMPLE

Preparer _____ Date _____

Reviews and Approvals

Project Manager _____ Date _____

Site Investigation Chief _____ Date _____

Geology _____ Date _____

Chemistry _____ Date _____

Health and Safety Officer _____ Date _____

EPA _____ Date _____

TYPE OF FACILITY: _____

SITE DESCRIPTION: _____

DISPOSAL METHODS: _____

FEATURES OF DISPOSAL AREA: _____

HISTORY (complaints, agency, previous action): _____

SAMPLE

STATUS: Active Inactive Unknown

HAZARD TYPE: Liquid Solid Gas Unknown

CHARACTERISTICS: Corrosive Ignitable Volatile Radioactive
 Toxic Persistent Reactive Incompatible
 Unknown Other _____

SECTION III. Hazard Evaluation

SUBSTANCES BELIEVED TO BE PRESENT: _____
(Refer to Chemical Evaluation Form)

WP-3

SECTION IV. Field and Laboratory Work Required

Establish Perimeter: Yes No
Map: Yes No
Identify Contamination Zone: Yes No
Geophysical Work: Yes No
If Yes, specify: _____

Drilling: Yes No
Determine location of wells: Yes No
Installation plans attached: Yes No

Sampling Required: Yes No
Identify locations: Yes No
Map attached: Yes No
If No, attach information _____
Locations undetermined at this time

Perform Site Recon: Yes No
If No, attach information _____

Perform Laboratory: _____

SAMPLE

Site Name _____

Site ID Number _____

Record and Documentation

(check all that apply)

- General Work Plan _____
- Safety Plan _____
- Log Books _____
- Photos _____
- Chain of Custody _____
- Traffic Reports _____
- Field Collected Information _____
- Analytical Information _____

- QA _____
- Technical Review _____
- Editorial Review _____
- QA Report _____
- QA Record _____
- Calibration Record _____
- Preinspection Meeting _____
- Drilling Logs _____
- Correspondence _____
- Reports _____

Sample Description _____ Sample No. _____

SAMPLE

WP-5
JUSTIFICATION FOR PROPOSED SAMPLES

Site Name
City, County., INDIANA

Sample No. Sample Type Justification

The possibility does exist that if, during the sampling event, contamination is suspected in different locations, sampling points may be revised.

SAMPLE

WP-6
SUMMARY TABLE OF SAMPLING AND ANALYSIS PROGRAM

<u>SAMPLE</u> <u>MATRIX</u>	<u>FIELD</u> <u>PARAMETERS</u>	<u>LABORATORY</u> <u>PARAMETERS</u>	<u>Sample</u> <u>No.</u>	<u>Field</u> <u>Dup.</u>	<u>Field</u> <u>Blank</u>	<u>MS/</u> <u>MSD^{2,3}</u>	<u>Matrix</u> <u>Total⁴</u>
--------------------------------	-----------------------------------	--	-----------------------------	-----------------------------	------------------------------	--	---

1. The field quality control samples also include trip blank, which is required for VOA water samples. One trip blank, which consists of two 40-ml glass vials (preserved) for water samples is shipped in each cooler of VOA samples.

2. Additional sample volume for the matrix spike/matrix spike duplicate (MS/MSD) is required for organic analysis, except for the OLC SOW. Samples designated for MS/MSD analysis will be collected, with extra sample volumes, at a frequency of one per group of 20 or fewer investigative samples. Triple the normal sample volumes will be collected for VOAs, and double the normal sample volumes will be collected for SVOCs and pesticides and PCBs.

3. For inorganic analysis, no extra sample volume is required for the spike and duplicate analyses, however, samples for the spike and duplicate analysis should be identified on the field COC at a rate of one per group of 20 or fewer investigative samples.

**IDENTIFY HERE IF SAMPLES ARE COLLECTED USING ANY OF THE 5035 METHODS, i.e., IN METHANOL, OR IN ENCORE TUBES

4. The number of samples to be collected for MS/MSD are not included in the matrix total. The number of trip blank samples is also excluded from the matrix total.

SUMMARY OF PROCEDURES AND ADDITIONAL COMMENTS (*Sample point selection method*):

SAMPLE

WP-7
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SITE INVESTIGATION PROGRAM
SITE SAFETY PLAN

SECTION I. Site Safety Work Plan

Site Secured: Yes No
 Perimeter Identified: Yes No
 Contamination Zones Identified: Yes No

Physical Hazards (Please check each that applies)

Heightened work surface Notes/Measurements: _____

Impact Notes/Measurements: _____

Falling or flying objects
 Overhead work or projection

Compression Notes/Measurements: _____

Rolling or pinching objects
 Hands Feet Impact
 Penetration Notes/Measurements: _____

Sharp objects which may pierce the hands or feet.

Heat Notes/Measurements: _____

Burns Radiant Heat High Humidity
 Eye Injury High Temperatures Lack of Adequate Ventilation

Cold Notes/Measurements: _____

Non-Ionizing Radiation Notes/Measurements: _____

Gamma Rays Beta Particles Alpha particles
 Ultraviolet Infrared Microwaves (If present contact ISHD Radiological Section 233-7153)

Electrical Notes/Measurements: _____

Noise Notes/Measurements: _____

Confined spaces (staff will not enter confined spaces)

Biological Agents Notes/Measurements: _____

Tuberculosis Hepatitis B Tetanus
 Poison Ivy Insects Stray Animals

Are Engineering controls possible? Yes No (Explain) _____

SP-1
 SECTION I. Site Safety Work Plan
 (Continued)

Air monitoring will be conducted. Staff will be informed about heat stress.

Are Administrative controls possible? Yes No (Explain)

Staff will be instructed to avoid areas of potential risk. A buddy system will be used. Staff will work in groups of at least two persons.

Level of Protection: A B C D Unknown

Modifications _____

All personnel will bring all health and safety equipment and prepare and respond as necessary

Equipment and Materials: _____

Site Entry Procedures: _____

Exit and Decon Procedures: _____

SAMPLE

Amount of Wastes Disposal Generated and Result of Disposition: _____

All hazardous waste will be disposed of properly

Personnel Required:

Name	Signature	Training	Duties

**By signing this document you are acknowledging that you have read and understand the established safety procedures for site activities. You must also realize that the majority of effective health & safety practices is common sense and requires the constant attention of all site workers. This document may or may not address all hazards associated with this site and may change as site activities occur.*

Work Limitations: _____

SP-2
SECTION II. Emergency Information

Site Resources: Water Telephone Radio Other (specify) _____

Local Resources: See accompanying HASP

Name

Number

Address

Ambulance
 Hospital
 Police Dept
 Fire Dept.
 Airport
 Local Health Dept.
 Directions to Hospital See attached directions and map

SECTION III. Emergency Contacts

IDEM Emergency Response 317/233-7745 or 888/233-7745 (24 Hour)
 IDEM Health & Safety (Dave Appel) 317/232-4867
 IDEM Human Resources (Corliss White) 317/233-1785
 IDEM Vehicle Problems (Nicole Kane) 317/232-4518
 Industrial Hygienist (Lorena Alexander) 317/351-1111 ext. 2222
 OH Radiological (Robert) 317/351-1111 ext. 2222
 OSHA/MSDR Emergency Response 800/498-6111 (24 Hour)
 EPA Regional Response Center 800/424-8800 (24 Hour)
 Indiana State Chemist 708/231-1414
 Pollution Control 800/424-8800-1234
 IDEM Eastern Regional Office 573/555-4848 or 800/553-5519
 IDEM Northwest Regional Office 219/757-0265 or 888/209-8892
 IDEM Southwest Regional Office 812/380-2305 or 888/672-8323



SP-3
 FIELD MONITORING EQUIPMENT CHECK-OUT
 (Use separate form for each piece of equipment used)

Type of Instrument: _____
 Serial Number: _____
 Date of Calibration: _____

Type of Calibrate Gas: _____

Fully Charged: Yes No

FIELD MONITORING RESULTS

		Breathing Zone*	Work Zone
1.	Location of monitoring _____	<input type="checkbox"/>	<input type="checkbox"/>
	Results (peak reading) _____	<input type="checkbox"/>	<input type="checkbox"/>
2.	Location of monitoring _____	<input type="checkbox"/>	<input type="checkbox"/>
	Results (peak reading) _____	<input type="checkbox"/>	<input type="checkbox"/>
3.	Location of monitoring _____	<input type="checkbox"/>	<input type="checkbox"/>
	Results (peak reading) _____	<input type="checkbox"/>	<input type="checkbox"/>
4.	Location of monitoring _____	<input type="checkbox"/>	<input type="checkbox"/>
	Results (peak reading) _____	<input type="checkbox"/>	<input type="checkbox"/>
5.	Location of monitoring _____	<input type="checkbox"/>	<input type="checkbox"/>
	Results (peak reading) _____	<input type="checkbox"/>	<input type="checkbox"/>
6.	Location of monitoring _____	<input type="checkbox"/>	<input type="checkbox"/>
	Results (peak reading) _____	<input type="checkbox"/>	<input type="checkbox"/>

* Breathing zone is identified as a hemisphere surrounding the lower half of the face

Do air monitoring results modify original PPE selection? YES NO

Describe modifications to level of PPE:

SP-4

Monitoring Action Levels

Photo Ionization Detector (MiniRae, HNu) and Flame Ionization Detectors (FID)

Known Constituents

- 0-5 meter units Level D
- 5-50 meter units * Level C
- 50-500 meter units* Level B
- >500 meter units* Leave Area

* The aforementioned levels are valid only for known compounds detected in the breathing zone and are superceded

by chemical specific permissible exposure levels (PEL).

Unknown Constituents

0-5 meter units	Level D
5-20 meter units	Level C
20-100 meter units	Level B
>100 meter units	Leave Area

Combustible Gas Indicator

0-10% LEL	Continue investigation
10-15% LEL	Continue with caution
>15% LEL	Leave Area, Fire Hazard

Oxygen Meter

<19.5%	Supplied air (SCBA) required
19.5-23.5%	Continue with caution
>23.5%	Leave Area, Increased fire hazard

All measurements for known and unknown constituents must be conducted in the breathing zone

SAMPLE

SP-5

Hospital Directions

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Insert Map Here

SAMPLE

SP-6

6. STATE CLEANUP PROGRAM

6.1 Purpose and Scope

The State Cleanup Program (SCP) (www.IN.gov/idem/4179.htm) was created by IDEM in 1989 to manage the investigation and remediation of sites contaminated with hazardous substances or petroleum which are not included in the federal Superfund Program. The SCP was modeled after the federal Superfund Program; however, the SCP differs from the Superfund Program in some respects. The SCP has jurisdiction over remediation of petroleum releases in addition to remediation of releases of hazardous substances. Also, the SCP follows aspects of the *National Oil and Hazardous Substances Pollution Contingency Plan* (NCP), 40 Code of Federal Regulations (CFR), Part 300, (www.epa.gov/superfund/policy/index.htm) as well as the *Remediation Closure Guide (Waste-0046R1)* (www.IN.gov/idem/4694.htm). By applying components of the NCP and the *Remediation Closure Guide*, the SCP can handle sites of the same environmental magnitude as Superfund Program sites, using a more streamlined approach.

The SCP is administered by the State, with no federal involvement or funding. Funding for the SCP comes from the Hazardous Substances Trust Fund which primarily receives its revenue from taxes on disposal of hazardous wastes and recovery of IDEM oversight costs. Examples of remediation projects managed under the SCP include dry cleaning facilities, manufacturing facilities, petroleum refineries, petroleum storage terminals, abandoned landfills, unregulated underground storage tank sites and other industrial sites.

6.2 Rules and Laws

The legal authorities listed below for the SCP can be viewed at the Indiana General Assembly website (www.IN.gov/legislative/ic_iac).

The Hazardous Substances Response Trust Fund (*IC 13-25-4*) is utilized for cleaning up sites contaminated with hazardous substances. It also establishes liability for potentially responsible parties/persons (RPs) to undertake investigation and remediation of hazardous substance releases. In addition, *IC 13-25-4* states that IDEM may recover the costs of removal or remedial actions when such actions are performed in a manner consistent with the NCP (*40 CFR Parts 300-399*). *IC 13-24-1* authorizes IDEM to require cleanup of petroleum contamination. Both *IC 13-25-4* and *IC 13-24-1* permit IDEM to enter into Agreed Orders (AO) with RPs involved in releases of petroleum or hazardous substances.

Indiana Statutes and Rules

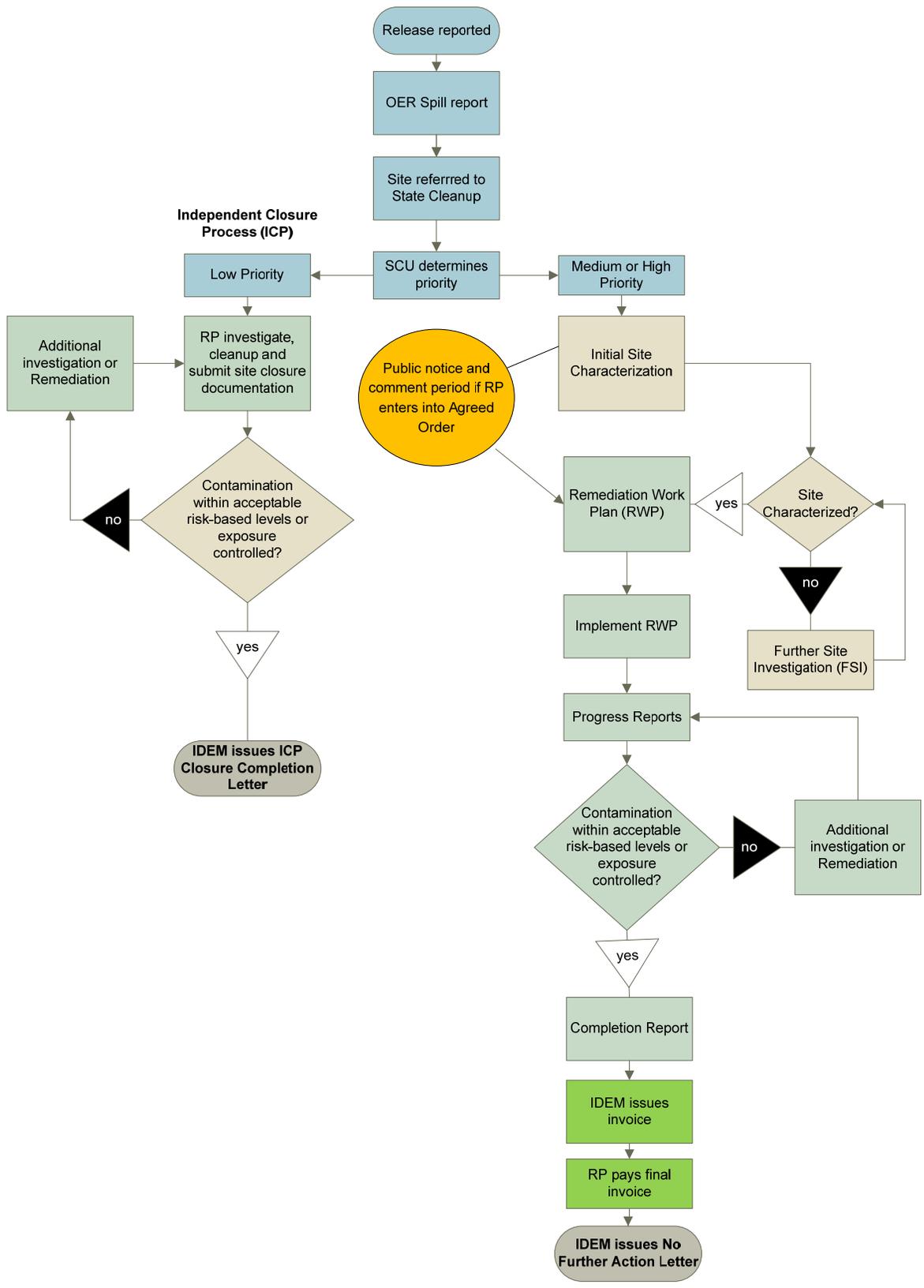
- IC 13-25-4 *Hazardous Substances Response Trust Fund* states that IDEM may recover the costs of removal or remedial actions when such actions are performed in accordance with the NCP.
- IC 13-24-1 Authorizes IDEM to require cleanup of petroleum contamination.
- IC 13-25-4 and IC 13-24-1 Permit IDEM to enter into AOs with responsible parties/persons.
- 329 IAC 7-1 *Priority Ranking System for Sites Subject to Remediation*

Nonrule Policies

- *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) provides technical guidance for screening a site, assessing risk, and establishing remediation objectives.

6.3 Process Overview

Figure 6.2 State Cleanup Program Process Overview



6.4 How Does a Site Enter the Program?

6.4.1 Site Referral

The State Cleanup Program (SCP) receives site referrals from IDEM Emergency Response, other IDEM Remediation Services Branch programs, other IDEM Offices, the IDEM Complaint Clearinghouse and local health departments. Below are examples of sites referrals to State Cleanup:

- By IDEM Emergency Response – Emergency Response (ER) refers sites to the SCP when long term cleanup management and oversight is necessary.
- By IDEM Voluntary Remediation Program (VRP) – The VRP refers sites to the SCP if the VRP applicant does not complete the obligations of the Voluntary Remediation Agreement and is terminated from the VRP, or if imminent threats to human health or the environment exist.
- By IDEM Site Investigations (SI) Program – The SI Program refers sites to the SCP after completion of site assessment under CERCLA, if it has been determined that the site does not qualify for inclusion on the NPL.
- By Indiana Brownfields Program (IBP) – The IBP refers sites to the SCP while in the process of Phase II activities and comfort letter review when off-site contamination is encountered or emergency threats are encountered.
- By IDEM Office of Water Quality – The Drinking Water Section of the Office of Water Quality refers sites to the SCP after it is determined that a private or public drinking water source has been contaminated above the MCL.
- By IDEM Complaint Clearinghouse – The IDEM Complaint Clearinghouse (www.IN.gov/idem/5274.htm) is available daily to receive complaints about contamination from the public. The IDEM Complaint Coordinator will refer a site to the SCP if the complaint involves historic contamination, imminent threat to human health or the environment or if a removal action may be warranted. SCP will investigate the site and evaluate the need for further work.

6.4.2 Site Prioritization (327 IAC 7.1)

The State Cleanup Section uses the Priority Ranking System (PRS) rule (329 IAC 7.1) to prioritize sites contaminated with hazardous substances and petroleum that are excluded from the National Priorities List (NPL) for state response actions. The PRS is IDEM's management tool to address sites that pose a significant threat to human health and the environment, and to assure IDEM's resources are allocated accordingly. IDEM assigns a priority status of low, medium or high (*depending on site characteristics*) to hazardous substances and petroleum response sites evaluated utilizing the PRS. Priority ranking may change based upon additional site information or other relevant factors that become known to the SCP after site referral or release, or during site investigation.

The specific criteria used to determine site priority may be found in the PRS rule (327 IAC 7.1).

6.4.3 Site Assignment and State Cleanup Project Oversight

SCP strives to ensure that its resources are utilized to manage sites that present the most significant risk to human health and the environment. To achieve this, SCP will only assign a project manager to sites designated by the SCP as high priority or medium priority sites contaminated with hazardous substances or a combination of hazardous substances and petroleum. Medium priority sites contaminated only with petroleum will not be assigned to an SCP project manager and RPs are expected to complete site investigation and cleanup with limited to no direct SCP oversight. RPs with medium priority sites contaminated with only petroleum may receive a letter from IDEM requesting that they proceed with their cleanup action under the Independent Closure Process (ICP) (*see section 6.7.2*). If an RP does not receive a request to proceed through the ICP or cannot remediate to the ICP cleanup objectives then the RP may apply to the IDEM VRP to receive direct IDEM oversight and obtain a timely closure review and approval. RPs for SCP-designated low priority sites will receive a letter requesting that they proceed with cleanup through the ICP or apply to the VRP. RPs who remain in SCP are required to perform the necessary site characterization and remediation activities regardless of the extent of oversight provided by the SCP. If sites fail to progress and do not achieve a valid closure determination the SCP may remove the site from the ICP and may pursue legal actions if necessary to ensure the completion of these activities.

6.5 Emergency or Immediate Actions

The Immediate Removal Program (*a subprogram under the SCP*), conducts time critical removal actions when pollutants, contaminants, petroleum and certain solid waste materials are considered an imminent and substantial threat to public health and/or the environment. For Immediate Removal purposes, a "time critical" action is defined as an action that needs to be initiated within six months to prevent a release. The goal of the program is to separate the hazard from potential receptors. This program is intended to remove immediate dangers; not to perform a full scale remediation.

The Immediate Removal Program typically addresses sites with miscellaneous abandoned drums of hazardous substances, tire piles, and abandoned industrial and commercial facilities with various uncontrolled waste issues.

Actions conducted at these sites often include installation of fencing, sampling and disposing of drums, and source removal. Source removal could include disposal of contaminated soil, transformers, lab packs, contents of lagoons and other hazards. Time critical actions also commonly include supplying alternate drinking or filter systems for residential drinking water wells impacted by pollutants or contaminants and installing subslab depressurization systems on habitable structures with indoor vapor impacts exceeding chronic exposure levels.

The Immediate Removal Program utilizes the same laws and rules that govern the SCP and seeks to recover removal action costs when an RP can be identified.

If emergency actions are warranted, or if IDEM management determines that site conditions are extremely costly or complex and meet the U.S. EPA Superfund Removal Program criteria, SCP may refer the site to the U.S. EPA Region V Superfund Removal Program.

6.6 How Is the Public Involved or Notified?

Virtual File Cabinet and Administrative Records

IDEM uses the web based Virtual File Cabinet (VFC) (www.IN.gov/idem/6551.htm) to house all public documents. IDEM considers the public records contained on the VFC for a site to be the administrative record for cleanup projects and a public repository.

Community Relations Plans

Public participation and involvement is critical for a successful remediation. The SCP follows the guidance for community relations plans (CRP) presented in the NCP (*40 CFR Parts 300.430[c] through 300.43[c]*) (www.epa.gov/superfund/policy/index.htm). The SCP will conduct interviews with local governments and private parties believed to be directly affected by the cleanup project to determine if a CRP needs to be developed and implemented. If IDEM finds that community interest is significant during the interview phase, or if IDEM receives notifications of interest or requests for information, SCP may determine the CRP is necessary. If the SCP is overseeing a cleanup that is being led by the RP, the RP will develop and implement the CRP. If the SCP is leading the site cleanup then the SCP will develop and implement the CRP. The CRP elements may include:

- Establishment of a local information repository
- Publication of a notice of availability and brief analysis of the proposed remediation plan
- Providing a public comment period on the proposed plan
- Providing an opportunity for a public meeting
- Keeping a transcript of the public meeting
- Preparing a written summary of significant comments received during the public meeting, along with IDEM's responses

Use of an Environmental Restrictive Ordinance (ERO)

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs

IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

6.7 Investigation

Investigation of the full nature and extent of potential and observed releases of contaminants is a required first step when completing response and remediation under SCP oversight. SCP investigations must delineate the nature and extent of contaminants to the land use appropriate screening levels contained in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) or a risk based screening level agreed upon by the SCP before the site investigation begins. Full nature and extent delineation also must include:

- Evaluation and sampling of all potential sources of the contaminants of potential concern
- Evaluation and sampling of all contaminant migration pathways
- Evaluation of fate and transport of contaminants
- Sampling of all potential contaminant receptors

These investigation elements are necessary to develop an accurate conceptual site model (CSM) and to justify any risk based remediation approach to closure. Historically collected environmental data and operational information also should be included in site investigation reports and taken into account when evaluating risk based exposures or developing a remediation strategy. Historically collected data should be reconfirmed during the site investigation process if the quality is in question. The *Remediation Closure Guide* provides a model for investigating and remediating SCP sites. The following specific steps and reports are required to document completion of an investigation under SCP oversight.

At a low priority site utilizing the ICP, the nature and extent of contamination in soil must be delineated to the residential soil screening levels for each contaminant of concern. At a medium priority site, utilizing the ICP, the nature and extent of contamination in soil must be delineated to the residential soil and ground water screening levels for each contaminant of concern.

6.7.1 High Priority Sites and Medium Priority Sites Contaminated with Hazardous Substances

As discussed in Section 6.4, high and medium priority sites are those sites contaminated with hazardous substances and petroleum that have ground water impacts and potential or confirmed receptor impacts. High and medium priority sites will generally follow the process outlined in Figure 6.2. The site characterization stage will include the following steps.

Initial Site Investigation (ISI) Report

SCP considers the ISI report as a combination Phase I Environmental Site Assessment (ESA) and Phase II Site Investigation. The ISI Report should include details of historic operational history and timelines, waste usage and waste management practices and details about potential release locations or source areas. The scope of work for the ISI should include data collection sufficient to screen potential contaminant source areas and potential migration pathways and to develop the initial CSM. The ISI Report should include information sufficient to show the extent of the environmental problem

Further Site Investigation (FSI) Report(s)

SCP will require one or more phased FSIs if the ISI did not fully delineate the nature and extent of contamination and fully evaluate migration pathways and receptor risks. For each successive

FSI, it is most efficient for the RP to submit an FSI work plan for IDEM review that establishes the scope, goals and procedures for the FSI. That will allow for agreement between IDEM and the RP for the project before the investigation is implemented, and eliminate unnecessary expenditure of time and money.

6.7.2 Medium Priority Petroleum Sites and Low Priority Sites (Independent Closure Process)

IDEM will issue a specific letter requiring that site investigation and remediation be completed using the Independent Closure Process (ICP) (www.IN.gov/idem/6548.htm) for low priority sites. The RP is to complete site investigation under the ICP in a manner consistent with high and medium priority sites. The RP must generate and submit the same investigation documents to report the results of the investigation of nature and extent of contaminants. The SCP considers low priority sites and medium priority sites contaminated only with petroleum to be sites with lower risk potential. Because of the lower risk potential, these sites may progress through each step of the process at a pace established by the RP, but within an overall project timeline established by the SCP. The SCP is responsible for ensuring that ICP sites progress to closure. Therefore, the SCP requires that the site investigation and remediation of a low priority site be completed within one year from the time the RP receives the letter from IDEM requiring completion of site investigation and remediation. For a medium priority site contaminated only with petroleum, the RP must complete investigation within one year of notification and remediation within three years of notification.

The PRS (*in 329 IAC 7.1-4-1*) defines low priority sites as sites with contamination found only in soil. Therefore, the RP must investigate ground water to verify to the SCP that ground water has not been impacted by the release of the contaminants. Ground water investigation for petroleum-only contamination must include a minimum of three grab samples of ground water from soil borings located within the source area or within 100 feet directly down gradient from the source area. Ground water investigation for hazardous substance contamination must include a minimum of three permanent two-inch monitoring wells located within the source area or within 100 feet directly down gradient from the source area. If the minimum and scientifically sound ground water sampling is not performed on a low priority site, the RP will not be allowed to continue using the ICP for that site.

6.8 Remedy Decision

6.8.1 Remediation Work Plan (RWP)

The RP will be required to submit a Remediation Work Plan (RWP) for IDEM's review and approval when SCP has approved the completion of the site investigation.

IDEM encourages RPs to include:

- Detailed summary and documentation of the results of the site investigation
- A statement of work to accomplish the remediation in accordance with agency guidelines
- Detailed summary of the results of any pilot study conducted
- A quality assurance project plan for construction
- An operation, maintenance and monitoring plan
- A health and safety plan
- A community relations plan (if warranted)

- A proposed schedule to implement the work plan

The proposed RWP should identify the nature and extent of the releases being addressed in the project, evaluate all potential exposure pathways, and explain how the RP intends to achieve the remediation objectives. IDEM recommends that information about the site be presented through a CSM as discussed in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm).

6.8.2 Record of Remedy Selection (RRS)

The RP should complete and submit a Record of Remedy Selection (RRS) - State Form 54471 (www.IN.gov/idem/5157.htm) as a cover letter to the RWP. The RRS is intended to provide an executive summary for the project at the time the RWP is submitted. The completed RRS should summarize the data collected for all media and the justification for the selected remediation approach. The RRS may allow expedited review of the RWP if it is an accurate summary of all previous site work. Submittal of an incomplete RRS will delay the RWP approval process or be cause for disapproval of an RWP.

6.9 Remedial Action

6.9.1 Remediation Implementation Report

In instances where the RWP includes implementation of an engineered remedy that requires long term operation and maintenance, SCP will require submittal of an implementation report to verify that construction occurred in a manner consistent with the approved RWP and that implementation included quality assurance procedures and meets quality control specifications.

6.9.2 Remediation Completion Report

IDEM must determine if an approved RWP has been successfully implemented. IDEM will base this determination on review of a remediation completion report submitted by the RP. The RP may use the Remediation Completion Report Completeness Checklist on the VRP website (www.IN.gov/idem/4127.htm) to develop a comprehensive completion report.

The completion report may be submitted as a stand-alone document after an approved remedy is implemented and remediation objectives are met. The completion report should reflect the project as approved in the RWP, and demonstrate how the remediation objectives were met and how risks to human health and the environment were mitigated.

6.9.3 Remediation Progress Report or Ground Water Monitoring Report

Progress reporting is necessary for SCP to verify that long term remediation implementation is continually meeting the objectives of the approved RWP. During a long term remediation implementation or long term ground water monitoring, reports are submitted on a quarterly sampling schedule. Remediation progress reports submitted for an active engineered treatment should detail operational history of the system, maintenance activities required, total treatment or recovery volumes and contaminant disposal records.

6.9.4 Remedial Action Under Independent Closure Process

Remediation objectives for the ICP are expected to be based upon land use appropriate screening concentrations for each contaminant of concern. Residential screening levels for each

contaminant of concern can be found in the *Remediation Closure Guide* (RCG) (*Waste-0046-R1*) (www.IN.gov/idem/4694.htm) and must be used as the remediation goal when the site is residential or may include residential use in the future. Industrial or commercial use sites must achieve industrial use remediation goals and record an appropriate ERC on the deed in order to qualify for closure. Because the RCG will not include industrial screening levels for the ground water ingestion pathway, the ICP closure goal for industrial or commercial use sites will be determined by using a safety multiplication factor of 10 times the contaminant specific residential screening level for the ground water ingestion pathway. Investigation of any groundwater pathway should be performed in accordance with the RCG. The SCP ICP Guidance (www.IN.gov/idem/6548.htm) contains specific examples of how to use the industrial multiplier to determine appropriate industrial closure goals for industrial use ICP sites.

For a low priority site, the RP must complete investigation (*of contaminant nature and extent*) and remediation within one year of notification by IDEM. For a medium priority site contaminated only with petroleum, the RP must complete remediation within three years of notification. If a site fails to progress through the ICP within the specified timelines the RP will not be allowed to continue using the ICP for that site.

An ERC or other institutional control is generally necessary for impacted properties if contaminants remain at concentrations exceeding the residential screening levels. Documentation that the institutional control is in place should be submitted with the closure documentation.

6.10 Closure

The RCG (*Waste-0046-R1*) (<http://www.in.gov/idem/4694.htm>) explains in detail appropriate technical procedures and approaches to achieve site closure. In general, the SCP will issue closure in the form of a No Further Action letter. Indiana law allows parties to select the type of remedy that best achieves remediation objectives. IDEM can modify an NFA decision if additional data or new information indicates that a site may become a risk to human health of the environment.

6.10.1 Record of Site Closure

The RP should complete and submit the Record of Site Closure (RSC) - State Form 54472 (www.IN.gov/idem/5157.htm) with the Remediation Completion Report. The RSC form should summarize the information in the completion report and the completion report checklist. If the RSC form is incomplete IDEM will request that the RP update and re-submit the form. An incomplete RSC may delay the closure approval. The RP should contact the SCP project manager to discuss specific information to be included in the RSC form to minimize delays.

6.10.2 Split Sampling for Confirmation

IDEM may split samples whenever necessary, at the discretion of the SCP project manager. Split samples can consist of any environmental media. The project manager will collect samples from the same locations and at the same time as the RP. The split samples will be analyzed using the same methods at different laboratories to determine if analytical results are comparable. Split sampling may be utilized at any time during the project, but may occur most frequently at the time of closure to verify closure data. IDEM will seek reimbursement of split sampling costs from the RP.

6.10.3 Environmental Restrictive Covenants (ERC) and Environmental Restrictive Ordinances (ERO)

If an institutional control (*such as an ERC or ERO*) (www.IN.gov/idem/5959.htm) is part of the remedy, the RP must provide proof in the completion report that the control is in place. A draft ERC must be submitted to SCP for approval of restriction language and verification of property ownership and legal description. A copy of the signed and recorded ERC should be included in the completion report. For an ERO, evidence that the ordinance has been passed by the local unit of government must be provided. A public hearing may be required prior to approval of the RWP.

ERCs must remain in effect until IDEM agrees that they may be removed. Restrictions provided by an ERC may only be modified with agreement of IDEM.

6.10.4 No Further Action Letter

SCP will issue a No Further Action (NFA) letter to approve closure of a high or medium priority remediation project (*which has an assigned project manager*). SCP will only issue the NFA letter upon successful completion of site investigation, implementation of the RWP, and implementation and monitoring of any necessary institutional controls. An NFA determination will remain in effect if conditions are unchanged and if no new or incorrect information is found that may alter the CSM. Institutional or engineering controls must be maintained and in continual effect for an NFA determination to remain valid.

6.10.5 ICP Closure Completion

Sites proceeding under the ICP will qualify for a closure determination from IDEM when they have verified and certified achievement of remediation to the land use specific screening levels and have implemented any necessary institutional controls such as ERCs. As with all other SCP projects, final executed ERCs must be presented with documentation of property ownership and legal description. Final ERCs must contain filing stamps from the particular County Recorder's office and also must be notarized.

Upon completion of all necessary remediation steps, the RP must submit all documentation to detail all steps taken to achieve closure. The ICP Closure Form – State Form 54166 (www.IN.gov/idem/5157.htm) will accompany all standard documentation. The ICP Closure Form acts as an executive summary to detail results of site investigation and remedial action. The RP and the RP's consultant must sign the ICP Closure Form to certify to IDEM that the data is accurate and the site meets all remediation objectives.

SCP will conduct a cursory review of the ICP documentation to verify the information and the ICP Closure Form are complete. The RP will be notified within 90 days of the results of the cursory review. If documentation is accurate and complete the SCP will issue an ICP Closure Completion letter.

Documents submitted for the ICP should be sent by mail to the SCP or to the SCP email address at scp@idem.in.gov.

6.11 Conditions Subsequent

The approved Remediation Work Plan or Long Term Maintenance or Monitoring Plan must address any contamination that may remain subsequent to remediation and closure. The SCP may grant a conditional closure. In that case, SCP will issue a No Further Action (NFA) letter with conditions subsequent to closure that must be monitored or maintained to ensure the continued effectiveness of the remedy. The NFA letter will identify the conditions. An environmental restrictive covenant (ERC) may also detail any condition that requires monitoring or maintenance. SCP will not agree to closure where conditions pose a potential or ongoing threat to human health or the environment.

6.12 When Issues Arise

Issue resolution can be informal or formal in the SCP. Most disagreements regarding the technical aspects of a project can be resolved through discussions with the project manager and the other parties. The SCP requests that the RP or consultant first discuss project specific disagreements with the project manager. If it is not possible to resolve issues between the technical staff, the RP or consultant may ask the SCP Section Chief to intervene. An issue may be raised through the IDEM chain of command for resolution. Formal dispute resolution procedures may be necessary.

When RPs do not agree to perform the cleanup upon formal request by IDEM, IDEM may issue an administrative order (*Commissioner's Order*) or seek a judicial order to compel a response and remediation. If RPs do not comply with the judicial order IDEM may request a court order for punitive damages of up to three times the total costs incurred by IDEM as a result of the RP's failure to properly provide removal or remedial action upon order of the court. RPs have the right to appeal during these stages.

6.13 Forms and Checklists

Sample copies of many forms, templates and checklists discussed in this RPG may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current State Forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as many other documents and websites have been provided where the document is discussed in the text.

- Sample 6.1 State Cleanup Program Independent Closure Process Site Closure - State Form 54166

These forms appear in Chapter 1:

- Sample 1.1 Record of Remedy Selection - State Form 54471
- Sample 1.2 Record of Site Closure - State Form 54472

Sample 6.1 State Cleanup Program Independent Closure Process Site Closure



**STATE CLEANUP PROGRAM
INDEPENDENT CLOSURE PROCESS
SITE CLOSURE**
State Form 54166 (11-09)

Indiana Department of Environmental Management
Office of Land Quality
100 North Senate Avenue
Mail Code 66-30, Room 1101
Indianapolis, IN 46204-2251
Telephone: (317) 234-4165
Fax: (317) 234-0428
E-mail: scp@idem.IN.gov

INSTRUCTIONS: The form must be completed in its entirety and submitted to IDEM upon request for independent closure process (ICP) site closure. This form is to be completed by **both** the environmental consultant and the responsible party. Questions regarding this form may be directed to the contact information above. ICP and your IDEM site number should be referenced in the subject line (if via email) to ensure a timely response.

I. SITE INFORMATION			
Site name (as reported to IDEM)			
Site location (number and street)			
Site location (city/State/ZIP code)			
IDEM site number			
II. RESPONSIBLE PARTY INFORMATION			
Responsible party name (company name and contact person)			
Responsible party address (number and street)			
Responsible party address (city/State/ZIP code)			
Telephone number			
E-mail			
III. ENVIRONMENTAL CONSULTANT INFORMATION			
Contact or consultant name (company name and contact person)			
Contact or consultant address (number and street)			
Contact or consultant address (city/State/ZIP code)			
Telephone number			
E-mail			
IV. ENVIRONMENTAL DATA			
Contaminant(s) (check all that apply)			
<input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Oil (specify)			
Estimated volume of release (gallons)			
Contaminant found in (check all that apply)			
<input type="checkbox"/> Soil <input type="checkbox"/> Ground water <input type="checkbox"/> Indoor air <input type="checkbox"/> Other (specify)			
Depth to ground water (feet)			
Ground water flow direction			
Determined by <input type="checkbox"/> Temp. ground water points <input type="checkbox"/> Perm. monitoring well <input type="checkbox"/> Topography <input type="checkbox"/> Other (specify)			
Potential receptors	Distance to (feet)	Investigated (check as appropriate)	Impacted (check as appropriate)
1. Water wells	1.	1. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2. Ground water	2.	2. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3. Surface water	3.	3. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4. Basements	4.	4. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5. Utility corridors	5.	5. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6. Other (specify)	6.	6. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Current land use <input type="checkbox"/> Residential <input type="checkbox"/> Commercial/industrial <input type="checkbox"/> Recreational <input type="checkbox"/> Other (specify)			
V. REMEDIATION SUMMARY			
Soil			
1. Ex-situ soil remediation	<input type="checkbox"/> Excavation <input type="checkbox"/> Other (specify)	Quantity removed (cubic yards)	<input type="checkbox"/> N/A
2. In-situ soil remediation	<input type="checkbox"/> Chemical injection (specify) <input type="checkbox"/> Other (specify)		<input type="checkbox"/> N/A
3. Soil source removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Ground water			
1. Ex-situ ground water remediation	<input type="checkbox"/> Pump and treat <input type="checkbox"/> Other	Volume removed (gallons)	<input type="checkbox"/> N/A
2. In-situ ground water remediation	<input type="checkbox"/> Chemical injection (specify) <input type="checkbox"/> Bioaugmentation (specify)	<input type="checkbox"/> Air sparge/soil vapor extraction <input type="checkbox"/> Other (specify)	<input type="checkbox"/> N/A
3. Ground water source removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

8. Has the recorded ERC been submitted to IDEM? Yes No N/A

9. Which restrictions are addressed in the ERC (if applicable)?

- Residential land use
- Well installation/drinking water consumption
- Excavation
- Other (specify)

10. As a record of communication, provide the following information for all documents (investigation, remediation, etc.) pertaining to the site.

Document title	Document date (month, day, year)	Environmental consulting company/preparer	IDEM's virtual file cabinet (VFC) document number

RESPONSIBLE PARTY CERTIFICATION

I certify that to the best of my knowledge the information presented and attached to this form is true and accurate. This recommendation is based on the available information and I have understood and acknowledged IDEM's requirements. I receive a copy of the Remediation Program letter, and am submitting the required documentation on behalf of the Responsible Party.

Signature

Date (month, day, year)

Printed name _____
Title _____
Company name _____

Notary

Before me, the undersigned, a Notary Public in and for said County and State, personally appeared (representative name) _____, the (relationship to responsible party, if different) _____ of the owner, (property owner name) _____, who acknowledged the execution of the foregoing instrument for and on behalf of said entity.

Witness my hand and Notarial Seal this _____ day of _____, 20____.

_____, Notary Public

Residing in _____ County, (State) _____

Date my commission expires: _____ (month, day, year)

VIII. ENVIRONMENTAL CONSULTANT CERTIFICATION STATEMENT

INSTRUCTIONS: For this site closure form to be valid, both the primary project manager and the principal owner* at the consulting company must sign and date. The primary project manager must be certified as a Licensed Professional Geologist (LPG), Professional Engineer (PE), or Certified Hazardous Materials Manager (CHMM).

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for closure is based on all available data as of _____ (month, day, year). I have understood and followed IDEM's requirements for receiving a Completion of Independent Closure Process letter, and am submitting the required documentation on behalf of _____ (Responsible party).

 Primary project manager signature _____ Date (month, day, year) _____

Printed name _____ Professional license number _____

Title _____

Company name _____

 Primary project manager signature _____ Date (month, day, year) _____

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for closure is based on all available data as of _____ (month, day, year). I have understood and followed IDEM's requirements for receiving a Completion of Independent Closure Process letter, and am submitting the required documentation on behalf of _____ (Responsible party).

 Principal owner* signature _____ Date (month, day, year) _____

Printed name _____

Title _____

Company name _____

*Principal owner means the owner, president, vice president, operations manager, etc. who is authorized to make decisions that represent the company.



7. SUPERFUND AND DEFENSE ENVIRONMENTAL RESTORATION PROGRAM

7.1 *Purpose and Scope*

Superfund Program: (www.IN.gov/idem/4152.htm) The goal of IDEM's Superfund Program is to reduce or eliminate risk to human health and the environment at hazardous substances sites. The program is currently addressing sites on the National Priorities List (NPL) and sites under alternative Superfund cleanup agreements. Sites include current and former chemical and manufacturing plants; rail yards; smelter sites; landfill and dump sites; and sediment sites. These sites are typically large and complex, requiring long-term investigations and cleanups. Many sites require ground water treatment and monitoring that may continue for 30 years or more after construction completion. Information about Indiana Superfund sites is available on the U.S. EPA Superfund website (www.epa.gov/superfund).

IDEM's Superfund Program is funded primarily through grants from the U.S. EPA, which fund 90 percent of the core (*administrative*) activities and 100 percent of the site-specific activities. At Superfund sites without responsible parties, IDEM pays for 10 percent of the cleanup actions and all of the cost to operate and maintain the remedies. IDEM also recovers its costs directly from some responsible parties.

Defense Environmental Restoration Program: (www.IN.gov/idem/4152.htm) IDEM's Defense Environmental Restoration Program (DERP) oversees and assists the Department of Defense, in cooperation with U.S. EPA, in the investigation and cleanup of active, closing or formerly used military installations at which hazardous substances and/or petroleum products were used, stored, or disposed of during past operations, such that human health and the environment are protected and economic redevelopment can occur. The sites are identified by the Department of Defense, and follow the same investigation and cleanup process as the federal Superfund Program as described in this chapter. None of these sites in Indiana are on the NPL.

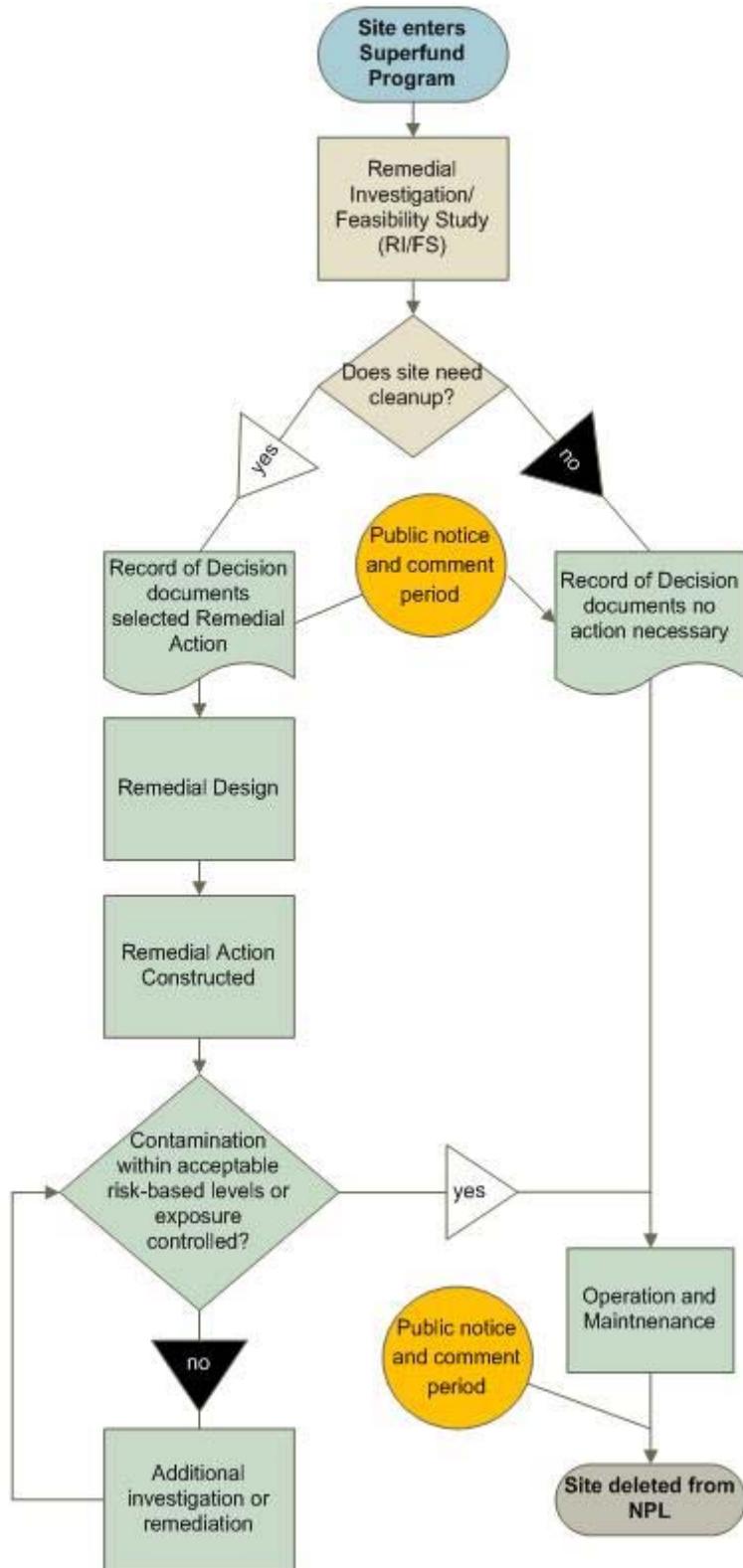
IDEM's DERP Program is funded by the Department of Defense.

7.2 *Rules and Laws*

- *The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*, 42 U.S.C. 9601 *et. seq* – CERCLA, (www.epa.gov/superfund/policy/index.htm) commonly known as the Superfund Law, was created by Congress in 1980 to clean up properties contaminated with hazardous substances. Among other things, CERCLA authorized EPA to identify parties responsible for contamination and compel cleanup or recover cleanup costs, and provided a trust fund to pay for cleanups at sites where no responsible parties could be found.
- *The National Oil and Hazardous Substances Contingency Plan (NCP)*, 40 C.F.R. Part 300 - (www.epa.gov/superfund/policy/index.htm). The NCP is the federal government's blueprint for responding to oil spills and hazardous substance releases. It identifies the Superfund process and designates roles for state and federal response. The NCP is set forth in rules.
- *Superfund Amendments and Reauthorization Act (SARA)*, P.L. 99-499, 100 STAT. 1613 *et. seq.* – (www.epa.gov/superfund/policy/index.htm). SARA amended CERCLA in 1986, and implemented key changes including requiring an increased focus on human health impact, requiring adherence to substantive requirements of other agencies rules and laws, and increased state involvement. It also expanded CERCLA and formally established the DERP Program.

7.3 Process Overview

Figure 7.1 Superfund Program Process Overview



7.4 How Does a Site Enter the Program?

A site becomes a Superfund site by being placed on the NPL by U.S. EPA (www.epa.gov/superfund/about.htm). A site is proposed for the NPL by being published in the Federal Register, and a public comment period takes place. After the public comment period, a site selected is again published in the Federal Register as a final NPL site. An IDEM project manager may be assigned during the Site Investigation process, (*usually conducted by IDEM staff, see Chapter Five*) once it is known that a site will be proposed for the NPL, so that the project manager can be involved as early in the process as possible. When IDEM is notified the site is has been placed on the NPL, a project manager is always assigned.

7.5 Emergency or Immediate Actions

Emergency Removals: (www.epa.gov/superfund/programs/er/hazsubs/timecrit.htm) U.S. EPA response teams respond to immediate or emergency threats, including chemical spills, toxic fumes, or contaminated water 24 hours a day.

Time Critical Removals: Time-critical removal actions are conducted at sites when the lead agency determines actions to protect public health must be undertaken with limited planning time. (*Usually U.S. EPA is the lead agency. In some cases IDEM may be the lead agency.*) These actions must be completed within one year, and cost less than \$2 million.

Non-time Critical Removals: Non-time-critical removal actions are conducted at Superfund sites when the lead agency determines based on the site evaluation, that a removal action is appropriate, and a planning period of at least six months is available before on-site activities must begin.

7.6 How Is the Public Involved or Notified?

There are multiple opportunities for the public to become involved and obtain information:

- **Community Relations Plan** – U.S. EPA will appoint a Community Involvement Coordinator (CIC) to work with the community throughout the cleanup process. A Community Relations Plan is created to outline the kind of outreach that will take place and how the community may expect to receive information.
- **Information Repository** – An information repository, usually in a library or other public location, is established in a central location in the community to store site-related information.
- **Administrative Record** – major site documents that are used to make site decisions are placed in an administrative record file. Copies are maintained with the U.S. EPA, IDEM, and at the Information Repository.
- **Public Comment Periods** – Public comment periods are required before a site is placed on the NPL list, when there is a proposed plan for a Record of Decision (ROD), and when U.S. EPA proposes to delist a site. Project managers also may hold informal meetings to update the public about site information.

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs

IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

7.7 Investigation

After a site is listed on the NPL, a Remedial Investigation/Feasibility Study (RI/FS) is performed (www.epa.gov/superfund/cleanup/index.htm). The RI evaluates the nature and extent of contamination, and the FS assesses the feasibility of several cleanup alternatives. The FS considers treatability of site contamination and evaluates the potential performance and cost of the remediation alternatives. A Human Health Risk Assessment and Ecological Risk Assessment (www.epa.gov/oswer/riskassessment/risk_superfund.htm) are conducted during the RI/FS to determine the need for cleanup actions to protect human health and the environment, and if the proposed remedial actions will be protective.

7.8 Remedy Decision

A ROD documents a cleanup decision at a site (www.epa.gov/superfund/cleanup/rod.htm). A ROD summarizes:

- Site history, description, and characteristics
- Community participation
- Enforcement activities
- Past and present cleanup and investigation activities
- Contaminants and contaminated media
- Summary of site risks
- Scope and role of response action
- The remedy selected for cleanup, including remediation objectives

A remedy decision is based on nine evaluation criteria listed in the NCP (*40 CFR Part 300.430[e] [9] [iii]*):

1. Overall protection of human health and the environment
2. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)
3. Long-term effectiveness and permanence
4. Reduction of Toxicity, Mobility or Volume Through Treatment
5. Short-term effectiveness
6. Implementability
7. Cost
8. State acceptance
9. Community acceptance

7.9 Remedial Action

The cleanup phase is called Remedial Design/Remedial Action (RD/RA) (www.epa.gov/superfund/cleanup/rdra.htm). The RD includes development of the engineering design and technical specifications for the construction of the remedy, which are presented in the RD Report. The RA includes development of the plans to implement the RD, and implementation. Construction projects can take from months to years to complete. Once all physical construction is finished, the site has reached Construction Completion.

7.10 Closure

When a site requires no further remedial action to protect human health and the environment, it can qualify for deletion from the NPL (www.epa.gov/superfund/programs/npl_hrs/nploff.htm).

- A Deletion Package is prepared, including the Final Close-Out Report and any other information that supports site deletion.
- U.S. EPA publishes a Notice of Intent to Delete in the Federal Register for public comment.
- After the public comment period, if the site still warrants deletion, U.S. EPA will publish a final Notice of Deletion in the Federal Register.
- If a site is deleted from the NPL with contamination left in place (*where exposure is prevented through engineering or institutional controls*), it may still require Operations and Maintenance and Five-Year Remedy Reviews.

7.11 Conditions Subsequent

Monitoring/Operations and Maintenance

Most sites require monitoring and operation and maintenance of remedy components (*such as landfill caps, slurry walls, fences, and other permanent engineered remedies*) (www.epa.gov/superfund/cleanup/post.htm). In many cases, monitoring and operations and maintenance activities continue indefinitely, as long as waste is in place at the site. U.S. EPA and the State review sites with waste left in place every five years to ensure the remedy continues to protect human health and the environment. The Five-Year Remedy Review process (www.epa.gov/superfund/cleanup/postconstruction/5yr.htm) evaluates all data collected in the previous five years about the status of the remedy, including sampling, inspections, public comments, and effectiveness of institutional controls.

7.12 *When Issues Arise*

CERCLA gives U.S. EPA the authority to negotiate agreements (*usually a Consent Decree or Administrative Order on Consent*) with responsible parties and government parties to pay for cleanups on Superfund sites. Under most circumstances, IDEM, U.S. EPA, and the responsible parties will complete work at a Superfund site under a Consent Decree that includes specific dispute resolution procedures.

Many disagreements regarding the technical aspects of a project can be resolved through discussions between the project manager and the other parties. An issue may be raised through the IDEM and/or U.S. EPA chain of command for resolution. Formal dispute resolution procedures may be necessary.

If responsible parties do not agree to perform the cleanup or refuse to perform work they previously agreed to perform under a settlement agreement, U.S. EPA may issue a Unilateral Administrative Order (UAO). If the responsible parties do not comply with the UAO, the courts may assess penalties, order treble damages, and/or issue a judicial order requiring cleanup.

7.13 *Forms and Checklists*

Sample copies of many forms, templates and checklists discussed in this *Remediation Program Guide* (RPG) may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current State Forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as links to many other documents and websites have been provided where the document is discussed in the text.

The following links and documents are good sources of information regarding the Superfund Program:

- U.S. EPA Superfund Laws, Policies and Guidance (www.epa.gov/superfund/policy/index.htm)
- EPA Superseded Remedy Guidance Documents (www.epa.gov/superfund/policy/remedy/sfremedy/supersede.htm)

8. VOLUNTARY REMEDIATION PROGRAM

8.1 Purpose and Scope

The Voluntary Remediation Program (VRP) (www.IN.gov/idem/4127.htm) provides a process for property owners, operators, potential purchasers, and third parties to voluntarily address (by *investigating and, if necessary, remediating*) property that is or that may be contaminated. Participants are typically current or past property owners, current or past lessees, and prospective purchasers. Local units of government who have obtained property by default, or have an interest in developing property also may participate.

Successful completion of the VRP process can facilitate property transfers.

- VRP Participants who successfully implement a Remediation Work Plan (RWP) for a project receive a Certificate of Completion from IDEM and a Covenant Not To Sue (*for liability or claims resulting from the release of a hazardous substance or petroleum, where that release is address by a RWP approved by IDEM*) from the Governor. These assure that the participants and property will not become the subject of future IDEM enforcement action (*subject to certain exceptions*).
- *A Memorandum of Understanding between U.S. EPA and IDEM Resource Conservation and Recovery Act Corrective Action (RCRA) (September 3, 2004)* (www.IN.gov/idem/4127.htm) supports the use of the VRP (*at facilities where the remediation objectives are consistent with RCRA*) to implement RCRA Subtitle C Corrective Action requirements, and to facilitate brownfield redevelopment in Indiana.
- *A Memorandum of Agreement between IDEM and U.S. EPA for the Indiana Voluntary Remediation Program (December 4, 1995)* (www.IN.gov/idem/4127.htm) provides that, under this MOA, for any site receiving a Certificate of Completion from the Voluntary Remediation Program, the U.S. EPA will not plan or anticipate any federal action under the Superfund law, unless it poses an imminent and substantial threat to human health or the environment. This agreement does not apply to sites on the Superfund National Priorities List (NPL) or sites currently subject to orders of enforcement under Superfund.

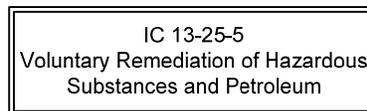
8.2 Rules and Laws

Indiana Statutory Authority (www.IN.gov/legislative/ic_iac)

Indiana Code (IC) 13-25-5 established requirements for VRP participation and established the Voluntary Remediation Agreement (VRA). Among other things, the statute addresses:

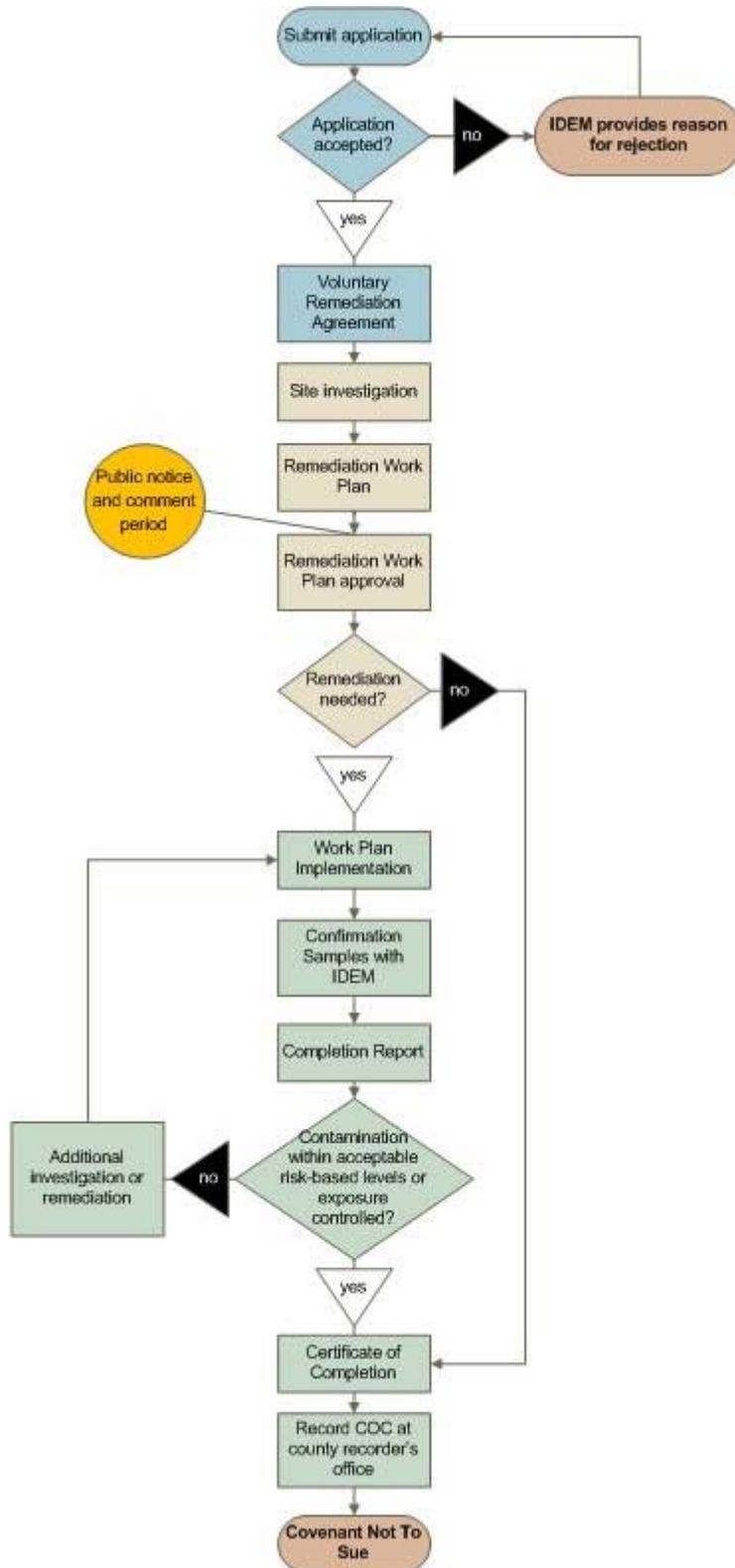
- The application process
- Eligibility criteria
- Document submittal timelines
- Remediation objectives, Remediation Work Plan contents, and how a work plan is accepted or rejected
- A public comment period
- Issuance of a Certificate of Completion and Covenant Not To Sue.

Figure 8.1 Laws and Rules Related to Voluntary Remediation



8.3 Process Overview

Figure 8.2 Voluntary Remediation Process Overview



8.4 *How Does a Site Enter the Program?*

8.4.1 Eligibility

Any person who has established property control or access and who wishes to investigate and remediate property contaminated with petroleum or hazardous substances is eligible to participate in the VRP Program unless one of the following conditions applies:

- State or federal enforcement is pending concerning the remediation described in the application
- A federal grant requires an enforcement action
- The condition described in the application constitutes an imminent and substantial threat to human health or the environment
- The application form is not complete

If there is evidence of uncontrolled exposure pathways IDEM may determine that the site constitutes an imminent and substantial threat. Impacted drinking water wells, vapor intrusion into an occupied space, or direct exposure to highly impacted soil are examples of uncontrolled pathways.

Applicants that have already completed remediation also may be eligible to participate.

8.4.2 Voluntary Remediation Program Application

IDEM uses information provided on the VRP application (www.IN.gov/idem/5157.htm) to determine eligibility. The application information also identifies the applicant, provides an initial summary of site conditions, and defines the preliminary scope of the investigation and remediation.

- Participation begins by submitting an application on a form provided by IDEM. After receiving the application and fee, IDEM assigns a unique project number and performs an internal enforcement check.
- Multiple parties may apply as co-applicants.
- The application fee is \$1,000. The VRP cannot process the application until the fee is received. Political subdivisions are not required to submit a fee.
- The application is confidential until IDEM and the applicant sign the Voluntary Remediation Agreement (VRA).
- IDEM holds the application fee until the project is completed or terminated, at which time IDEM will either refund the fee or apply it toward any outstanding payments

The application must include an environmental assessment. The environmental assessment must include:

- A legal description of the site
- The physical characteristics of the site
- The operational history of the site to the extent the history is known by the applicant
- Information that the applicant is aware of concerning
 - The nature and extent of any relevant contamination and
 - Relevant releases
- Relevant information the applicant is aware of concerning the potential for human exposure to contamination at the site

IDEM has 30 days to determine eligibility. Incomplete applications are returned within 45 days of receipt with missing information identified. An applicant may revise and resubmit the application. A resubmitted application does not require an additional fee. Upon approval, the VRP will send a formal acceptance letter to the designated contact person in the application. That letter will identify the assigned VRP project manager.

8.4.3 Voluntary Remediation Agreement (VRA)

IDEM and the VRP participant must enter into a VRA that defines the terms and conditions of participation, and identifies the obligations of the participant and IDEM. IDEM will not commit significant time and effort to a project until the VRA is fully executed. The VRA establishes deadlines to complete significant project milestones.

- After an application is accepted, the project manager will send the participant a standard VRA and a nonbinding VRP oversight cost estimate.
- The participant may sign the VRA and return it for final approval or suggest a modified VRA. Although many program aspects cannot be altered in the VRA, changes may be allowable and mutually beneficial. For example, language may be added to address specific circumstances for a RCRA Corrective Action site, or to address natural resource damages.
- The VRA requires the participant to submit a proposed Remediation Work Plan no later than 180 days after the VRA is signed unless the participant requests and IDEM grants a written extension. IDEM will not grant extensions without just cause.
- By signing a VRA, the participant agrees to reimburse IDEM for its administrative costs. Administrative costs are generally assessed at an hourly rate. Lab costs and costs of any contractor hired by IDEM in connection with the project are billed to the applicant for the same amount at which IDEM is billed. IDEM administrative costs include, but are not limited to IDEM's time and effort to:
 - Review documents
 - Conduct site visits
 - Monitor compliance

IDEM provides an estimate of projected administrative cost with the VRA for the applicant's consideration. However, as IDEM cannot predict the level of effort over the life of a project based on the application information provided, the estimate does not bind IDEM to a maximum cost that IDEM is entitled to bill the participant under the agreement.

IDEM will not issue closure documents if administrative costs that have been invoiced are past due. If the agreement is terminated for any reason, the participant agrees to reimburse IDEM for all of its administrative costs incurred to the time of termination.

The VRA template is available on the IDEM VRP website (www.IN.gov/idem/4127.htm).

8.5 *Emergency or Immediate Actions*

IDEM may reject the application if conditions constitute an imminent and substantial threat to human health or the environment. Regardless of whether IDEM has accepted an application, IDEM may determine later that an imminent and substantial threat exists and withdraw approval

of the RWP. If a spill occurs at a site participating in the VRP, the participant is responsible to follow all reporting requirements that otherwise apply, and to take appropriate action to respond to the release. The participant may need to coordinate activities with IDEM's Emergency Response section (www.IN.gov/idem/4155.htm). If the spill constitutes an imminent and substantial threat, IDEM may allow the site to remain in the VRP for any necessary long-term remedial actions after the participant has addressed the spill.

See Section 8.4.1 above for additional discussion of imminent and substantial threat.

8.6 How Is the Public Involved or Notified?

The participant and/or IDEM can open lines of communication with affected residents or businesses, and help reduce suspicion or confusion by holding informational meetings, or through effective written communication.

Community Relations Plan

VRP Participants are required to submit a Community Relations Plan (CRP) (www.IN.gov/idem/4127.htm). The CRP must identify property owners or occupants who are affected, or potentially affected, by contamination. When the RWP is made available for public comment, the participant must give written notice of the public comment period to the affected or potentially affected property owners or occupants identified in the CRP. The CRP may require the participant to post an informational sign at the site if certain conditions exist.

Before IDEM may approve or reject a proposed RWP, IDEM must:

1. Notify local governmental units located in the county affected by the proposed project of the Remediation Work Plan
2. Provide that a copy of the proposed Remediation Work Plan (RWP) be placed in a library in the county where the cleanup is taking place
3. Publish a notice (www.IN.gov/idem/5474.htm) requesting comments on the proposed RWP
4. Provide a public comment period of at least 30 days following publication of the notice. Interested parties may submit written comments on the work plan, and request a public hearing on the RWP

Use of an Environmental Restrictive Ordinance (ERO)

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs

IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

8.7 Investigation

VRP participants may choose to limit their project to specific releases rather than all known releases. However, the liability protection offered by the Covenant Not to Sue (CNTS) (www.IN.gov/idem/4127.htm) is limited to releases addressed in an approved Remediation Work Plan (RWP).

Participants are required to address all known contamination associated with the release(s), including evaluation of all potentially affected media. The investigation should evaluate all potential exposure pathways (*soil, ground water, surface water, air, ecological receptors*) based on the current and expected future use of the site and the affected area surrounding the site. For example, if the participant can adequately demonstrate that current or future residential exposure is unlikely on an industrial/commercial property, and that adjacent property is not affected by the release, delineation of contamination to residential standards may not be necessary. Site investigation activities should be consistent with the quality assurance project plan (QAPP). The *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) contains additional information about completing a site investigation.

Although not required, the VRP Participant is encouraged to submit an Investigation Work Plan (*Sampling and Analysis Plan*) prior to completing site characterization activities, to allow IDEM to provide feedback.

8.8 Remedy Decision

8.8.1 Remediation Work Plan (RWP)

The participant must submit a proposed RWP for IDEM's review and approval. The proposed RWP must be submitted within 180 days of when the VRA is signed, unless IDEM agrees in writing to an extension.

The proposed RWP must include:

- Detailed documentation of the investigation performed (*or to be performed*) to determine the nature and extent of the release
- A statement of work to accomplish the remediation in accordance with agency guidelines
- A quality assurance project plan
- A health and safety plan
- A community relations plan
- A data management plan
- A proposed schedule to implement the work plan

There also are provisions within the statute that vary slightly from the items listed above that allow the participant to submit an RWP for projects that are already completed (*See IC 13-25-5-7[c]*) (www.IN.gov/legislative/ic_iac).

The proposed RWP must identify the nature and extent of the releases being addressed, evaluate all potential exposure pathways, and explain how the participant intends to achieve the remediation objectives. IDEM recommends that information about the site be presented through a conceptual site model (CSM) as discussed in the *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm). If institutional controls will be proposed as part of the remedy, IDEM recommends including draft copies of any environmental restrictive covenant (ERC) or environmental restrictive ordinance (ERO) in the proposed RWP.

8.8.2 Remediation Objectives

The RWP must specify the remediation objectives for the site. In accordance with IC 13-25-5-8.5, remediation objectives for each hazardous substance and any petroleum on the site shall be based on:

- (1) Levels of hazardous substances and petroleum calculated by the department using standard equations and default values for particular hazardous substances or petroleum.
- (2) Levels of hazardous substances and petroleum calculated using site specific data for the default values in the department's standard equations.
- (3) Levels of hazardous substances and petroleum developed based on site specific risk assessments that take into account site specific factors, including remedial measures, restrictive covenants, and environmental restrictive ordinances that:
 - (A) manage risk; and
 - (B) control completed or potential exposure pathways.

An RWP may propose more than one remediation objective. For example, the participant may show that most contaminants are at or below screening levels, and demonstrate that risk associated with contaminants exceeding screening levels will be effectively managed through institutional controls such as an environmental restrictive covenant (ERC) or an environmental restrictive ordinance (ERO) that control completed or potential exposure pathways. The *Remediation Closure Guide (Waste-0046-R1)* (www.IN.gov/idem/4694.htm) contains more information about remedy selection, ERCs, and EROs.

8.8.3 Evaluation of Proposed RWP

IDEM will evaluate proposals to ensure that they are accurate and thorough and comply with rules, laws and guidelines established by the department.

The participant must submit a complete RWP that complies with IC 13-25-5-7 within the established timeline. Complications (*such as property access or completion of a pilot study*) can prevent a complete understanding of site conditions and the submittal of a comprehensive document. If the participant cannot submit a final RWP as scheduled, the participant should submit an interim RWP that is as complete as possible in accordance with the timeline. This will allow IDEM to gain a general understanding of site conditions and evaluate progress at the site. If IDEM determines that the participant has not made a good-faith effort to submit a complete RWP, IDEM may reject the RWP as incomplete and terminate the VRA.

At any time during the evaluation of the work plan, IDEM may request that the participant submit additional or corrected information. IDEM typically requests items such as additional site characterization, clarification, or refinement of the statement of work to accomplish remediation

objectives. IDEM may also request additional information about quality assurance, health and safety, or community relations plans.

The participant may comply with the request for additional information, or withdraw the proposed work plan from consideration. If responses are not provided in a timely manner, IDEM may reject the RWP and terminate the VRA. If the participant withdraws the RWP from consideration and does not resubmit in a timely manner, IDEM may consider this to be equivalent to failure to submit an RWP and terminate the VRA.

The VRP recommends that RWPs be developed in accordance with the Remediation Work Plan Completeness Checklist available on IDEM's Forms website (www.IN.gov/idem/5157.htm).

Use of the checklist should help the participant develop a comprehensive RWP and avoid unnecessary delays during the review process.

8.8.4 Agency Decision on RWP

IDEM must provide a public comment period of at least 30 days prior to any formal decision on the RWP. See Section 8.6 above.

Following its review of the RWP, IDEM may:

- Approve
- Modify and approve
- Reject the proposed work plan

If IDEM decides to reject an RWP, it must notify the participant and specify the reasons. The participant may appeal the decision. Typically, IDEM will work with the participant to resolve deficiencies in the RWP before rejecting a work plan.

IDEM must also notify the participant of its intent to approve, or modify and approve an RWP. The participant may appeal IDEM's decision.

8.8.5 Record of Remedy Selection

The participant should submit a Record of Remedy Selection or a Record of Site Closure (www.IN.gov/idem/5157.htm) with the proposed RWP.

The Record of Remedy Selection (RRS) presents the remedial action plan. It certifies that the remedy selection process was carried out properly; describes the technical parameters; specifies the remedy components and remediation goals; and provides a consolidated source of information - including the rationale behind the selection.

The Record of Site Closure (RSC) presents the site closure decision. In cases where IDEM can approve the remedy selection and site closure simultaneously, the RSC may present all information about the remedy selection and remedial action(s) performed, so an RRS would not be necessary. It describes the technical parameters; specifies the remedy components and remediation goals; and provides a consolidated source of information - including the rationale behind the selection.

IDEM staff will indicate approval by signing and returning the form to the requestor, or if a form is incomplete or inaccurate, provide comments.

8.9 Remedial Action

Remediation Work Plan Implementation

The VRP participant must notify IDEM of its intent to implement the RWP within 60 days of RWP approval. Failure to provide written notification may jeopardize IDEM's approval of the work plan. IDEM must oversee RWP implementation. This is typically done through review of written progress reports provided by the participant (*for example, ground water monitoring reports*) and IDEM field oversight.

A participant may commence the work contemplated in the RWP before the RWP is approved, at the participant's risk. If prompt action to mitigate risk or remove source material in advance of RWP approval is advisable, IDEM may provide a letter approving an interim action in advance of RWP approval.

8.10 Closure

8.10.1 Closure Samples

The participant must provide empirical evidence through sample data that site conditions are appropriate for closure. If active remediation (*for example, soil excavation, ground water pump and treat*) was implemented to meet a numeric standard, IDEM will require samples of the appropriate media to demonstrate compliance with the standard.

The purpose of confirmation sampling is to confirm previously submitted results. This may be achieved with a limited number of samples. The purpose is not to re-characterize the area. If a project enters the VRP after remediation is complete or after an investigation suggests that no further action is required, IDEM may still require confirmation samples to determine if remediation objectives were achieved.

IDEM may choose to split confirmation samples with the VRP participant to independently verify that site conditions meet the objectives approved in the Remediation Work Plan (RWP).

8.10.2 Completion Report and Record of Site Closure

The participant must submit a remediation completion report that will provide the basis for IDEM to determine if an approved RWP has been successfully implemented. The participant may use the Remediation Completion Report Completeness Checklist, (www.IN.gov/idem/5157.htm) to develop a comprehensive completion report.

The completion report may be a stand-alone document submitted after an approved remedy is completed. For a site with a completed remedy, or where no remedy is necessary, the completion report may be submitted as part of the RWP. The completion report should reflect the project as approved in the RWP, and demonstrate how the remediation objectives were met. If an institutional control (*ERC or ERO*) is part of the remedy, the participant must provide proof in the completion report that the control is in place. For an ERC, a copy of the signed and recorded

ERC must be included in the completion report. For an ERO, evidence that the ordinance has been passed by the local unit of government must be provided.

Participants must submit an RSC (www.IN.gov/idem/5157.htm) with the remediation completion report.

IDEM staff will review the completion report and the RSC, and will either indicate approval by signing and returning the form to the requestor, or provide comments on the form and/or completion report.

8.10.3 Certificate of Completion and Covenant Not to Sue (www.IN.gov/idem/4127.htm)

If IDEM determines that the RWP was successfully implemented, IDEM will issue a Certificate of Completion for the releases addressed in the approved work plan. If IDEM determines that the RWP was not successfully implemented, IDEM must notify the participant, and the participant may appeal this decision.

The participant must record the Certificate of Completion at the County Recorder's Office and provide evidence of the recording to IDEM. When that is accomplished the Governor will provide a Covenant Not to Sue (CNTS). IDEM will not issue the Certificate of Completion or CNTS until all billed oversight costs have been paid.

The Certificate of Completion and CNTS assure the participant and future land owners that the voluntary remediation has been performed properly and that associated future liability is limited. Closure may be concluded with contaminants left in place, in which case there may be conditions that must be maintained or performed subsequent to closure.

8.11 Conditions Subsequent

The VRP may include conditions that must be performed or maintained after closure in the Certificate of Completion and CNTS. Examples may include ongoing ground water monitoring, continued operation of a vapor mitigation system, or operation and maintenance of a ground water treatment system. IDEM will consider whether it is appropriate to approve closure at sites with active, ongoing obligations on a case-by-case basis. IDEM will not grant closure if the participant has not demonstrated that the proposed remedy is working properly and effective at controlling risk and preventing exposure. IDEM may require financial assurance if it determines such assurance is necessary to ensure the continued effectiveness of the remedial action.

If closure is approved with ongoing obligations, the Certificate of Completion and CNTS will be conditioned on the continuing performance or maintenance of the ongoing obligations such that the remedy continues to be effective. If the conditions are not performed or maintained, then the covenant would no longer bar an action by IDEM against the recipient of the covenant. IDEM would not have to take action to void, rescind, or reopen the covenant—the shield from liability would simply no longer exist.

The provisions in this subsection are not intended to be a substitute for required institutional controls.

8.12 When Issues Arise

The VRA contains provisions for dispute resolution. The parties are encouraged to make a good-faith effort to resolve disagreements informally. To begin a formal dispute resolution process the participant should provide a written statement to IDEM identifying the specific matters in dispute, and include the legal and technical basis for their position. While the dispute is being considered, the participant agrees to continue to meet its responsibilities under the VRA that are not affected by the dispute. If IDEM and the participant are still unable to resolve the dispute, IDEM will respond in writing to the participant. IDEM also will send the response to the IDEM Commissioner along with the participant's written statement. The Commissioner will make a determination about the dispute and notify the participant in writing. The Commissioner's determination is considered to be final and conclusive. However, the participant may appeal the decision under the *Administrative Orders and Procedures Act* (AOPA), (IC 4-21.5) (www.IN.gov/legislative/ic_iac). The parties may mutually agree to submit the dispute to arbitration or mediation for a determination.

8.13 Forms and Checklists

Sample copies of many forms, templates and checklists discussed in this *Remediation Program Guide* (RPG) may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.**

Current State Forms that can be completed electronically are posted on the IDEM Forms website (www.IN.gov/idem/5157.htm) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as links to many other documents and websites have been provided where the document is discussed in the text.

- Sample 8.1 Voluntary Remediation Program Application and Instructions - State Form 47271 (*The instructions are not included in this sample*)
- Sample 8.2 Remediation Work Plan Completeness Checklist - State Form 53413
- Sample 8.3 Remediation Completeness Report Completeness Checklist - State Form 54168
- Sample 8.4 Certificate of Completion
- Sample 8.5 Environmental Restrictive Covenant VRP Template

Additional program documents:

- Sample 8.6 Voluntary Remediation Agreement Template
- Sample 8.7 Covenant Not to Sue Template

These forms appear in Chapter 1:

- Sample 1.1 Record of Remedy Selection - State Form 54471
- Sample 1.2 Record of Site Closure - State Form 54472

Sample 8.1 Voluntary Remediation Program Application and Instructions



Voluntary Remediation Program Application

State Form 47271 (R3/6-08)
Approved by State Board Accounts, 2008
Indiana Department of Environmental Management

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Cashier's Office, Mail Code 50-10C
100 N. Senate Ave.
Indianapolis, IN 46204

INSTRUCTIONS This application form shall be used to apply to the Voluntary Remediation Program pursuant to Indiana Code 13-25-5-2. When completed, please return this form and support documents to the address given in the box above.

CONFIDENTIAL

Project Number: 6 | | | | |

VRP Account #: 2680-110000-421400

Pursuant to Indiana Code 13-25-5-2, this application to the Voluntary Remediation Program (VRP) will remain confidential until the Voluntary Remediation Agreement (VRA) is signed by both parties. Neither this application nor any information which comes from this application will be made available to the public until the VRA is signed. However, any material submitted to or generated by the VRP including this application will be considered IDEM public record after the VRA is signed.

Section 1 - VRP Project Information

Voluntary Remediation Applicant

Applicant Billing Contact

(IDEM's cost recovery invoices will be mailed to the individual/entity identified. The application will not be complete without this information)

Applicant Name: <small>Name to appear on the Coverpage Not To Sign</small>		Billed Company:	
Contact Person:		Contact Person:	
Mailing Address:		Mailing Address:	
City, State, ZIP:		City, State, ZIP:	
Phone & Fax:		Phone & Fax:	
E-Mail:		Federal Tax ID <small>(Required)</small>	

VRP Project Name and Location

Applicant's Registered Agent

person accepting responsibility for corporation

Facility Name:		Company:	
Site Address:		Company Address:	
City:		City, State, ZIP:	
County:		Phone & Fax:	
EPA ID Number:		E-Mail:	

Applicable Facility Standard Industry Code(s) & Description(s):

SIC Number: _____

Description: _____

*Please provide information on an additional page if there are not enough spaces for entries.

Anticipated Future Facility Use: <input type="checkbox"/> Residential <input type="checkbox"/> Recreational <input type="checkbox"/> Non-Residential <input type="checkbox"/> Currently Undetermined	Years of Current Facility Operation: _____ Years (Current Operation) <input type="checkbox"/> Unknown _____ Total years site has been in use (Current and Historic)
Current Site Status (Check all that apply) <input type="checkbox"/> Undergoing Property Transfer <input type="checkbox"/> Inactive Operations <input type="checkbox"/> Active Operations <input type="checkbox"/> Residential <input type="checkbox"/> Commercial/Industrial	Official State Use Only Date Stamp

Other IDEM Offices:

Does this site have a previous history with the Voluntary Remediation Program? No Yes (if yes, please attach appropriate page from Section 3 of this application)

Has a spill for this site been reported to IDEM's Emergency Response/Remedial Response Program? No Yes (if yes, please provide the incident number below and attach the appropriate page from Section 3 of this application)

Please be advised that if an appropriate remedial response is not completed in the Voluntary Remediation Program, IDEM will refer the site to the appropriate remedial program to determine if further action is required.

Emergency Response/ Remedial Response Program incident number: _____

Is this application the result of a referral from, or under the jurisdiction of, another IDEM office?

Yes (If yes, indicate which office and complete the appropriate page in Section 3.) No

Brownfields Program

RCRA / Corrective Action

Leaking Underground Storage Tanks (LUST) / Underground Storage Tanks (UST)

State Cleanup Section

Office of Enforcement

Office of Waste (Landfill)

Investigations (SI)

Other IDEM Office: _____ (if applicable) Phone #: _____

<p>Current Source Size (defined to IDEM RISC Residential Closure Levels):</p> <p><input type="checkbox"/> Currently Undetermined</p> <p><input type="checkbox"/> less than or equal to 0.50 acre</p> <p><input type="checkbox"/> greater than 0.50 acre</p>	<p>Project Investigation Status:</p> <p><input type="checkbox"/> Ongoing</p> <p><input type="checkbox"/> Complete</p>	<p>Project Remediation Status:</p> <p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Ongoing</p> <p><input type="checkbox"/> Complete</p>
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Known or Anticipated VRP Project Hazards/Conditions:

None Infectious Materials Radioactivity Confined Spaces Explosive Conditions

Reactive Materials Known Off-Site Contamination Other: _____

<p>Documents Anticipated To Be Submitted for VRP Review: (Please check all that are expected)</p> <p><input type="checkbox"/> Phase II Investigation Work Plan</p> <p><input type="checkbox"/> Phase II Investigation Report</p> <p><input checked="" type="checkbox"/> Remediation Work Plan (VRP requirement)</p> <p><input type="checkbox"/> Site Specific Risk Assessment</p> <p><input checked="" type="checkbox"/> Remediation Completion Report (VRP requirement)</p>	<p>Property Ownership</p> <p>Do you own this property? <input type="checkbox"/> Yes <input type="checkbox"/> No (If no, answer next question)</p> <p>If not, name of the current owner _____</p> <p>and, do you have legal access rights to this property from that owner?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
---	---

Local Drinking Water Supply: Surface Groundwater Municipal <input type="checkbox"/> <input type="checkbox"/> Private/Residential <input type="checkbox"/> <input type="checkbox"/>	Local Drinking Water Supply Distance From Facility: _____ Feet _____ Mile(s) Is the site in a designated Wellhead Protection Area? <input type="checkbox"/> Yes <input type="checkbox"/> No Is the site in a designated Sole Source Aquifer? <input type="checkbox"/> Yes <input type="checkbox"/> No
Local Surface Water Bodies Near Facility: (check closest) <input type="checkbox"/> Wetland(s) <input type="checkbox"/> Stream(s) <input type="checkbox"/> River(s) <input type="checkbox"/> Lake(s) <input type="checkbox"/> Pond(s)	Local Surface Water Bodies Distance From Facility: _____ Feet _____ Mile(s)
On- site Water Supply and Usage: <input type="checkbox"/> Well(s) - <input type="checkbox"/> Drinking <input type="checkbox"/> Production <input type="checkbox"/> Both <input type="checkbox"/> Municipal - <input type="checkbox"/> Drinking <input type="checkbox"/> Production <input type="checkbox"/> Both <input type="checkbox"/> No Water at Site <input type="checkbox"/> Agricultural	Site Specific Depth to Groundwater: _____ Feet <input type="checkbox"/> Currently Unknown Site Specific Principal Groundwater Flow Direction: <input type="checkbox"/> Unknown <input type="checkbox"/> NW <input type="checkbox"/> N <input type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> SE <input type="checkbox"/> S <input type="checkbox"/> SW <input type="checkbox"/> W

Site History and Conditions

Facility Operational History:

Source Area/Contaminant Information:
Provide a description of the known or suspected source area that will be addressed by the project by reviewing the questionnaires. The project must address all source areas of media related to each source area, including the site of the actual source area, the property and the area that is appropriate to be investigated. RISC will require a liability release or covenant to be signed by the owner of the property and the this project. There may be duplicate source areas. Provide the information requested for each source area. If multiple source areas are being addressed in this project, the information may be duplicated to provide the information requested for each source area.

What is the known or suspected source area of contamination with the highest concentration of this contaminant?

Briefly describe any efforts undertaken to remediate contamination.

Soil Impacts:
What contaminants have been detected in soil, and what is the maximum concentration (or range of concentrations) detected? If several contaminants within the same class have been detected (VOCs, SVOCs, etc.), list the primary contaminants of concern within each class. A map showing boring locations is required in Attachment A.

Has the extent of soil contamination been defined to RISC Residential Closure levels?
Yes No

Groundwater Impacts:
What contaminants have been detected in ground water and what is the maximum concentration (or range of concentrations) detected? If several contaminants within the same class have been detected (VOCs, SVOCs, etc.), list the primary contaminants of concern within each class. A map showing groundwater sample locations is required in Attachment A.

Has the extent of ground water contamination been defined to RISC Residential Closure levels? Yes No

Is ground water contamination known or suspected to have migrated offsite? Yes No Uncertain
Describe any efforts to evaluate offsite contamination.

Are contaminants from this release believed to pose an imminent or substantial threat to human health or the environment? Yes No
If the answer is Yes, describe below and take immediate steps to mitigate the release.

Does contamination from the site have the potential for human exposure? Possible pathways include: drinking water wells, vapor intrusion into occupiable structures, and contaminated surface soil in occupied locations. Yes No Uncertain If yes, describe.

Does contamination from the site have the potential for ecological exposure? Yes No Uncertain

Is it likely contamination has extended to surface water, sediments, wetlands, karst bedrock, or any other sensitive area? Yes No Uncertain
If you answered yes to either question, describe potential exposure.

Past Spill History: Have there been any previous spills, releases, or incidents at your facility? If so, please describe.

SAMPLE

Geologic Information:

Hydrogeologic Information:

Additional Environmental Information:

Previous Facility Studies (please include Title, Author & Date):

Other (please include Title, Author, and Date):

- U.S. Geological Survey State Reports Soil Conservation Service Past Voluntary Site Specific Data Collection
 Regulatory Reporting Other Governmental Agencies Other: _____

Section 2 - Statement of Certification

Pursuant to Indiana Code 13-25-5-2, this application to the Voluntary Remediation Program (VRP) will remain confidential until the Voluntary Remediation Agreement (VRA) is signed by both parties. Neither this application, nor any information which comes in addition to this application, will be made available to the public until the VRA is signed. However, material submitted to or generated by the VRP will be considered IDEM public record after the VRA is signed.

I, _____, certify that this document and all attachments were prepared under my direction
(Print or Type Name of Applicant)

or supervision by qualified personnel. Based on my inquiry of the persons who gathered the information, it is, to the best of my knowledge, true, accurate, and complete. I further certify that I am authorized to submit this information.

Applicant's Signature (see application instructions for appropriate signatory)

Date

By signing this Application, the Applicant understands and agrees that the entire VRP process must be completed to IDEM's satisfaction in order to remain an active participant in the VRP. Therefore, if IDEM determines that the Applicant has not made good faith efforts to execute the Voluntary Remediation Agreement, or fails to provide the required documents and information to IDEM for evaluation of the site and work done to determine whether or not the Remediation Work Plan has been successfully completed, the Voluntary Remediation Agreement will terminate.

Attachment Information:

This application **will not** be considered complete, and may be rejected, unless the following Attachments are included:

Attachment A: Please attach a *detailed* site map illustrating identified area(s) targeted for VRP efforts. For an explanation of a detailed site map, please see Attachment A instructions.

Attachment B: Legal Description-- Attach a copy of a warranty deed with a legal description and property owner's name. The deed must identify the owner AND the name of the trustee. JUST in case the name of the current owner does not match, additional information must be provided to clarify the deed. For example, if a corporation owns the property, then proof that the corporation on the deed is the same as the current corporation must be submitted.

If the deed does not adequately describe the property due to the occurrence of multiple land transactions, a new legal description **MUST** be prepared by a professional land surveyor and the professional seal/certification must be stamped on the new legal description.

Attachment C: Please check Application Form Instructions and provide the pertinent Facility Universal Transverse Mercator (UTM) coordinates information and include as Attachment C.

Attachment D: Additional pages from Section 3 (if applicable).

Section 3- Application Attachment Pages

CO-APPLICANT ATTACHMENT

If more than one party is applying to the VRP, use this attachment to provide information about co-applicant(s). Please be advised that at the successful conclusion of this project, only applicants to the VRP will receive the Certificate of Completion and Covenant Not to Sue.

Pursuant to Indiana Code 13-25-5-2, this application to the Voluntary Remediation Program (VRP) will remain confidential until the Voluntary Remediation Agreement (VRA) is signed by both parties. Neither this application, nor any information which comes in addition to this application, will be made available to the public until the VRA is signed. However, material submitted to or generated by the VRP will be considered IDEM public record after the VRA is signed.

Section 1 - VRP Facility Declarations

Voluntary Remediation Applicant		Applicant's Registered Agent or person accepting service if not a corporation	
Applicant Name:		Company:	
Contact Person:		Contact Person:	
Mailing Address:		Mailing Address:	
City, State, ZIP:		City, State, ZIP:	
Phone & Fax:		Phone & Fax:	
Email:		Email:	

I, _____, certify that this document and all attachments were prepared under my direction
(Print or Type Name of Applicant)

or supervisory qualified personnel. Based on my inquiry of personnel there, the information is, to the best of my knowledge, true, accurate, and complete. I hereby certify that I am authorized to submit this information.

Applicant's Signature (see application instructions for appropriate authority) _____ Date _____

By signing this Application, the Applicant understands and agrees that the entire VRP process must be completed to IDEM's satisfaction in order to remain an active participant in the VRP. Therefore, if IDEM determines that the Applicant has not made good faith efforts to execute the Voluntary Remediation Agreement, or fails to provide the required documents and information to IDEM for evaluation of the site and work done to determine whether or not the Remediation Work Plan has been successfully completed, the Voluntary Remediation Agreement will terminate.

VOLUNTARY REMEDIATION PROGRAM

1. Does this site currently have any other VRP applications submitted/approved for this same site?

Yes No

If yes, VRP Project Number(s) _____

VRP Project Manager(s): _____

2. Was this site the subject of a VRP project at anytime in the past? Yes No

If yes, VRP Project Number(s): _____

VRP Project Manager(s): _____

3. Please provide details below explaining why another application for this same site is/was necessary:

SAMPLE

RCRA / CORRECTIVE ACTION

1. Are you interested in addressing RCRA Corrective Action Requirements for this source area through this VRP Project? Yes No
2. Has the RCRA Corrective Action Project Manager been notified in writing that a VRP application has been submitted to address this contamination? Yes No
3. What is the facility EPA ID number? _____
4. What is the date of Notification of Hazardous Waste Activity? _____
5. Have you submitted a RCRA Part A application for Interim Status? Yes No
If Yes, date: _____
6. Have you lost Interim Status or gone through an EPA Policy 121 closure for Mistaken and Protective Filings? Yes No
If Yes, please attach a copy of the letter.
7. Does this facility have a RCRA Part B Operating Permit? Yes No
If Yes, date issued: _____
Expiration date: _____
8. Have any permitted units undergone closure? Yes No
Were those units cleaned up? Yes No
Are any landfills used in closed place? Yes No
If Yes, check boxes that are applicable:
 Lined (describe type of liner-____)
 Unlined
 Capped (describe type of cap-____)
 Not Capped
9. Is this facility currently under any enforcement action, Agreed Order, Commissioner's Order, or any other type of required action by any government agency? Yes (if Yes, describe below) No

SAMPLE

EMERGENCY RESPONSE / REMEDIAL RESPONSE PROGRAM

1. Has this spill / release been reported to IDEM? Yes No

 If yes, what is the Spill Incident Number(s): _____

 IDEM contact person(s): _____

 Contact's telephone number: _____

2. Is this spill / release to be addressed in the VRP? Yes No

3. Has the IDEM contact person been notified in writing that this spill / release will be addressed in the VRP?

Yes (if yes, please attach copy of the letter) No

4. If this spill / release is to be addressed in the VRP, please provide a summary of the spill / release below:

SAMPLE

LEAKING UNDERGROUND STORAGE TANKS (LUST) & UNDERGROUND STORAGE TANKS (UST)

1. Is the UST(s) the source of the contamination to be addressed as part of the VRP? Yes No
2. Did / Does the UST contain petroleum products? Yes No
3. Is the UST regulated? Yes No
4. Has the regulated UST been registered with IDEM? Yes No N/A
If yes, indicate the UST Facility I.D. Number: _____
5. Has a UST petroleum release ever been reported to IDEM? Yes No N/A
If yes, indicate the LUST Incident Number: _____
6. Has the LUST section been notified in writing that you are applying to the VRP?
 Yes (if yes, please attach copy of the letter) No
7. Do you intend to apply for Excess Liability Trust Fund (ELTF) reimbursement with respect to this cleanup?
 Yes No N/A
8. If you have already applied for ELTF reimbursement, indicate ELTF number. _____
9. Please provide a summary of the site issues to be addressed below:

SAMPLE

STATE CLEANUP SECTION

1. Is this site under an Agreed Order or Commissioner Order with IDEM? Yes No
2. What is the State Cleanup Project I.D. Number? _____
3. Is this State Cleanup site to be addressed in the VRP? Yes No
4. If this site is to be addressed in the VRP, has the State Cleanup Project Manager been notified in writing?
 Yes (if yes, please attach copy of the letter) No
5. Who is the State Cleanup Project Manager and what is their telephone number?
Project Manager: _____
Telephone Number: _____
6. Provide a summary of the site issues below:

SAMPLE

OFFICE OF ENFORCEMENT (OE)

1. Is the site / facility that is subject to enforcement to be addressed in the VRP?
 Yes No (if No, skip all other questions on this page)

2. Is the site under any of the following types of enforcement:

- | Formal | Informal |
|---|---|
| <input type="checkbox"/> Notice of Violation | <input type="checkbox"/> Violation Letter |
| <input type="checkbox"/> Agreed Order | |
| <input type="checkbox"/> Commissioner's Order | |

3. What is the Case Number(s)? _____

4. Who is the OE contact person and what is their telephone number?

Contact Name: _____

Telephone Number: _____

5. If this enforcement site is to be addressed in the VRP, has the OE contact person been notified in writing?

- Yes (if yes, please attach copy of the letter) No

6. Provide a summary of the site issues for address below.

SAMPLE

OFFICE OF SOLID WASTE (Landfills and Processing Facilities)

(Due to IDEM requirements, it is unlikely that facilities with significant amounts of waste left in place will receive a Covenant Not to Sue as a closure mechanism)

1. Is this a solid waste landfill Site? Yes No (If No, skip to question #7)
2. Is this landfill active? Yes No
If Yes, what year did the landfill begin accepting waste? _____
3. Is this landfill inactive? Yes No
If Yes, what year did the landfill begin accepting waste? _____
If Yes, what year did the landfill cease accepting waste? _____
4. Is the landfill lined? Yes No
If Yes, what type of liner does it have? _____
5. Is the landfill capped? Yes No
If Yes, what material(s) is the cap constructed of? _____
6. Were hazardous or petroleum constituents placed into the landfill at any time? Yes No
7. What type of solid waste site is it and what does it contain?

8. Is this a solid waste permitted facility? Yes (If Yes, provide following information) No
Provide the facility identification number: _____
Permit type: _____
Permit number: _____
Date issued: _____
Date it expires: _____
IDEM Solid Waste Contact (Name and Telephone number) _____
9. Is this facility being required to conduct a cleanup by or under an enforcement action with any government agency? Yes No
If Yes, provide details:

10. Has the solid waste contact person been notified in writing that a VRP application for this facility has been submitted? Yes (If Yes, attach a copy of this letter) No

SITE INVESTIGATIONS (SI)

1. Is this site currently in IDEM's Site Investigation Program? Yes No
2. Has this site previously been in IDEM's Site Investigation Program? Yes No
3. Is this Site Investigation issue to be addressed in VRP? Yes No
4. If this site is to be addressed in the VRP, has the Site Investigation Project Manager been notified in writing?
 Yes (if yes, please attach copy of the letter) No
5. What is the EPA ID Number for this site (if applicable)? _____
6. What is the name and address of this site?

7. Who is the IDEM contact person and their telephone number?
IDEM Contact: _____
IDEM Telephone Number: _____
8. Please provide summary of the Site Investigation issues below: (If applicable)

SAMPLE

Sample 8.2 Remediation Work Plan Completeness Checklist



**REMEDIAL ACTION PLAN
COMPLETENESS CHECKLIST**
State Form 53413 (9-07)
INDIANA DEPARTMENT OF ENVIRONMENTAL

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
VOLUNTARY REMEDIATION SECTION
100 N. Senate Avenue
Indianapolis, IN 46204-2251

INSTRUCTIONS This checklist shall be completed and returned for all remediation work plan (RWP) submittals required under IC 13-25-5-7. When completed, please return this form and support documents to the address given in the box above.

The RWP provides the basis for IDEM to evaluate the proposed remedy for each VRP site. All of the following information is required to evaluate the selected remedy's effectiveness and to demonstrate that it is the most effective remedy for the site. The remediation work plan must provide a complete description of the past operations, the site investigation and the selected remedy for the site.

I. INTRODUCTION

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Sources of contamination		
1. Site name, address, and telephone		
2. Current owner and contact information		
3. Historical summary of site ownership		
4. Type of facility, past and present operations		
5. Site contact responsible for VRP process		
6. Overview of initial discovery of contamination, spill history, & previous investigations conducted at the site		
B. Supporting Documents		
1. Discussion of relevant previous reports		
2. Other documents regarding the site		
C. Remedial Action Objectives		
1. Remediation and clean-up objectives shall include media, sampling, and exposure provisions		
2. Work items shall include remedial		

II. INVESTIGATION ACTIVITIES

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Summary of Information Used to Select Remedy		
1. Baseline assessment and literature search		
a. Geologic and hydrogeologic summary		
b. Physical and political geo information		
2. Extent of subsurface work, including:		
a. Copies of boring logs and monitoring well construction logs		
b. Boring and well location maps		
c. Field screening results for soils		
d. Sample location map		
B. Summary of Site Investigation		
1. Identification of all contaminants		
a. Chemical and physical properties		
b. Contaminant toxicological data		
c. Potential effects of residual contamination		
2. Summary of site-specific Geology & Hydrogeology		
3. Discussion of Sources of Contamination		
4. Summary and Map of Extent of Contamination		
a. Impacted environmental media, such as soil, sediment, groundwater, surface water, and air		
b. Concentrations of contaminants		
c. Concentration trends		

Report/Plan Element	Present (Y,N, or NA)	Location in Document
C. Summary of Risks Associated with Site		
1. Human, ecological, and environmental risks for each contaminant & impacted media, including discussion of long and short-term risks, environmentally sensitive areas, and endangered species		
2. Impact of current and future land-use issues, if applicable, including need for environmental notice & deed restrictions		
D. Background Concentration Assessment		
1. Summary of naturally occurring site contaminants		
2. Background data in tabular format & background sampling location map		
3. Statistical comparison of background concentrations to concentrations in potentially contaminated media		
4. Reliability and applicability of background data		
E. Additional Field Investigation Requirements		
1. Additional investigations required to effectively complete the design or the installation of the selected remedial method		
2. Description of additional investigations		
3. Description of additional work to be completed		

VAPOR INTRUSION

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Discussion of ground water results compared with the Appendix VIII Tables in the IDEM Draft Vapor Intrusion Pilot Program Guidance.		
B. Description of further investigation required under Draft Vapor Intrusion Pilot Program Guidance.		

TOTAL PETROLEUM HYDROCARBONS

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Discussion of Total Petroleum Hydrocarbons results compared with the Chapter 8 in the IDEM RISC Technical Resources Guidance Document.		
B. Description of further actions under Chapter 8 if needed.		

III. REMEDIATION PLAN

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Evaluation of Remedial Alternatives		
1. The remedial alternatives evaluated must be identified, and the rationale for their selection must be provided. In addition, the remediation work plan should describe parameters evaluated for each of the selected alternatives. The parameters should include, but not necessarily be limited to, the following:		
a. Extent of remediation effort		
b. Technical feasibility to address physical and chemical characteristics of media		
c. Projected contamination removal & treatment rates		
d. Protectiveness of human health		
e. Cleanup criteria		
f. Ability of each alternative to achieve cleanup criteria		
g. Community acceptance		
h. Anticipated volume of contaminated materials to be treated		
i. Ease of technology application or implementation		
j. Dimensions of major technologies & space limitations		
k. Process parameters		
l. Clean up time frames		
m. Contamination distribution		
n. O&M Costs		
o. Other special considerations		
2. Summarize conclusions for each of the technologies evaluated, and provide the reasons each technology should or should not be appropriate		
3. Need for treatability study or pilot test. Describe the treatability study or pilot test and the reasons it is required, and provide the following information:		
a. Proposed study methodology		
b. Clear statement of treatability study or waste characterization objectives		
c. Proposed scale of study (e.g., bench, pilot, etc.)		
d. Data requirements and evaluation		
e. Pilot plant startup and O&M		
f. Schedule for pilot study		
g. Remedial technologies to be tested & equipment required		
h. Treatability assessment and waste characterization		
i. Proposed disposal arrangements for wastes caused during remediation, plus approvals & necessary documentation		
j. Installation and startup procedures, including:		
- Data requirements and analytical methods		
- Pilot Plant O&M requirements		
- Data analysis & interpretation of results to be used		
- Full-scale technology application requirements and notation of limitations & optimum operating conditions		

Report/Plan Element	Present (Y,N, or NA)	Location in Document
<p>B. Selected Remediation Technology – If more than one remedial alternative will be used to address different on-site areas, the remediation work plan must describe how the remediation system, as a whole, will work. A flow diagram, conceptual sketch, or other approach should be used to illustrate the components of the remediation system. Major equipment, such as pumps, air strippers, and in-situ treatment equipment, must be indicated. The work plan should include a site map showing areas to be remediated and proposed locations of major equipment.</p> <ol style="list-style-type: none"> 1. Identify which evaluated technology or combination of technologies will be implemented at the site, including the technical, economic and social acceptance rationales for the final selection. 2. Identify the need for risk assessment and provide: <ol style="list-style-type: none"> a. Parameters to be addressed b. Proposed risk assessment methodologies c. Potential exposure pathways d. Exposure assumptions e. Environmental fate and transport data f. Tabulated parameters and resulting cleanup levels 3. Provide a detailed description of the selected technology and system setup, including the following information: <ol style="list-style-type: none"> a. Technical specifications of all equipment & processes b. Proposed locations of remediation equipment on a scale site map showing piping routes and electrical wiring where applicable c. Waste disposal permit requirements for the system d. Waste disposal approvals needed to implement system 		
<p>C. Monitoring and Sampling Plan</p> <ol style="list-style-type: none"> 1. Sampling plan details, including: <ol style="list-style-type: none"> a. Sampling and monitoring parameters b. Sampling and monitoring frequency c. Schedule for submitting results to IDEM for review and evaluation (quarterly progress reporting is minimum requirement) <p>Provide data management details, including a discussion of how the monitoring & confirmation sampling data will be documented & reported, & proposed progress reports format</p>		
<p>D. Project Work Schedule</p> <ol style="list-style-type: none"> 1. Projected installation and startup 2. Sampling and monitoring schedule 3. Contaminant removal & treatment rates, including remediation progress milestones & projected completion dates 4. O&M Plan, including: <ol style="list-style-type: none"> a. Optimal operating conditions b. Necessary O&M tasks, their frequency, replacement schedule & planned O&M replacement events c. Proposed inspection schedule 		

SAMPLE

Report/Plan Element	Present (Y,N, or NA)	Location in Document
d. Potential problems and their remedies		
e. Contingency plan indicating how the applicant plans to respond in the event of a system failure, including the following information: - Description of alternate operation procedures to prevent undue hazards if the system fails - Notification procedure for system shutdown or failure - System modification procedures		
5.0 RISK ASSESSMENT (if applicable, attach to the Remediation Work Plan)		
A. List of parameters to be addressed by Risk Assessment		
B. Description of proposed Risk Assessment methodologies (e.g., types of modeling)		
C. Identification of potential pathways of exposure		
D. Identification of exposure assumptions		
E. Environmental Fate and Transport data development procedures		
F. Summary table listing parameters and calculated cleanup levels		

IV. REFERENCES

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. References used to prepare remediation work plan should be cited, including author, full name, publisher, company, date, etc.		

V. APPENDICIES

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. A QAPP is required for the remediation work plan. The QAPP should contain all elements discussed in Chapters 3 and 4 of the RISC Technical Guide. If a QAPP was submitted as part of the investigation report, it need not be re-submitted.		
B. A site Health and Safety Plan is required.		

VI. ENVIRONMENTAL RESTRICTIVE COVENANT

Report/Plan Element	Present (Y,N, or NA)	Location in Document
Text of environmental restrictive covenant		
Table of Last Known Concentrations of COC's and the closure standard		
Site Plan showing areas containing COCs with coordinates		

OTHER VRP REQUIREMENTS

COMMUNITY RELATIONS

MAILING LISTS

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Mailing list of affected residents; interested community groups; and local, state, and national officials (e.g., mayor, local newspaper, county health department, representatives, and senators).		
B. Name and address of local library that will be the repository for the Remedial Work Plan during the public notice period.		

PUBLIC MEETINGS

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Discussion of plans to hold public informational meetings about the proposed remediation process.		
B. Format of meetings.		
C. Proposed public meeting schedule and notification procedures.		

INFORMATION BULLETINS

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Discussion of plans to prepare and distribute information bulletins regarding the remediation process.		
B. Description of the format and types of information included in information bulletins.		

MEDIA

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Description of the types of media that will be used to inform the general public (newspaper, radio, etc.).		
B. Description of the type of information that will be released to the media.		

COMPLETION OF REMEDIAL ACTION

COMPLETION REPORT

Report/Plan Element	Present (Y,N, or NA)	Location in Document
A. Statement that a Completion Report detailing the remediation system and confirmation sampling will be submitted upon completion of the remediation to the cleanup criteria.		

Sample 8.3 Remediation Completeness Report Completeness Checklist



**REMEDIAL COMPLETION REPORT
COMPLETENESS CHECKLIST**
State Form 54168 (1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY
VOLUNTARY REMEDIATION SECTION
100 N. Senate Avenue
MC 66-30, IGCN 1101,
Indianapolis, IN 46204-2251

INSTRUCTIONS This checklist shall be completed and returned for all remediation completion report (RCR) submittals for review under IC 13-25-5-16. When completed, please return this form and support documents to the address given in the box above.

The primary purpose of the remediation completion report is to document the completion of activities identified in the remediation work plan (see RISC User's Guide – Appendix 1 Dated February 15, 2001 A.1-30 Appendix A1.2). The RCR also provides information about the performance of the remediation measures and indicates how the site was or will be restored following remediation.

I. INTRODUCTION

Report/Plan Element	Location in Document
A. Project Identification and Site Background	
1. Site name, facility identification number(s), address, and telephone number	
2. Current owner and operator, mailing address, and telephone number	
3. Site contact person or group responsible for guiding the remediation project(s)	
4. Historical summary of site ownership	
5. Type of facility, including description of past and current operations	
6. Site location map and site layout drawing showing the following:	
a. Property boundaries, roads, loading and unloading areas, and building outlines	
b. Locations of treatment or disposal areas, remediated areas, ground water monitoring wells, ground water production wells, sampling points, and major remediation equipment	
c. Materials and hazardous waste storage areas	
7. Overview of the initial discovery of contamination, spill history, investigations conducted at the site, and remedial action history	
8. List of previously completed reports concerning the site, including a discussion of whether data is readily available to the site	
B. Remedial Action	
1. Description of the remediation system, including a block flow diagram or other conceptual illustration of the system as installed, and major equipment used or installed	
2. Evaluation of overall system performance, including discussion of procedures used to measure and document system performance, significant problems that occurred, and how the problems were addressed	
3. Description of remedial action(s) undertaken at the site, including the following:	
a. Summary of remedial activities performed	
b. Description of wastes generated during remedial activities, including total volumes or amounts and final disposition	
c. Description of time required to achieve full remediation	

II. Confirmation Sampling

IDEM must receive advance notice before any confirmation sampling is conducted so that the sampling activities can be observed and duplicate samples can be collected, if appropriate. IDEM will not evaluate any requests for a Covenant Not to Sue, or other actions until the final report has been approved and confirmation monitoring and sampling have been completed.

The closure report must describe confirmation sampling procedures as they were actually implemented. The actual numbers and locations of confirmation samples must be shown on a map. Analytical results must be presented in tabular form, addressing all sampling locations, affected media, and contaminants. The name, address, and telephone number of the laboratory or (laboratories) that performed the analyses must also be identified. Copies of laboratory reports and chain-of-custody forms must be provided in Appendices A and B.

<p>A. The confirmation monitoring portion of the closure report must include the information below.</p> <ol style="list-style-type: none"> 1. Data from most recent monitoring and sampling event 2. Graphical display of data to show remediation effectiveness and trends, including historical comparison with previous sampling results 3. Summary of O&M problems or downtime experienced during current reporting period, including the following: <ol style="list-style-type: none"> a. Reasons for O&M problems or downtime b. Length of downtime c. Corrective measures taken to repair the system 4. Recommendations concerning need for additional monitoring and sampling events, including the following: <ol style="list-style-type: none"> a. Continued monitoring and sampling if cleanup criteria have not been achieved, including re-evaluation of time required to achieve cleanup criteria and revised monitoring and sampling schedule b. Final closure report submittal if cleanup criteria have been achieved, including the following: <ul style="list-style-type: none"> - Final confirmation monitoring and sampling report - Information that demonstrates that cleanup criteria have been achieved - Clear statement of expected future uses of the site after remediation is completed (such as residential or nonresidential) - Discussion of deed restrictions, land-use restrictions, or environmental notice requirements (See Section IV) 	
<p>B. Completed Field Work and Laboratory Analysis</p> <ol style="list-style-type: none"> 1. Summary of confirmation sampling performed, including the following: <ol style="list-style-type: none"> a. Confirmation sampling procedures b. Confirmation sampling locations on a plan view map c. [Redacted] 2. Confirmation sampling results, including the following: <ol style="list-style-type: none"> a. [Redacted] b. Laboratory reports [Redacted] c. All chain-of-custody forms in Appendix B 	
<p>C. Evaluation of Confirmation Sampling Results</p> <ol style="list-style-type: none"> 1. Comparison of confirmation sampling results with the agreed upon cleanup levels 2. Comparison of IDEM's split confirmation sampling results with the applicant's confirmation results and the agreed upon cleanup levels 3. Acceptable cleanup criteria for all contaminants of concern and for all affected media 4. Demonstration that acceptable cleanup criteria have been met 	
<p>D. Final Site Restoration</p>	
<p>A description of work required to restore the site after remediation is required. Issues such as monitoring well abandonment and equipment dismantling must be addressed.</p>	
<p>1. Summary of site restoration work, including the following:</p>	
<p>a. Description of how disturbed areas have been or will be restored</p>	
<p>b. Completion schedule for restoration activities</p>	
<p>2. Description of remediation equipment dismantling and removal, including the following:</p>	
<p>a. Description of decontamination procedures</p>	
<p>b. Description of decontamination verification sampling</p>	
<p>c. Description of waste disposal activities conducted</p>	

III. Appendices

A. Copies of Laboratory Reports	
B. Chain-of-Custody Forms	

IV. Environmental Restrictive Covenant

Report/Plan Element	Location in Document
A. Text of environmental restrictive covenant	
B. List of activity restrictions	

SAMPLE

Sample 8.4 Certificate of Completion

**INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
CERTIFICATE OF COMPLETION**

ISSUED TO: **VRP Applicant**

FOR: The successful completion of the Voluntary Remediation Work Plan for the **facility name**, IDEM #**VRP Number** located at **street address, city, (County County)**, Indiana, as more specifically described in the attached Exhibits 1-X (**enter number of exhibits**), which are incorporated herein by reference. The issuance of a Certificate of Completion under IC 13-25-5 is a final agency action for purposes of IC 4-21.5.

GIVEN UNDER MY HAND IN THE CITY OF INDIANAPOLIS
THIS _____ DAY OF _____, 2007

SAMPLE

Thomas W. Easterly, COM
Department of Environmental Management

Sample 8.5 Environmental Restrictive Covenant, VRP Template

Environmental Restrictive Covenant

THIS ENVIRONMENTAL RESTRICTIVE COVENANT ("Covenant") is made this _____ day of [month], 20____, by [insert name and address of property owner].

WHEREAS: Owner is the fee owner of certain real estate in the County of _____, Indiana, which is located at [insert address of site] and more particularly described in the attached Exhibit "A" ("Real Estate"), which is hereby incorporated and made a part hereof. This Real Estate was acquired by deed on _____, and recorded on _____, as Deed Record _____, in the Office of the Recorder of _____ County, Indiana. The Real Estate consists of approximately _____ acres and has also been identified by the county as parcel identification number[s] [insert 18-digit parcel identification number(s) as described in 50 IAC 23-8-1].

[Optional: The Real Estate, to which this Covenant applies, is depicted on a map attached hereto as Exhibit _____.]

WHEREAS: [insert name of owner and address of site] applicant, if different from [insert name of owner and address of site] into Indiana's National Remediation Program ("NRP") to address releases of hazardous substances and petroleum ("contaminants of concern") relating to the Real Estate. The Indiana Department of Environmental Management ("IDEM" or the "Department") assigned the project number _____. A remediation work plan was prepared in accordance with IC 13-25-5, which was approved by the Department on _____.

WHEREAS: IDEM approved the remediation work plan, which allows certain contaminants of concern to remain in the [select appropriate media: soil, groundwater, or groundwater and soil], provided that certain land use restrictions are implemented [if applicable, insert and engineering controls maintained] to protect human health. The remaining contaminants of concern are listed in Exhibit _____, which is attached hereto and incorporated herein.

WHEREAS: The remediation work plan and completion report are hereby incorporated by reference and may be examined at the offices of the Department, which is located in the Indiana Government Center North building at 100 N. Senate Avenue, Indianapolis, Indiana. The documents may also be viewed electronically in the Department's Virtual File Cabinet by accessing the Department's Web Site (currently www.in.gov/idem/).

NOW THEREFORE, [insert name of Owner] subjects the Real Estate to the following restrictions and provisions, which shall be binding on the current Owner and all future Owners:

I. RESTRICTIONS

1. Restrictions. The Owner: *[Select from the list below those restrictions that are applicable to the site. Delete those that are not applicable and renumber list. Additional site specific restrictions may be appropriate based on site conditions, and are to be negotiated between the property owner and the Department.]*

- (a) Shall not use or allow the use of the Real Estate for residential purposes, including, but not limited to, daily child care facilities or educational facilities for children (e.g., daycare centers or K-12 schools).
- (b) Shall not use or allow the use or extraction of groundwater at the Real Estate for any purpose, including, but not limited to: human or animal consumption, gardening, industrial processes, or agriculture, except that groundwater may be extracted in conjunction with environmental investigation and/or remediation activities.
- (c) Shall not use the Real Estate for any agricultural use.

[Include the following soil disturbance restriction if COCs remain in soil at levels above residential land use criteria]

- (d) Shall restore soil disturbed as a result of excavation and construction activities in such a manner that the remaining contaminant concentrations do not present a threat to human health or the environment. This determination shall be made using the Department's Risk Integrated System of Closure ("RISC") Technical Guidance Document. Upon the Department's request, the Owner shall provide the Department written evidence (including sampling data) showing the excavated and restored area, and any other area affected by the excavation, does not represent a threat. Contaminated soils that are excavated must be managed in accordance with all applicable federal and state laws and regulations. Such soils must also be in accordance with all applicable federal and state laws.

[In addition to the preceding general soil disturbance restriction, the following restrictions may be appropriate for high levels of contamination and should be tailored accordingly. The following is an example restriction illustrating the case where COCs remain in soil at levels above construction worker criteria.]

- (e) Shall neither engage in nor allow excavation of soil [at depths greater than ____ feet] in the area identified via *[choose* GPS coordinates *or* legal survey, *as applicable]* as the "Construction Worker Restriction Area" on the attached Exhibit ____ (which is incorporated herein), unless the soil disturbance obligations listed in the preceding paragraph are followed. In addition, the Owner shall provide written notice to the Department in accordance with paragraph 14 below *[edit as necessary]* at least ____ days [before *or* after] the start of soil disturbance activities]. The owner, upon the Department's request, shall provide the Department evidence showing the excavated and restored area does not represent a threat to human health or the environment.

[Include the following if there is a potential future vapor intrusion threat at undeveloped or unoccupied sites; sites that are already occupied and have vapor intrusion issues should instead include the restriction below requiring operation and maintenance of an engineered control.]

- (f) Shall not construct or allow occupancy of a dwelling or work space on the Real Estate unless a vapor mitigation system is installed, operated, and maintained within the dwelling or work space. IDEM may waive this restriction in writing if the Owner has provided data and analysis demonstrating to IDEM's satisfaction that there is no unacceptable risk to human health via the vapor intrusion exposure pathway.

[Include if an active engineered control (e.g., vapor mitigation system, etc.) has been implemented at the site]

- (g) Shall operate and maintain the *[list engineered control, depicted in Exhibit ____]* so as to protect its functional integrity *[in accordance with insert title and date of the document containing operations and maintenance requirements]*. Owner shall notify the Department in writing at least fifteen (15) days in advance of conducting any construction or excavation work that may impact an engineered control, unless an emergency exists. Owner shall ensure that the integrity of the *[list the engineered control]* is restored immediately after disturbance by any construction or excavation work. Upon IDEM's request, the Owner shall provide written evidence showing the engineered control has been restored to its complete integrity.

[Include if pavement or a building serves as a passive engineered control or barrier and modify as appropriate]

- (h) Shall maintain the integrity of the existing *[insert asphalt pavement or building, as appropriate]*, which is depicted on Exhibit ____ via *[choose GPS coordinates or legal survey, as appropriate]*; the *[insert asphalt pavement or building]* serves as an engineered control to prevent contact with the underlying soils and must not be excavated, removed, disturbed, demolished or lowered in all instances.

[Include if monitoring or other monitoring is being conducted]

- (i) Shall prohibit any activity on the Real Estate that may interfere with the groundwater monitoring or well network.

- (j) *[Insert other site specific restriction(s) here.]*

II. GENERAL PROVISIONS

2. Restrictions to Run with the Land. The restrictions and other requirements described in this Covenant shall run with the land and be binding upon, and inure to the benefit of the Owner of the Real Estate and the Owner's successors, assignees, heirs and lessees and their authorized agents, employees, contractors, representatives, agents, lessees, licensees, invitees, guests, or persons acting under their direction or control (hereinafter "Related Parties") and shall continue as a servitude running in perpetuity with the Real Estate. No transfer, mortgage, lease, license, easement, or other conveyance of any interest in or right to occupancy in all or any part of the Real Estate by any person shall affect the restrictions set forth herein. This Covenant is imposed upon the entire Real Estate unless expressly stated as applicable only to a specific portion thereof.

3. Binding upon Future Owners. By taking title to an interest in or occupancy of the Real Estate, any subsequent Owner or Related Party agrees to comply with all of the restrictions set forth in paragraph 1 above and with all other terms of this Covenant.
4. Access for Department. The Owner shall grant to the Department and its designated representatives the right to enter upon the Real Estate at reasonable times for the purpose of monitoring compliance with this Covenant and ensuring its protectiveness; this right includes the right to take samples and inspect records.
5. Written Notice of the Presence of Contamination. Owner agrees to include in any instrument conveying any interest in any portion of the Real Estate, including but not limited to deeds, leases and subleases (excluding mortgages, liens, similar financing interests, and other non-possessory encumbrances), the following notice provision (with blanks to be filled in):

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL RESTRICTIVE COVENANT, DATED _____ 20__, RECORDED IN THE OFFICE OF THE RECORDER OF _____ COUNTY ON _____, 20__, INSTRUMENT NUMBER (or other identifying reference) _____ IN FAVOR OF AND ENFORCEABLE BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.

SAMPLE

Notice to Department of _____ conveyance of _____ property. Owner agrees to provide notice to the Department of any conveyance of any portion of any owner's interest in the Real Estate, excluding mortgages, liens, _____ financing interests, and other non-possessory encumbrances. Owner must provide the Department with the notice within _____ days of the conveyance and (a) include a certification that the instrument conveying any interest in any portion of the Real Estate; (b) if it has been recorded, its recording reference; and (c) the name and business address of the transferee.

7. Indiana Law. This Covenant shall be governed by, and shall be construed and enforced according to, the laws of the State of Indiana.

III. ENFORCEMENT

8. Enforcement. Pursuant to IC 13-14-2-6 and other applicable law, the Department may proceed in court by appropriate action to enforce this Covenant. Damages alone are insufficient to compensate IDEM if any owner of the Real Estate or its Related Parties breach this Covenant or otherwise default hereunder. As a result, if any owner of the Real Estate, or any owner's Related Parties, breach this Covenant or otherwise default hereunder, IDEM shall have the right to request specific performance and/or immediate injunctive relief to enforce this Covenant in addition to any other remedies it may have at law or at equity. Owner agrees that the provisions of this Covenant are enforceable and agrees not to challenge the provisions or the appropriate court's jurisdiction.

IV. TERM, MODIFICATION AND TERMINATION

9. Term. The restrictions shall apply until the Department determines that the contaminants of concern no longer present an unacceptable risk to the public health, safety, or welfare, or to the environment.
10. Modification and Termination. This Covenant shall not be amended, modified, or terminated without the Department's prior written approval. Within thirty (30) days of executing an amendment, modification, or termination of the Covenant, Owner shall record such amendment, modification, or termination with the Office of the Recorder of _____ County and within thirty (30) days after recording, provide a true copy of the recorded amendment, modification, or termination to the Department.

V. MISCELLANEOUS

11. Waiver. No failure on the part of the Department at any time to require performance by any person of any term of this Covenant shall be taken or held to be a waiver of such term or in any way affect the Department's right to enforce such term, and no waiver on the part of the Department of any term hereof shall be taken or held to be a waiver of any other term of or the Covenant.

SAMPLE

Conflict and Compliance with Laws. In no event shall this Covenant be rendered unenforceable if Indiana's laws, regulations, guidance, or remediation policies (including those concerning environmental restrictive covenants, or institutional or engineering controls) change as to form or content. All statutory references include any successor provisions. Compliance with this Covenant does not relieve the Owner of its obligation to comply with any other applicable law.

13. Change in Law, Policy or Regulation. In no event shall this Covenant be rendered unenforceable if Indiana's laws, regulations, guidance, or remediation policies (including those concerning environmental restrictive covenants, or institutional or engineering controls) change as to form or content. All statutory references include any successor provisions.
14. Notices. Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other pursuant to this Covenant shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Owner: *[insert owner's name and address]*

_____, Notary Public

Residing in _____ County, _____

My Commission Expires:

This instrument prepared by:

[insert name and address]

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law:

[insert name and address]

SAMPLE

EXHIBIT A
LEGAL DESCRIPTION OF REAL ESTATE

SAMPLE

EXHIBIT ____

Instructions: Attach separate sheets as necessary, labeled as 'Exhibit B', 'Exhibit C', etc. The following are some examples of additional Exhibits.

1. A scaled map of the site (optional).
2. List, description, or table of COCs (optional for non-CERCLIS sites and non-hazardous waste facilities).
3. Scaled map(s) with GPS coordinates¹ showing the location of engineered barriers or other engineering controls.
4. Scaled map(s) with GPS coordinates showing the location of contamination above construction worker levels, identifying the relevant area as the "Construction Worker Restriction Area" (requested if contaminant concentrations remain above that level).
5. Scaled map(s) showing the legal boundary (by survey, GPS coordinates, etc.) of areas within a property (i.e. "carve outs") subject to specific restrictions or obligations (required if such areas exist).
6. CERCLIS sites and current and former hazardous waste facilities (defined in IC 13-1-100 to mean a plant, site, or other facility where, or where treatment, storage, or disposal) are required by IC 13-2-2-1(c) to describe the identity, quantity, and location of hazardous substances remaining on the property. (Note: CERCLIS sites and hazardous waste facilities generally in the State are not exempt from the above requirements.) Two methods of displaying this information include the following exhibit options:
 - a. Scaled map(s) identifying the location of contamination exceeding residential land use criteria for each contaminant of concern. For clarity purposes, it is recommended that analytical information (identification and quantity of hazardous substances) be shown separately in a table.
 - b. A narrative summary of the identity, quantity, and location of hazardous substances remaining on the property.

¹ The presence of any of the following will likely necessitate the collection of GPS data: engineered barriers or controls; a restriction that applies to only a portion of the site; and areas labeled 'construction worker restriction area.' GPS data should be collected with a mapping or survey-grade GPS receiver, and data deliverable information should be submitted in accordance with the document *IDEM Office of Land Quality Spatial Data Collection Standards*, which is available on IDEM's Website.

Sample 8.6 Voluntary Remediation Agreement Template

Voluntary Remediation Agreement Relating to [Enter VRP Facility Name] Site #XXXXXXX

This Voluntary Remediation Agreement (the "Agreement"), entered into by and between the Indiana Department of Environmental Management (the "IDEM") and [VRP Applicant Name] (the "Applicant"), is executed pursuant to the terms and conditions set forth herein. In consideration of those mutual undertakings and covenants, the parties agree as follows:

WHEREAS, the IDEM, by its Commissioner or his designee (the "Commissioner"), and the Applicant (the "Parties"), hereby enter into this Agreement pursuant to IC 13-25-5-8 for the purposes of remediating the release of hazardous substances or petroleum at [Site name, site address, city, county] County, Indiana by entering into the Voluntary Remediation Program (the "VRP"). The activities conducted by the Applicant under this Agreement are subject to approval by the IDEM.

WHEREAS, the Commissioner has determined that the Applicant is eligible to participate in the VRP as established under IC 13-25-5. However, neither this determination nor the entry into this Agreement precludes any determination by the Commissioner at a later date that the Site poses an imminent and substantial threat to human health or the environment within the meaning of IC 13-25-5. The Commissioner may terminate this Agreement and the Applicant's participation in the VRP if the Commissioner determines at a later date that the Applicant withholds or misrepresents information to the Applicant's including, but not limited to, a condition described in paragraph [] of the Agreement.

The Applicant shall follow work related to this Agreement:

in accordance with the attached Exhibit A, Scope of Work; Exhibit B, Schedule for Project Tasks, and Exhibit C, Special Conditions.

2. Term. This Agreement shall become effective on the date of execution by the Commissioner and shall remain in effect until the earlier of: (1) issuance of the Covenant not to Sue, (2) termination of the Agreement by the Commissioner, or (3) withdrawal from the VRP by the Applicant.

3. Access to Records. The Applicant shall ensure that all books, documents, papers, accounting records, and other evidence pertaining to the subject matter covered under this Agreement are maintained. The records to be maintained by the Applicant include all records created by any contractors or subcontractors who perform work related to the remediation of the Site which is the subject to this Agreement. The Applicant shall make such materials available during the term of this Agreement and for six (6) years from the date of the termination or satisfaction of this Agreement for inspection by the State or its authorized designees; these materials shall be made available within a reasonable time frame as requested by IDEM at the Applicant's office in Indiana or at IDEM's office. Copies shall be furnished at no cost to the State if requested. After the six (6) year period, the Applicant shall notify the IDEM in writing thirty (30) days prior to the destruction of any such documents. At that time, if the IDEM request that some or all documents be preserved for a longer period of time, the Applicant shall provide the IDEM with the documents that the IDEM wishes to preserve. If the Applicant claims any document is not subject to IDEM's review because it is confidential, then the Applicant shall provide IDEM with a privilege log describing any document or record that is withheld and the basis of the privilege

asserted; the date the document was created; and the document's author(s), recipients(s), and subject matter. Any dispute concerning invocation of the privilege shall be resolved pursuant to the dispute resolution provision under this Agreement.

4. Assignment; Successors. This Agreement is binding upon the Applicant's successors and assignees. No change in ownership, corporate, or partnership status of the Applicant shall in any way alter its status or responsibilities under this Agreement unless the Applicant withdraws or the IDEM terminates this Agreement. The Applicant shall provide a copy of this Agreement to the next subsequent owner or successor before ownership rights are transferred.

5. Audits. The Applicant acknowledges that it may be required to submit to an audit to ensure compliance with any of the terms of this Agreement. The Applicant has granted access to the IDEM for this purpose as specified in the attached Exhibit C, Special Conditions, Access.

6. Authority to Bind Applicant. The signatory for the Applicant represents that he/she has been duly authorized to execute this Agreement on behalf of the Applicant and has obtained all necessary or applicable approvals to make this Agreement fully binding upon the Applicant when his/her signature is affixed, and certifies that this Agreement is not subject to further acceptance by the Applicant when accepted by the IDEM.

7. Changes in Work. The Applicant shall not commence any additional work or significantly change the scope of the work under this Agreement until notification is provided to the IDEM.

8. Compliance with Laws.

All work undertaken by the Applicant pursuant to this Agreement shall be performed in compliance with applicable federal, state, and local laws, ordinances, and regulations, including, but not limited to, the Occupational Safety and Health Administration, Department of Transportation, and Resource Conservation and Recovery Act regulations. In the event of a conflict in the application of federal, state, or local laws, nothing in this Agreement shall be construed as eliminating the Applicant's obligation to comply with the most stringent law

B. The Applicant shall be responsible for obtaining all necessary permits on a timely basis. However, if the Applicant wishes to utilize the permit waiver provisions under IC 13-25-4-26, the Applicant shall identify the specific permit(s) that the Applicant is seeking to have waived. The Applicant agrees to satisfy all requirements that would have been imposed on the Applicant under a permit but for IC 13-25-4-26; these requirements shall be determined by the IDEM and set forth in the Remediation Work Plan (RWP). In the event the Applicant does not wish to abide by those requirements, it may withdraw its request or terminate its participation in the VRP. If the Applicant undertakes an activity for which a permit is required without first obtaining a valid permit or approval of a permit waiver request or the Applicant fails to meet the requirements set forth in the RWP, the Applicant shall be subject to appropriate enforcement action.

C. Nothing in this Agreement relieves the Applicant of its obligations or responsibilities under the Resource Conservation and Recovery Act, 42 USC 6901 et seq., including, but not limited to, the duty to meet any permit conditions financial responsibility, closure, post closure or corrective action, regardless of whether the RWP addressed the contaminants or property at issue.

D. Nothing in the Agreement, the Certificate of Completion, or the Covenant Not To Sue shall be construed to relieve the Applicant of any natural resource damage liability arising from contaminants, even if addressed by the RWP, including under the following authorities: 42 USC

9601 et seq. (CERCLA), 33 USC 2701 et seq., IC 13-25-4-8, or any common law theories of public trust doctrine in Indiana. Applicant agrees that the period from the Effective Date of this Agreement until the Agreement is terminated or satisfied shall toll all statutes of limitations pertaining to any cause of action arising under Title 13 of the Indiana Code and relating to the release or threatened release that is the subject of this Agreement.

9. Administrative Costs.

A. Pursuant to IC 13-25-5-8, the Applicant agrees to reimburse the IDEM for all of its reasonable Administrative Costs associated with implementation of this Agreement. Administrative Costs may include, but are not limited to, costs for compliance monitoring (such as the collection and analysis of split or duplicate samples, inspection of the Applicant's activities, and Site visits), discussions regarding disputes, review and approval or disapproval of reports, environmental restrictive covenants, the costs of dispute resolution, copying of documents, travel, laboratory or sampling costs, and retention of a qualified person to oversee the work performed under this Agreement. Invoices of the IDEM's Administrative Costs shall be sent to the Applicant. Administrative Costs for salary, benefits and indirect costs of the IDEM personnel shall be calculated at a rate of \$69.11 (sixty-nine dollars and eleven cents) per hour or fractional rate thereof. Laboratory costs and the cost of any contractor hired by IDEM to assist it in connection with the remediation of this Site (including, e.g., the evaluation of any proposed RWP, oversight of the work conducted, or implementation of this Agreement) shall be charged at a rate of \$100.00 per hour. As authorized by IC 13-25-5-9, the IDEM may consider this rate to be an estimate of the necessary and effective cost of implementation of the Voluntary Remediation Program and the Applicant agrees that the IDEM's obligations are not limited to the expenses. The IDEM reserves the right to increase the rate for Administrative Costs under this Agreement in accordance with the Consumer Price Index (CPI), per calendar year (effective every February 1st), for the most recent Urban Zone in the State of Indiana that the IDEM decides to implement the program. The IDEM will effectively and efficiently implement the VRRP. (Information about the CPI may be obtained at <http://www.bls.gov/cpi/>.) Exhibit D contains an itemized list of estimated Administrative Costs that the IDEM expects to incur under this Agreement. This estimate does not bind the IDEM to a maximum cost that the IDEM is entitled to bill the Applicant under this Agreement.

B. The Applicant shall pay these reasonable Administrative Costs within thirty (30) days of the due date of the invoice. In the event that payments are not made within thirty (30) days of the due date of the invoice, the Applicant shall pay interest on the unpaid balance at an annual rate of eight (8) percent pursuant to IC 24-4.6-1. The interest shall begin to accrue on the due date of the invoice and shall continue to accrue until the date of payment. The IDEM will not issue the Certificate of Completion nor will the Covenant Not To Sue be issued until the IDEM receives full payment of all reasonable Administrative Costs invoiced and due. Further, Applicant understands that a full accounting of all Administrative Costs incurred by the IDEM cannot be completed before the Certificate of Completion and Covenant Not To Sue have been issued; therefore, Applicant agrees to pay IDEM's reasonable Administrative Costs invoiced after the Certificate of Completion and Covenant Not To Sue have been issued.

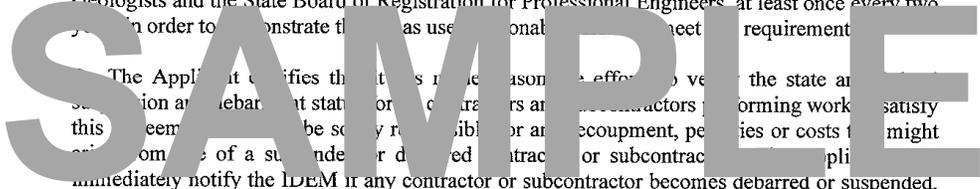
C. Checks shall be made payable to the Voluntary Remediation Fund and be mailed, along with a transmittal letter stating the Site name, number, and address, to the Indiana Department of Environmental Management; Attention: Cashier; 100 North Senate Avenue, Mail Code 50-10C; Indianapolis, Indiana 46204.

D. In the event that this Agreement is terminated for any reason, the Applicant agrees to reimburse IDEM for all of its reasonable Administrative Costs incurred to the time of termination.

10. Confidentiality Claim. The Applicant may assert a confidentiality claim with respect to any or all of the information requested or submitted pursuant to this Agreement, pursuant to applicable laws and rules including IC 13-14-11, IC 5-14-3, and 329 IAC 6.1-3. The Applicant shall adequately substantiate any assertion of confidentiality when the assertion is made. Information determined to be confidential by IDEM shall be disclosed only to the extent permitted by law. If no such confidentiality claim accompanies the information when it is submitted to the IDEM, it may be made available to the public by the IDEM without further notice to the Applicant. The Applicant agrees not to assert any confidentiality claim with regard to any physical or analytical data.

11. Debarment and Suspension.

A. The Applicant certifies by entering into this Agreement that it will make reasonable efforts to ensure that none of its contractors or principals of its contractors, including subcontractors and any principals of the subcontractor, that are to perform work to satisfy this Agreement are debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from entering into a contract to perform work to satisfy this Agreement. The Applicant shall consult with the appropriate licensing boards, including the Indiana Board of Licensure for Professional Geologists and the State Board of Registration for Professional Engineers, at least once every two years in order to demonstrate that it has used reasonable efforts to meet the requirement.



The Applicant certifies that it has made reasonable efforts to verify that the state and local debarment and suspension status of its contractors and subcontractors performing work to satisfy this Agreement will be solely responsible for any debarment, penalties or costs that might be incurred as a result of a suspension or debarred contractor or subcontractor. The Applicant shall immediately notify the IDEM if any contractor or subcontractor becomes debarred or suspended, and shall, at the IDEM's request, take any steps required by IDEM to terminate its contractual relationship with the contractor or subcontractor for work to be performed under this Agreement.

12. Disputes.

A. Should any disputes arise with respect to this Agreement, the Applicant and the IDEM agree to act immediately to resolve such disputes. Time is of the essence in the resolution of disputes.

B. The Applicant agrees that, the existence of a dispute notwithstanding, it will continue without delay to carry out all its responsibilities under this Agreement that are not affected by the dispute. Should the Applicant fail to continue to perform its responsibilities regarding all non-disputed work, without delay, any additional reasonable costs incurred by the IDEM or additional costs incurred by the Applicant as a result of such failure to proceed shall be borne by the Applicant, and the Applicant shall make no claim against the IDEM for such costs.

C. The Applicant shall provide the IDEM with a written statement identifying the specific matters in dispute and providing the legal and technical bases for the Applicant's position. If the IDEM and the Applicant cannot resolve the dispute within fifteen (15) working days following the IDEM's receipt of the Applicant's written statement, then the parties agree to resolve the dispute by submitting it to the Commissioner pursuant to the following procedure:

1. The IDEM shall submit a written response to the Applicant's statement within twenty-five (25) working days of its receipt of Applicant's statement; this response shall also be provided to the Commissioner, along with a copy of the Applicant's statement. The Commissioner shall reduce a decision to writing and mail or otherwise furnish a copy thereof to the Applicant within thirty (30) working days after presentation of such dispute for action. The Commissioner's decision shall be final and conclusive unless the Applicant invokes the Administrative Orders and Procedures Act ("AOPA"), IC 4-21.5. The parties may mutually agree to submit the dispute to arbitration or mediation for a determination.

The above timeframes may be extended by agreement of the parties as specified in the attached Exhibit C, Special Conditions, Extension of Time Periods.

D. If either Party determines or the mediator declares that the dispute cannot be resolved through the mediation process, the Parties retain all rights under the Indiana Administrative Orders and Procedures Act, IC 4-21.5 ("IAOPA"). All deadlines and times for filing a petition for review, petition for stay, or any other redress or remedy under IAOPA shall be tolled during the mediation process and shall not begin to run until the aggrieved or affected party receives notice from the other Party or the mediator that the dispute cannot be resolved through the mediation process. The cost of the mediator shall be included in the administrative costs paid by the Applicant. IDEM's costs of mediation shall be included in the administrative costs paid by the Applicant, except to the extent that the mediator or IDEM acted unreasonably. The Applicant shall pay the Applicant's costs of mediation.

13. **Force Majeure.** In the event the Applicant is unable to perform any of its obligations under this Agreement or to enjoy any of its benefits because of natural disasters or other governmental bodies not the fault of the affected party (hereinafter referred to as a Force Majeure Event), the Applicant shall immediately give notice to the IDEM project manager and shall do everything possible to resume performance. Increase of costs shall not be considered a Force Majeure Event. The Applicant shall have the burden of demonstrating that the event is a Force Majeure Event, and the Commissioner shall make the decision of whether an event is a Force Majeure Event subject to the dispute resolution provisions in paragraph 12. If the period of nonperformance exceeds beyond any written extension granted by the IDEM, upon giving written notice, the IDEM may terminate this Agreement.

14. **Governing Laws.** This Agreement shall be construed in accordance with and governed by the laws of the State of Indiana and suit, if any, must be brought in the Office of Environmental Adjudication. Further, the Applicant consents to personal jurisdiction in an Indiana state court and the Office of Environmental Adjudication, agrees to accept service of process in Indiana, and has designated [Insert Name and address of Registered Agent (or Person Accepting Service for non-corporate applicants)] for this purpose. Applicant agrees to always have a registered agent in Indiana (if Applicant is a corporation) or person accepting service (for non-corporate applicants) and provide IDEM with notice of any change in its registered agent or designated person within thirty (30) days of such change.

15. **Indemnification.** The Applicant agrees to indemnify, defend, and hold harmless the IDEM, its agents, officers, and employees from all claims and suits including court costs, attorney's fees, and other expenses caused by any act or omission of the IDEM and the Applicant and/or its contractors and subcontractors, if any, in the performance of this Agreement.

16. Key Person(s)/Designated Project Manager.

A. On or before the Effective Date of this Agreement, the Applicant and the IDEM shall each designate a Project Manager. Each Project Manager shall be responsible for overseeing the implementation of this Agreement. The IDEM Project Manager will be the designated IDEM representative at the Site. To the maximum extent possible, communications between the parties and all documents (including reports, approvals, and other correspondence) concerning the activities performed pursuant to this Agreement shall be directed through the Project Managers. Each party has the right to change its respective Project Manager, which party shall notify the other party of the change in writing and in a timely fashion.

B. The IDEM shall have the authority to halt, conduct, or direct any work required by this Agreement and/or any response actions or portions thereof if Site conditions present an imminent and substantial threat to human health or the environment. In the event that the IDEM Project Manager halts work pursuant to this paragraph, the schedule of work described in the RWP and this Agreement shall be modified accordingly, or the IDEM may withdraw its approval of the RWP pursuant to the terms of this Agreement.

C. The absence of either party's Project Manager from the Site shall not be cause for the stoppage of work. The Applicant's Project Manager or his or her supervisor shall reasonably be available by telephone while work is being performed at the Site. The Applicant's Project Manager shall designate a person to be in charge of the work and this person will be available at the Site when work is being performed at the Site.

The party's Designated Project Manager/Key Person(s) on this Agreement is specified in the attached Exhibit C, Special Conditions, *Notice to Key Person(s)/Designated Project Managers*.

17. Licensing Standards. The Applicant and its contractors and subcontractors shall comply with all applicable licensing standards, certification standards, accrediting standards and any other laws, rules or regulations governing services to be provided by the Applicant pursuant to this Agreement. If any licensure, certification or accreditation expires or is revoked, or if disciplinary action is taken concerning the applicable licensure, certification or accreditation, the Applicant shall notify the IDEM within 30 (thirty) days of Applicant's becoming aware of such action, and the IDEM, at its option, may terminate this Agreement.

18. Merger & Modification. This Agreement constitutes the entire agreement between the parties. No understandings, agreements, or representations, oral or written, not specified within this Agreement will be valid provisions of this Agreement. This Agreement may not be modified, supplemented or amended, in any manner, except by written agreement signed by all necessary parties.

19. Notice to Parties. Whenever any notice, statement or other communication is required under this Agreement, it shall be sent to the following addresses, as specified in the attached Exhibit C, Special Conditions, *Notice to Key Person(s)/Designated Project Managers*.

20. Progress Reports. The Applicant shall submit progress reports to IDEM upon request. The report shall be written, unless otherwise approved by the State. The progress reports shall serve the purpose of assuring the IDEM that work is progressing in line with the schedule provided for in the approved RWP, and that completion can be reasonably assured on the scheduled date.

21. Reservation of Rights.

A. IDEM and the Applicant reserve all rights and defenses they may have pursuant to any available legal authority unless expressly waived herein.

B. Nothing herein is intended to release, discharge, or in any way affect any claims, causes of action, or demands, in law or in equity, that the parties may have against any person, firm, partnership, or corporation, not a party to this Agreement, for any liability it may have arising out of, or relating in any way to, the generation, storage, treatment, handling, transportation, release, or disposal of any materials, hazardous substances, hazardous waste, contaminants, or pollutants at, to, or from the Site. The parties to this Agreement expressly reserve all rights, claims, demands, and causes of action they have against any and all other persons and entities who are not parties to this Agreement, and as to each other for matters not covered in this Agreement.

C. The Applicant reserves the right to seek contribution, indemnity, or any other available remedy against any person other than the IDEM found to be responsible or liable for contributions, indemnity, or otherwise for amounts which have been or will be expended by the Applicant in connection with the Site.

Pursuant to 42 U.S.C. 9601(a)(1) and 42 U.S.C. 9601(a)(25)-(28), the parties to this Agreement agree to an administrative settlement for purposes of 42 U.S.C. 9613(f)(2), under which the Applicant, upon payment of all reasonable Administrative and Remedial Costs due under the Agreement and the issuance of a Covenant Not to Sue, will have resolved all claims to the extent provided in the Covenant Not to Sue, to the State. The parties also agree that this Agreement constitutes an administrative settlement for purposes of 42 U.S.C. 9613(f)(3)(B), under which the Applicant has resolved the liability it may have to the State to the extent provided in the Covenant Not to Sue.

E. The IDEM reserves the right to bring an action, including an administrative action, against the Applicant for any violations of statutes or regulations except, subject to IC 13-25-5-18(c), for any claim arising under Title 13 in connection with the release or threatened release of a hazardous substance or petroleum that was the subject of the approved RWP.

F. No right conferred on either party under this Agreement shall be deemed waived, and no breach of this Agreement excused, unless such waiver is in writing and signed by the party claimed to have waived such right. The Applicant agrees to waive its rights to administrative and judicial review of the following issues: the binding effect and enforceability of the Agreement and the authority of IDEM to enter into this Agreement.

G. The Applicant agrees not to assert any claim or cause of action under any common law theory or any statute against IDEM and the State of Indiana, its agencies, departments, instrumentalities, authorized officers, employees, contractors or representatives for any action taken by IDEM in connection with this Agreement.

22. Severability. The invalidity of any section, subsection, clause or provision of this Agreement shall not affect the validity of the remaining sections, subsections, clauses or provisions of this Agreement.

23. Termination and Satisfaction.

A. Pursuant to IC 13-25-5-8 and IC 13-25-5-19, the IDEM may make a determination to withdraw its approval of a RWP and/or terminate this Agreement and the Applicant's participation in the VRP. This determination may be made for (but not limited to) any of the following reasons: 1) the Applicant fails to timely submit a proposed RWP that meets the requirement of IC 13-25-5 or this Agreement; 2) the Applicant fails to substantially comply with the terms and conditions of the approved RWP and/or this Agreement; 3) the Applicant fails to implement the RWP after being notified of its approval by IDEM; and 4) the IDEM, at a later date, determines that the Site poses an imminent and substantial threat to human health or the environment pursuant to IC 13-25-5-19.

B. In the event that the IDEM makes a determination to terminate this Agreement and terminate Applicant's participation in the VRP for any reason, all protection provided under IC 13-25-5-18(e) is extinguished and IDEM may bring any action to enforce any statute or regulation under Title 13 of the Indiana Code, including an action regarding the violations that arose from a release subject to this Agreement, and the Applicant shall remain responsible for administrative costs. Additionally, the Applicant shall remain responsible for all costs related to responding to the release which was the subject of this Agreement.

C. Further, upon termination of this Agreement by the IDEM, the Applicant is removed from the VRP. If the Applicant's termination occurs for failure to timely submit a RWP, the Applicant may reapply to the VRP. However, subsequent guidance, rules or other documents approved or required by IDEM, as well as any subsequent modifications to the IDEM's RWP non-compliance document or change in design or cleanup level, may be required for any future RWP submitted to IDEM. By reapplying to VRP, the IDEM is in no manner bound to accept the new Application submitted by the Applicant. A reapplication is deemed a new application and, if accepted, the RWP shall be designed and reviewed in accordance with the guidelines established by the Department at the time of reapplication.

D. The provisions of this Agreement shall be satisfied when the IDEM issues a Certificate of Completion to the Applicant. The Parties understand that the IDEM will issue the Certificate of Completion to the Applicant only. Termination or satisfaction of this Agreement does not end the obligations found in paragraph 3 (Access to Records) and paragraph 9 (Administrative Costs).

E. Nothing in this Agreement shall restrict the IDEM from seeking other appropriate relief to protect human health or the environment from pollution or contamination at or from this Site not remediated in accordance with this Agreement.

F. After the IDEM issues the Certificate of Completion, the Governor's Office shall provide Applicant with a Covenant Not To Sue pursuant to IC 13-25-5-18. The Covenant Not To Sue shall contain a listing of the specific work and contaminants covered. The parties understand that the Governor's Office will issue the Covenant Not To Sue to the Applicant only. The Applicant agrees and understands that the covenant shall be conditioned upon and limited to Site conditions described in the approved RWP, provided that the information submitted by the Applicant was complete and accurate.

G. The Applicant agrees and understands that the obligation to pay reasonable Administrative Costs pursuant to paragraph 9 of this Agreement shall survive termination of this Agreement.

24. Work Standards. The Applicant shall execute its responsibilities by exercising the professional and technical standard of care that is customary in the field. If the IDEM becomes dissatisfied with the work product of or the working relationship with those individuals assigned to work on this Agreement, the IDEM may request in writing the replacement of any or all such individuals.

Non-Collusion and Acceptance

The undersigned attests, subject to the penalties for perjury, that he/she is the Applicant, that he/she has not, nor has any other member, employee, representative, agent or officer of the Applicant, directly or indirectly, to the best of the undersigned's knowledge, entered into or offered to enter into any combination, collusion or agreement to receive or pay, and that he/she has not received or paid, any sum of money or other consideration for the execution of this Application other than that which appears upon the face of this Application.

THE REST OF THIS PAGE IS INTENTIONALLY LEFT BLANK

SAMPLE

**SIGNATURE PAGE FOR VRA
BETWEEN IDEM AND _____ [ENTER APPLICANT NAME]**

In Witness Whereof, the Applicant and the State have, through their duly authorized representatives, entered into this Agreement. The parties, having read and understood the foregoing terms of this Agreement, do by their respective signatures dated below hereby agree to the terms thereof.

For the Applicant: _____
By _____ Attested By: _____
Printed Name: _____
Title: _____
Date: _____

For the Indiana Department of Environmental Management

Thomas W. Easterly, Commissioner

Date: _____

SAMPLE

Richard Harris, Section Chief
Voluntary Remediation Program

Date: _____

**EXHIBIT A
SCOPE OF WORK**

The Applicant shall perform the following tasks and provide the requested information relative to this Agreement for the specific purpose of evaluation and implementation of the RWP for the remediation of the release or threatened release of petroleum or hazardous substances from the Site.

Task: A The Applicant shall conduct a full investigation and delineation of the nature and extent of the actual or threatened release being addressed under this Agreement, and the investigation must include any off-site migration of such releases. This requirement is subject to the provision in Exhibit C, Part I, General Special Conditions, Access, concerning areas owned or controlled by entities other than the Applicant.

Task: B The Applicant shall submit a proposed RWP that meets the requirements of IC 13-25-5 as discussed in Task C and Task D not later than 180 days after the execution date of this Agreement. The proposed RWP shall clearly state that the Applicant conducted an investigation of the nature and extent of the actual or threatened release being addressed under this Agreement, including any off-site migration of such releases.

Task: C Pursuant to IC 13-25-5-7, the Applicant shall provide the following items in its proposed RWP: 1) a detailed documentation of the investigation conducted when preparing the proposed RWP, and a description of the work that was performed to determine the nature and extent of the actual or threatened release; 2) a proposed schedule of work to accomplish remediation in accordance with the guidelines established by the IDEM; 3) project plans concerning the following: a) quality assurance plan; b) sampling and analysis plan; c) a health and safety plan; d) a community relations plan; e) a change management plan; f) a record keeping plan; g) a schedule of completion of implementation of tasks set forth in the proposed RWP. The proposed RWP shall specify the remedial actions assumed in determining the RWP and the institutional engineering, or other control, to be used to reduce the risk at the Site. The activities conducted by the Applicant shall be consistent with this Agreement, and all applicable laws and regulations, and appropriate guidance documents as described in the attached Exhibit C, Special Conditions.

Task: D Pursuant to IC 13-25-5-8.5, the proposed RWP must specify the remediation objectives for remediation of hazardous substances or petroleum that are based on background levels or an assessment of risks posed by the hazardous substances and petroleum, taking into consideration the expected future use of the Site and measurable risks to human health, natural resources, or the environment. Risk based objectives shall be based on one of the following: 1) levels of hazardous substances and petroleum calculated by the IDEM using standard equations and default values for that particular contaminant; 2) levels of hazardous substances and petroleum calculated using Site specific data for the default values in IDEM's standard equations; or, 3) levels of hazardous substances and petroleum developed based on Site specific risk assessments that take into account Site specific factors, including remedial measures, restrictive covenants, and environment restrictive ordinances that: (a) manage risk; and (b) control completed or potential exposure pathways. IDEM shall consider and give effect to restrictive covenants as defined in IC 13-11-2-193.5 (also referred to as "Environmental Restrictive Covenants" or "ERCs") and environmental restrictive ordinances as defined in IC 13-11-2-71.2 ("EROs") in evaluating risk based remediation proposals. The proposed RWP, including the format, shall be developed in accordance with guidance documents as specified in the attached Exhibit C, Special Conditions.

Task: E The proposed RWP shall be subject to review and evaluation by the IDEM for 120 days after receipt. Should the IDEM fail to act on the proposed RWP within that timeframe, its failure to act shall not constitute its acceptance of the RWP. The IDEM may request the Applicant to supply additional information or corrected information, and the Applicant may comply with the request or withdraw the proposed RWP from consideration. If the Applicant fails to make a good faith effort to respond to the IDEM's request to supply additional information, the IDEM may determine that the Applicant failed to timely submit a RWP that meets the requirements of IC 13-25-5 and reject the proposed RWP. Upon the rejection of the proposed RWP, this Agreement shall be terminated and the IDEM reserves the right to bring any action to enforce any statute or regulation under Title 13 of the Indiana Code, including an action regarding the violations or releases that were the subject of the Agreement.

Task: F If the Applicant has submitted a proposed RWP that meets the requirements of IC 13-25-5-7, the IDEM will follow the public notice provisions of IC 13-25-5-11 for the proposed RWP, which include: notification to local officials; providing for placement of a copy of the proposed RWP in a local library; publication of a notice requesting comments on the proposed RWP; and at least a 30-day public comment period.

Task: G Following the public comment period, the IDEM will approve, modify and approve, or reject the proposed RWP pursuant to IC 13-25-5-10. If IDEM rejects the proposed RWP, IDEM shall notify the Applicant of the rejection and specify the reasons for the rejection pursuant to IC 13-25-5-12. If the IDEM approves, or modifies and approves, the proposed RWP, the Applicant shall be notified of the decision, and the IDEM will provide a date by which the Applicant may begin implementation of the RWP and the time by which the work must be completed pursuant to IC 13-25-5-13. (If the approved RWP is incorporated by reference the time table set forth in the proposed RWP.)

Task: H The Applicant shall notify the IDEM Project Manager within 60 days of the IDEM's approval of its intent to proceed with implementation of the approved RWP. The Applicant shall provide to the IDEM Project Manager the start and completion dates approved by the IDEM. In addition, prior to starting the work to be performed to remediate the Site, the Applicant shall notify the IDEM, in writing, the name, title, and qualifications of any contractors and/or subcontractors to be used in carrying out the terms of this Agreement. If the contractors or subcontractors to be used to carry out the terms of this Agreement are changed or additional contractors or subcontractors are used, the Applicant shall notify the IDEM Project Manager, and provide the name, title and qualification of that contractor or subcontractor prior to their involvement in the remediation of the Site.

Task: I The IDEM will oversee and review the implementation of the approved RWP and request reports as needed.

Task: J After the remediation work is complete, the Applicant shall submit a Completion Report to the IDEM, and shall provide all the necessary information for a determination to be made whether or not the work was conducted pursuant to the approved RWP and this Agreement. If the remedial objectives for the Site were based on an ERC and/or an ERO, then the Applicant shall include a copy of the recorded ERC and/or the ERO (including documentation showing that the ERO was adopted by a municipal corporation and is in effect under IC 36) with the Completion Report. IDEM is not bound to accept any ERC or ERO that was not evaluated by IDEM prior to being recorded or adopted by a municipal corporation.

Task: K The IDEM will determine whether or not a Certificate of Completion will be issued. IDEM will not issue the Certificate of Completion until the Applicant has remitted all Administrative Costs pursuant to paragraph 9 of this Agreement. If the Certificate of Completion is issued, the Applicant shall record it on the deed of the property subject to the remediation. The Applicant shall provide a copy of the recorded Certificate of Completion to the IDEM for its review to ensure the recording was correct.

Task: L After the IDEM receives a copy of the recorded Certificate of Completion and determines it was properly recorded, the IDEM Project Manager will prepare a Covenant Not To Sue packet to forward to the Governor's Office for appropriate signature. When the Covenant Not To Sue is executed by the Governor's Office, the IDEM will provide to the Applicant the executed Covenant Not To Sue.

The Contractor shall follow the schedule provided as Exhibit B, Schedule for Project Tasks, attached hereto and incorporated herein.

SAMPLE

**EXHIBIT B
SCHEDULE OF PROJECT TASKS**

The tasks and the associated time periods necessary for the project are as follows:

TIME PERIOD	TASK
Prior to or concurrent with the submittal of the RWP	<ul style="list-style-type: none"> • Task A
Within 180 days after the Effective Date of this Agreement or longer per a written extension granted by IDEM	<ul style="list-style-type: none"> • Tasks B, C & D
Upon IDEM's receipt of the Applicant's proposed RWP	<ul style="list-style-type: none"> • Task E
Upon conclusion of IDEM's review of the proposed RWP and any additional information submitted at IDEM's request	<ul style="list-style-type: none"> • Task F
Following the completion of the 60-day public comment period on the proposed RWP	<ul style="list-style-type: none"> • Task G
Within 60-days of IDEM's approval of the RWP	<ul style="list-style-type: none"> • Tasks H & I
Following the completion of the remediation work performed pursuant to the RWP	<ul style="list-style-type: none"> • Task J & K
After IDEM receives and reviews the recorded Certificate of Completion	<ul style="list-style-type: none"> • Task L

**EXHIBIT C
SPECIAL CONDITIONS**

In addition to the terms and conditions set forth herein, the parties agree to abide by the following Special Conditions:

**Part I
General Special Conditions**

Access.

To the extent that the Site or other areas where work is to be performed hereunder are presently owned or controlled by parties other than those bound by this Agreement, the Applicant shall obtain access agreements from the present owners. Such agreements shall provide access for IDEM and authorized representatives of IDEM, as specified below. In the event that access to the Site is not obtained, the Applicant shall so notify IDEM, which may at its discretion assist the Applicant in gaining access. IDEM may terminate or modify this Agreement should the Applicant's inability to gain access to the Site or other areas affect the Applicant's ability to perform the work required herein. The Applicant shall provide authorized representatives of IDEM access to the Site and other areas where work is to be performed at all reasonable times. Such access shall be related solely to the work being performed on the Site and shall include, but not be limited to: inspecting records, operating logs, and contracts related to the Site; reviewing the progress of the Applicant in carrying out the terms of this Agreement; conducting such tests, inspections, and sampling as IDEM may deem necessary; examining, sound recordings, and other documents; equipment for field activities; and verifying data submitted to IDEM by the Applicant's equipment. The Applicant shall permit IDEM's authorized representatives to inspect and copy all records, logs, operating documents, and other writings, including all sampling and analytical data, which are in this Agreement and on which the Applicant exercises control. All persons with access to the Site pursuant to this Agreement shall comply with the approved Health and Safety Plan and established health and safety protocols.

Nothing herein shall be construed as restricting the inspection or access authority of IDEM under any law or regulation. Furthermore, nothing herein shall be construed as restricting the authority of IDEM to abate any pollution or contamination at the Site.

Community Relations.

In addition to performing the requirements specified in the Community Relations Plan in the Applicant's RWP, the Applicant shall cooperate with IDEM in providing information about the RWP to the public. The Parties will give to each other reasonable advance notice of any such public meetings they may hold, and each will work together to agree upon the time and location of any public meeting. IDEM may require the Applicant or its agent to attend any public meeting held by the agency. Before the Commissioner may approve or disapprove the RWP, the Commissioner shall provide thirty (30) days for public comment pursuant to IC 13-25-5-11.

IDEM shall maintain a public information file containing the RWP during the thirty (30) day Public Comment period at a public repository near the Site. The Applicant shall provide the location of a suitable public repository in accordance with applicable guidance.

Extensions of Time Periods—Generally.

Any written response shall be deemed timely performed if hand delivered or postmarked by the last day of any time period prescribed herein. Whenever a Party has the right or an obligation to

do some act or make some response within a prescribed period after the service of a notice by mail, three (3) days shall be added to the prescribed period.

Whenever any Party is called upon to respond or otherwise act in a certain number of days, and the final day occurs on a Saturday, Sunday or legal holiday (whether state or national), such time limitation shall automatically extend to the next business day after such Saturday, Sunday or legal holiday.

Any time periods specified in this Agreement may be extended only by written agreement of the Parties.

Extensions of Time Periods for submitting a RWP.

The Applicant may receive an extension of time for no longer than 90 days if requested in writing and the IDEM determines good cause exists for requesting the extension. Applicant may request a second extension for no longer than 90 days if requested in writing and the IDEM determines good cause exists for requesting the second extension. In no event shall more than two 90 day extensions be granted, and if Applicant fails to submit a RWP that meets the requirements of IC 13-25-5 within the initial 180 day period or within an extended time period as granted by the IDEM, this Agreement shall terminate and the IDEM reserves the right to bring any action to enforce any statute or regulation under Title 13 of the Indiana Code, including an action regarding the violations or releases that were the subject of this Agreement.

Event of Bankruptcy or Death
As soon as the Applicant has knowledge of an intent to file for bankruptcy and no later than seven (7) days after the actual filing of a voluntary or involuntary bankruptcy petition, the Applicant shall notify IDEM of the filing of such bankruptcy petition. If an Applicant dies, as soon as a personal representative of a decedent's estate becomes aware of this VRP project, the personal representative shall notify IDEM of the project of the estate. IDEM shall be considered a creditor of the bankruptcy and/or estate. IDEM's claim may be a contingent claim, in whole or in part, as there may be oversight costs due after the closing of the bankruptcy and/or probate estate.

Notice to Key Person(s)/Designated Project Managers.

Whenever any notice, statement, report, approval, notification, disapproval, and other correspondence or communication is required under this Agreement, it shall be sent to the following addresses by U.S. First Class mail, hand delivery, overnight mail, or by courier service:

Notices to IDEM: Project Manager
Voluntary Remediation Program
MC 66-30V IGCN 1101
Indianapolis, Indiana 46204-2251
(317) 231-(extension)

Applicant Project Manager: Name
(See paragraph 16) Address
City, State, Zip
Phone Number

Additional Applicant Contact (optional): Name
(Delete this section is no additional Contact is desired) Address
City, State, Zip

Part II
Special Technical Conditions

Compliance with Guidance Documents.

All work performed and all documents submitted shall be in accordance with all the VRP guidance documents available and in effect as the Effective Date of this Agreement, including the IDEM's *Risk-Integrated System of Closure non-rule policy document (Waste-0046-NPD, 24 Ind. Reg. 1986 (2001))* and IDEM's *Draft Vapor Intrusion Pilot Program Guidance (April 26, 2006)* or any other Vapor Intrusion guidance approved by IDEM. The Applicant may supplement this guidance with guidance or other documents approved by the VRP. Guidance documents identified in this Agreement are named for the convenience of the Applicant; the failure to specify a specific guidance document in this Agreement shall not be construed as a limitation on the applicability of a guidance document.

Environmental Professionals.

All work plans and reports related to the practice of geology to be submitted by the Applicant shall be designed and implemented under the direction and supervision of a Licensed Professional Geologist ("LPG") licensed in Indiana with expertise in hazardous substance or petroleum Site investigation and remediation. If the work requires a designed remediation system or engineered barrier, the work will be done under the direction and supervision of a Professional Engineer ("PE") with expertise in hazardous substance or petroleum Site investigation and remediation.

Quality Assurance.

The Applicant shall use quality assurance, quality control, and chain of custody procedures in accordance with the Quality Assurance Project Plan and any other procedures approved by IDEM through any sample collection, analysis and testing under this Agreement, unless IDEM agrees otherwise.

Applicant shall provide the IDEM with reasonable advance notice of all sampling and analysis details in the approved RWP. IDEM reserves the right to be present at the presence of an IDEM representative during sampling and analysis. To provide quality assurance and maintain quality control, the Applicant shall do each of the following.

- (a) Applicant shall allow IDEM personnel and/or IDEM authorized representatives reasonable access to laboratories and personnel utilized by the Applicant for analyses.
- (b) Applicant shall ensure that all sampling and analyses are performed according to U.S. EPA methods, the approved Quality Assurance Project Plan, or other methods deemed satisfactory by IDEM.
- (c) Applicant shall ensure that any laboratories used by the Applicant for analyses participate in a documented Quality Assurance/Quality Control program that complies with U.S. EPA guidance documents. As part of such a program, and upon request by IDEM, such laboratories shall perform analyses of samples provided by IDEM to demonstrate the quality of analytical data for each such laboratory.
- (d) Applicant shall perform confirmatory sampling for all contaminants and all media for which a Certificate of Completion and Covenant Not to Sue

are sought. Applicant shall specify in the RWP the means of taking confirmatory samples and notify IDEM personnel a minimum of fourteen (14) days prior to taking confirmatory samples.

IDEM reserves the right to reject any data not gathered consistent with the requirements of this section and Exhibit C, Part II (Sampling and Data/Document Availability) and to require that the Applicant utilize a different laboratory.

Sampling and Data/Document Availability.

The Applicant shall, upon request, make the results of all sampling, including raw data, and/or tests or other data generated by the Applicant, or on the Applicant's behalf, available to IDEM. IDEM will make available to the Applicant the quality assured results of sampling and/or tests or other data similarly generated by IDEM.

At the request of IDEM, the Applicant shall provide to IDEM (and/or its authorized representative) splits or duplicates of any samples collected by the Applicant pursuant to the implementation of this Agreement. At the request of the Applicant, IDEM (or its authorized representative) shall provide split or duplicate samples to the Applicant of any samples collected by IDEM and/or its authorized representative pursuant to the implementation of this Agreement. Each Party shall notify the other in advance of any sample collection activity.

Scientific Practices.

The Applicant shall employ sound scientific, engineering, and construction practices.

Part III
Agency Representative
The following agencies have an interest in the RWP being performed in the current jurisdiction of the Site:
SAMPLE

- 1. Indiana Department of Natural Resources
Executive Office Room W-256
402 W. Washington, Indianapolis, IN 46204
Attn: John M. Davis
Phone: (317) 232-4025
Fax: (317) 233-6811
- 2. Indiana State Department of Health
Epidemiology Resource Center
3-D
2 N. Meridian St.
Indianapolis, IN 46204
- 3. Department of Homeland Security
Fire Code Enforcement, Fire & Building Safety
Rm E-241
402 W. Washington St.
Indianapolis, IN 46204
Phone: (317) 232-2222
Fax: (317) 233-0307

4. U.S. Department of Interior
Fish & Wildlife Service
Bloomington Ecological Services Field Office
620 South Walker Street
Bloomington, Indiana 47403-2121
Telephone: (812) 334-4261
Fax: (812) 334-4273

The Applicant shall provide notice to these agencies of the submission of the RWP by sending them a copy of the RWP Executive Summary, a Site map, and the names of the Project Managers for the Parties. Any of the above named agencies that wish to review the RWP shall be given an opportunity by IDEM to comment during the time that IDEM is reviewing the RWP or during the thirty (30) day public comment period provided for in IC 13-25-5-11. If the Applicant wishes to address natural resource damages in the RWP, the Applicant shall so notify the State and Federal Natural Resources Trustees within thirty (30) days of the Effective Date of this Agreement.

Part IV Natural Resource Damages

The Applicant may devise and carry out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources or pay to the State the value of the natural resources, as determined by the Natural Resource Trustees. The plan may be developed and implemented as part of the RWP. If the Applicant wishes to address natural resource damages in the RWP, the Applicant shall so indicate in the notice to State and Federal Natural Resources Trustees, as

defined in Exhibit A, Special Provisions, Item L, *Implementation Coordination*.

After receiving notice of the Applicant's plan to address natural resource damages, the Natural Resources Trustees may perform a pre-assessment screen. If the Applicant is responsible for construction of, or damage to, natural resources, the Applicant shall reimburse IDEM for any and all costs incurred by IDEM or the Indiana Department of Natural Resources in performing the pre-assessment screen. The Applicant will perform the assessment of damage on the pre-assessment screen. This Agreement and the Covenant Not to Sue issued hereunder do not alter the liability of the Applicant or any other person to the federal government for claim of natural resource damages under any federal law.

**EXHIBIT D
ITEMIZED COSTS**

NON-BINDING COST ESTIMATE
IDEM SITE #: Site Number

Oversight of voluntary remediation at the Site Name site in Site City, Indiana will be required. The following tasks and estimated costs are anticipated:

Review of Phase 2 Work Plan	\$
Review of Phase 2 Report & Revisions	\$
Review of Remediation Work Plan & Revisions	\$
Review of Risk Assessment & Revisions	\$
Implementation Oversight	\$
Review of Remediation Completion Report & Revisions	\$

Please note that IDEM split sampling costs are NOT included in this estimate

Total: \$

SAMPLE
N O C U M

Sample 8.7 Covenant Not to Sue

STATE OF INDIANA
VOLUNTARY REMEDIATION PROGRAM
COVENANT NOT TO SUE
COVENANT

On DATE, the Commissioner of the Indiana Department of Environmental Management issued a Certificate of Completion pursuant to Indiana Code § 13-25-5-16 to APPLICANT in recognition of the completion of the work required under a Voluntary Remediation Work Plan ("Work Plan"). The Certificate is attached to this Covenant as Exhibit 1 and the Work Plan as Exhibit 2. The APPLICANT has completed the Work Plan to address the release of the hazardous substances or petroleum listed in Exhibit 3 at the SITE NAME ("Site") located at STREET ADDRESS, CITY, Indiana. Site characterization information is attached as Exhibit 4, and a site map and legal description are attached as Exhibit 5.

Pursuant to Indiana Code § 13-25-5, the Governor of the State of Indiana now covenants not to sue APPLICANT for any liability, including future liability, or for any claim, resulting from or based upon the release or threatened release of contaminants listed in Exhibit 3 that were the subject of the Work Plan. The Covenant shall bar suit against APPLICANT, and any other person who receives the Certificate of Completion through transfer or who acquires the subject property with the Certificate applied for by "successors in title", from all public and private claims arising under Title 13 of the Indiana Code or rules adopted thereunder in connection with the release or threatened release of a hazardous substance or petroleum that was the subject of the Work Plan.

This Covenant Not To Sue shall be construed as a Covenant running with the land, but shall not apply to the predecessors in title of APPLICANT.

RESERVATIONS

1. Pursuant to Indiana Code § 13-25-5-18(c), the Covenant does not extend to any public or private claim for liability, or future liability, arising under Title 13 of the Indiana Code or any rules adopted thereunder, resulting from or based upon a condition or extent of a condition that:

- A) was present on the property on which a completed Voluntary Remediation Work Plan took place; and
- B) was not known to the Commissioner of the Indiana Department of Environmental Management at the time the Certificate of Completion was issued.

For purposes of this paragraph, the Commissioner's knowledge at the Site is limited to the information IDEM received during the execution of the Work Plan and the information contained in the site investigation report(s) and the Work Plan and its attachments as provided to IDEM.

2. Pursuant to Indiana Code § 13-25-5-1, a person that performs an action under an approved Remediation Work Plan is performing that action to assure compliance with the voluntary remediation of hazardous substances and petroleum. This section does not affect a person's legal obligations set forth in 42 U.S.C. § 6901, *et seq.* regardless of a person's participation in this chapter.

3. Pursuant to Indiana Code § 13-25-5-18(d), this Covenant does not preclude the federal government from pursuing APPLICANT for claims based on federal law.

4. This Covenant does not preclude the State of Indiana from taking any unilateral action at the Site, under any existing or future statutory authority, to protect human health and the environment, provided however, in no event shall the State have a right of recovery against APPLICANT, or its successors in title, to the extent that such right of recovery arises under Title 13 of the Indiana Code, or rules adopted thereunder, and relates to matters covered by the Work Plan.

5. This Covenant does not preclude the State Natural Resource Trustees ("Trustees") from pursuing APPLICANT, or its successors in title, for natural resource damages resulting from the release or threatened release of contaminants listed in Exhibit 3 that were addressed by the completed Work Plan.

6. This Covenant does not preclude the State of Indiana from enforcing, under Indiana Code § 13-14-2-6(5), a restrictive covenant implemented under the Work Plan.

7. This Covenant does not preclude the State of Indiana from suing APPLICANT for the money they are required to pay the Indiana Department of Environmental Management under the Voluntary Remediation Agreement.

WHEREFORE, the Governor of the State of Indiana issues this Covenant to APPLICANT, with all aforementioned privileges, responsibilities, conditions and reservations, this _____ of _____, 20_____.

Mitchell E. Daniels, Jr., Governor, State of Indiana

APPROVED FOR LEGALITY AND FORM

Steve Carter
Attorney General, State of Indiana

By:
Gregory F. Zoeller
Chief Counsel, Advisory Services

Appendix A List of Referenced Documents and Websites

IDEM DOCUMENTS AND WEBSITES

	TITLE	WEBSITE
1	Emergency Response Program Website	www.IN.gov/idem/4155.htm
2	Environmental Restrictive Covenant Template (<i>Tailored to Leaking Underground Storage Tank sites</i>)	www.IN.gov/idem/4997.htm
3	ELTF and UST Forms	www.IN.gov/idem/5157.htm
4	Excess Liability Trust Fund Website	www.IN.gov/idem/5063.htm
5	Federal Programs Website	www.IN.gov/idem/4152.htm , Website
6	Institutional Controls Registry	www.IN.gov/idem/5959.htm
7	IDEM Complaints Clearinghouse	www.IN.gov/idem/5274.htm
8	IDEM Forms Website	www.IN.gov/idem/5157.htm
9	IDEM Public Notices Website	www.in.gov/idem/5474.htm
10	IDEM Website	www.IN.gov/idem
11	Indiana Environmental Rules, Statutes, and Policies	www.IN.gov/idem/4087.htm

TITLE	WEBSITE
12 Indiana Immediate Removals Program Website	www.IN.gov/idem/4298.htm
13 Leaking Underground Storage Tank Program Website	www.IN.gov/idem/4997.htm ,
14 LUST Initial Incident Report Form	www.IN.gov/idem/5157.htm
15 Energy Policy Act Public Record Summary Information On Underground Storage Tanks (USTs)	www.IN.gov/idem/4999.htm
16 LUST Program QAPP	www.IN.gov/idem/4997.htm
17 NPD <i>Property Containing Contaminated Aquifers/Underground Storage Tanks</i> Waste-0038	www.IN.gov/idem/4694.htm
18 NPD <i>Excess Liability Trust Fund/Risk Integrated System of Closure</i> Waste-0039	www.IN.gov/idem/4694.htm
19 NPD “Access to Third Party Properties” Waste-0043	www.IN.gov/idem/4694.htm
20 NPD <i>Brownfields Program Comfort and Site Status Letters Policy</i> Waste-0051	www.IN.gov/idem/4694.htm

	TITLE	WEBSITE
21	NPD <i>Drilling Procedures and Monitoring Well Construction Guidelines</i> Waste-0053	www.IN.gov/idem/4694.htm
22	NPD <i>Methyl Tertiary Butyl Ether (MTBE) Remediation</i> Waste-0055	www.IN.gov/idem/4694.htm
23	NPD <i>Monitored Natural Attenuation of Petroleum Contaminated Sites</i> Waste-0054	www.IN.gov/idem/4694.htm
24	NPD <i>Risk Integrated System of Closure (RISC) Technical Resource Guidance Document and User's Guide</i> Waste-0046	www.IN.gov/idem/4694.htm
25	NPD <i>Property Containing Contaminated Aquifers</i> Waste-0047	www.IN.gov/idem/4694.htm
26	NPD <i>Remediation Closure Guide</i> Waste-0046-R1	www.IN.gov/idem/4694.htm
27	NPD <i>Supplemental Environmental Project (SEP) Policy</i> Waste-08-003	www.IN.gov/idem/4694.htm
28	NPD <i>The Underground Storage Tank Branch Guidance Manual (USTBGM) 1994</i>	www.IN.gov/idem/4997.htm ,

	TITLE	WEBSITE
29	<i>OLQ Document Submittal Guidelines</i>	www.IN.gov/idem/6578.htm
30	<i>OLQ Electronic Data File Submittal Guidelines</i>	www.IN.gov/idem/5384.htm
31	OLQ GIS Services Website	www.IN.gov/idem/6546.htm
32	RCRA Corrective Action Program Website	www.IN.gov/idem/4995.htm
33	RCRA Memorandum of Understanding with U.S. EPA	www.IN.gov/idem/4127.htm
34	Record of Remedy Selection Form	www.IN.gov/idem/5157.htm
35	Record of Site Closure Form	www.IN.gov/idem/5157.htm
36	Site Investigations Program Website	www.IN.gov/idem/4143.htm
37	State Cleanup Independent Closure Process	www.IN.gov/idem/6548.htm
38	State Cleanup Program Website	www.IN.gov/idem/4179.htm ,
39	Virtual File Cabinet (VFC)	www.IN.gov/idem/6551.htm .
40	VFC Tutorial	www.IN.gov/idem/6551.htm .
41	Voluntary Remediation Program Website	www.IN.gov/idem/4127.htm ,
42	VRA Template	www.IN.gov/idem/4127.htm
43	VRP Application	www.IN.gov/idem/4127.htm

	TITLE	WEBSITE
44	VRP Certificate of Completion (<i>example</i>)	www.IN.gov/idem/4127.htm
45	VRP Community Relations Plan Guidance	www.IN.gov/idem/4127.htm
46	VRP Covenant Not to Sue Example	www.IN.gov/idem/4127.htm
47	VRP Memorandum of Agreement with U.S. EPA	www.IN.gov/idem/4127.htm
48	VRP Remediation Completeness Report Completeness Checklist	www.IN.gov/idem/4127.htm
49	VRP Remediation Work Plan Completeness Checklist	www.IN.gov/idem/4127.htm
50	VRP Remediation Work Plan Completeness Checklist	www.IN.gov/idem/4127.htm

OTHER ORGANIZATIONS AND AGENCIES

	TITLE	WEBSITE
1	Brownfields Comfort Letter/Site Status Request (IFA)	www.IN.gov/ifa/brownfields
2	U.S. EPA Brownfields and Land Revitalization Laws and Statutes	www.epa.gov/brownfields/laws/index.htm
3	IC 13-25-5	www.IN.gov/legislative/ic/code
4	Indiana Finance Authority Website	www.IN.gov/ifa/brownfields
5	Indiana General Assembly Website	www.IN.gov/legislative/ic_iac
6	U.S. EPA Emergency Management Internet Site	www.epa.gov/emergencies/content/er_cleanup.htm
7	U.S. EPA Laws & Regulations, RCRA Internet Site	www.epa.gov/lawsregs/laws/rcra.html
8	U.S. EPA National Priorities List	www.epa.gov/superfund/sites/npl/npl_hrs.htm
9	U.S. EPA OUST Regulations Pertaining to Underground Storage Tanks Internet Site	www.epa.gov/OUST/fedlaws/cfr.htm
10	U.S. EPA OUST Leaking Underground Storage Tank Corrective Action Compendium	www.epa.gov/oust/lust/intro.html
11	U.S. EPA OUST Remediation/Cleanup Technologies Internet Site	www.epa.gov/oust/cat/REMEDIAL.HTM

	TITLE	WEBSITE
12	U.S. EPA OUST Site Characterization/ Assessment Internet Site	www.epa.gov/oust/cat/sitechar.htm
13	U.S. EPA Region V Superfund Internet Site, Site Information	www.epa.gov/R5Super/
14	U.S. EPA OUST Analysis of Today's Rule - A Program Scope	www.epa.gov/oust/fedlaws/pre2804a.htm
15	U.S. EPA Superfund Cleanup Process Internet Site	www.epa.gov/superfund/cleanup/index.htm
16	U.S. EPA Superfund Guidance Documents Internet Site	www.epa.gov/superfund/policy/remedy/sfremedy/supersede.htm
17	U.S. EPA Superfund Laws and Policy and Guidance Internet Site	www.epa.gov/superfund/policy/index.htm
18	U.S. EPA Superfund Policies and Guidance Internet Site	www.epa.gov/superfund/policy/guidance.htm
19	U.S. EPA Superfund Post Construction Internet Site	www.epa.gov/superfund/cleanup/postconstruction/index.htm
20	U.S. EPA Superfund Post Construction Internet Site, Five Year Remedy Reviews	www.epa.gov/superfund/cleanup/postconstruction/5yr.htm

Appendix B

Acronyms

Acronym	Term
AAI	All Appropriate Inquiry
AAI Phase I	All Appropriate Inquiry Phase I Environmental Site Assessment
AO	Agreed Order
AOPA	Administrative Orders and Procedures Act
ARARs	Applicable or Relevant and Appropriate Requirements
BFPP	Bona Fide Prospective Purchaser
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CNTS	Covenant Not to Sue
CPOs	Contiguous Property Owner
CRP	Community Relations Plan
CSM	Conceptual Site Model
DERP	Defense Environmental Restoration Program
ELTF	Excess Liability Trust Fund
EPCRA	Emergency Planning and Community Right-to-Know Act
ERC	Environmental Restrictive Covenant
ERO	Environmental Restrictive Ordinance
FSI	Further Site Investigation
GIS	Geographic Information Services (<i>refers to staff located in OLQ Science Services Branch</i>)
HASP	Health and Safety Plan
HEA	House Enrolled Act
HRS	Hazard Ranking System
IAC	Indiana Administrative Code
IBP	Indiana Brownfields Program
IC	Indiana Code
ICP	Independent Closure Process
IDEM	Indiana Department of Environmental Management
ISC	Initial Site Characterization
LEL	Lower Explosive Limit
LSI	Limited Subsurface Investigation
LUST	Leaking Underground Storage Tank
MB	Megabytes
MCLs	Maximum Contaminant Levels
MOA	Memorandum of Agreement
MTBE	Methyl Tertiary Butyl Ether
NCP	National Contingency Plan

Acronym	Term
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NPD	Non-Rule Policy Document
NPL	National Priorities List
OLQ	IDEM Office of Land Quality
O/O	Owner/Operator
ORC	Oxygen Release Compound
OUST	Office of Underground Storage Tanks (<i>U.S. EPA</i>)
PA	Preliminary Assessment
QA/QC	Quality Control / Quality Assurance
QMRs	Quarterly Monitoring Reports
RCG	Remediation Closure Guide
RCRA	Resource Conservation and Recovery Act
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
RISC	Risk Integrated System of Closure
ROD	Record of Decision
RP	Responsible Party
RPG	Remediation Program Guide
RRS	Record of Remedy Selection
RSB	Remediation Services Branch
RSC	Record of Site Closure
RWP	Remediation Work Plan
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SCP	State Cleanup Program
SEP	Supplemental Environmental Project
SF	Superfund Program
SI	Site Investigation
SSL	Site Status Letter
TSDs	Treatment, Storage Or Disposal Facilities
U.S. EPA	U.S. Environmental Protection Agency
UAO	Unilateral Administrative Order
USTBGM	Underground Storage Tank Branch Guidance Manual
USTs	Underground Storage Tanks
VFC	Virtual File Cabinet
VRA	Voluntary Remediation Agreement
VRP	Voluntary Remediation Program

Appendix C Glossary

“Agreed order (AO)” - (1) A written negotiated settlement, to which Indiana Department of Environmental Management (IDEM) is a party, that resolves an enforcement action issued by Indiana Department of Environmental Management (IDEM). (2) The formal legal agreement between the agency and the respondent that contains steps the respondent must take to comply with the law. In most cases, this agreement includes a civil penalty for past violations and stipulated penalties for failure to complete future compliance steps. Where appropriate, the agreement will include, as part of the civil penalty, an addition of economic benefit realized by the respondent for noncompliance. (3) The formal legal agreement between the agency and the owner and operator of a hazardous or solid waste facility. The AO specifies the actions that must be taken by the owner and operator to comply with the law.

“Applicable or relevant and appropriate requirements (ARARs)” - ARARs are defined by the National Oil and Hazardous Substances Contingency Plan (NCP) at 40 CFR 300.5 as “...those clean-up standards, standards of control, and other substantive requirements, criteria or limitations promulgated under federal environmental or state environmental or facility citing laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance found at a CERCLA site.” ARARs are identified during the RI/FS to help screen potential remedial actions at a Superfund site.

“Applicant” - The individual, agency, political subdivision, corporation, limited liability company, partnership, association or other entity that applies to the Indiana Department of Environmental Management for a decision, a permit or other approval to conduct a proposed activity.

“Branch chief (BC)” - A second-level agency supervisor responsible for managing section chiefs and nonsupervisory agency staff.

“Brownfield” - A parcel of real estate that is abandoned or inactive; or may not be operated at its appropriate use; and on which expansion or redevelopment is complicated because of the presence or potential presence of a hazardous substance, a contaminant, petroleum, or a petroleum product that poses a risk to human health and the environment (*IC 13-11-2-19.3*).

“Brownfields no further action (NFA) letter” - A letter issued to a party that demonstrates current levels of petroleum contaminants of concern at the brownfield site substantially meet current cleanup criteria as established by the Indiana Department of Environmental Management (IDEM) under the *Remediation Closure Guide*. The potential liability of the party requesting the letter is not addressed. The NFA states that based on a technical analysis of information submitted to IDEM pertaining to site conditions, IDEM concludes that current conditions do not present a threat to human health or the environment and that IDEM does not plan to take a response action at the brownfield site.

“Closure” - IDEM’s written recognition that a party has demonstrated attainment of remediation objectives in a particular area. The written instrument for this decision varies by remediation program. Under the Resource Conservation and Recovery Act, closure refers to a series of formal procedures required to end the operation of a permitted treatment, storage, or disposal unit.

“Code of federal regulations (CFR)” - A codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

“Combined sewer overflows (CSO)” - (1) Overflows from sewers designed and constructed to transport both storm water and raw sewage. (2) A system that is a combination of sanitary and storm water. Also refers to an event which occurs when excess flow occurs within a combined sewer system, thus releasing untreated wastewater directly into a body of water. CSOs require a discharge permit. (3) A combined sewer overflow is the combination of sanitary sewage and storm water in the same conduit (*sewer pipe*).

“Comfort letter (CL)” - A liability clarification letter issued to a party that qualifies for an applicable exemption to liability found in Indiana law or the Indiana Department of Environmental Management (IDEM) policy, but is not a legal release from liability.

“Comment letter” - A letter issued to applicants identifying issues or deficiencies in environmental investigations/remediations that need to be addressed and next steps to achieve closure of the site.

“Comment period” – The time allowed from the date a notice is published within which criticisms on and/or suggestions regarding an agency action or decision may be received.

“Commissioner’s order” - The document described by IC 13-30-3-4, issued by the Commissioner when a case is not settled through an agreed order.

“Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)” – Legislation that established the federal Superfund for response to uncontrolled releases of hazardous substances to the environment.

“Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS)” – The U.S. Environmental Protection Agency’s (U.S. EPA’s) inventory and tracking system for potential hazardous waste sites.

“Conceptual site model” – A comprehensive description of a site and the processes by which contamination may move from source(s) to receptor(s).

“Conditional Closure” – A closure that relies on a continuing activity and/or activity restriction to adequately address risk from a release.

“Contaminant” – For purposes of the *Remediation Closure Guide* and the *Remediation Program Guide*, a chemical present at a concentration that exceeds the chemical’s remediation objective.

“Contamination” – (1) The degradation of natural water quality as a result of human activities (See 312 IAC 13-1-10).

(2) The presence in ground water of at least one contaminant in a quantity or concentration that:

- A. Is injurious to human health, plant or animal life, or property;
- B. Interferes unreasonably with the enjoyment of life or property; or
- C. Otherwise violates:
 - a. Environmental management laws; or
 - b. Rules adopted under environmental management laws (IC 13-11-2-43).

“Covenant not to sue (CNTS)” - A document limiting liability issued by the governor as defined by IC 13-25-5-18.

“Defense-State Memorandum of Agreement (DSMOA)” – An agreement between a state and the U.S. Department of Defense (DoD) that establishes a partnership for environmental restoration fostering communication and cooperation on specified installations. The DSMOA provides for reimbursement to the state by DoD for costs of providing specified types of assistance (*eligible services*) for environmental restoration at specified DoD facilities.

“Emergency measures” - (328 IAC 1-1-5.1) Any work described under IC 13-23-8-4(b) (1). The term only includes the necessary work performed to directly abate the following conditions related to a release:

- (1) Petroleum or petroleum constituents are detected in indoor air in an inhabitable building greater than short term risk-based concentrations under IC 13-12-3-2 for the contaminants.
- (2) Petroleum or petroleum constituents, greater than 10 percent of the measured lower explosive limits, are detected anywhere in utility conduits, such as sewers.
- (3) Petroleum or petroleum constituents are detected as free product or sheen in utility conduits or surface water.
- (4) Petroleum or petroleum constituents are detected as free product off-site, not including easements or rights-of-way.
- (5) Petroleum or petroleum constituents are detected at or above the maximum contamination levels (MCLs) or RISC residential ground water cleanup objectives under IC 13-12-3-2(a):
 - (A) In a drinking water well, as measured at the point of compliance or at the tap; or
 - (B) Within one year time of travel from a public drinking water well, and the petroleum or petroleum constituents are in imminent danger of impacting drinking water.
- (6) Any other condition requiring direct abatement, as specified by the commissioner, based on the potential threat to human health or the environment.

“Emergency Response Section (ERS)” - The section of the Office of Land Quality, Compliance and Response Branch responsible for response to emergency environmental releases throughout Indiana. This section also is responsible for, but not limited to, clean-up activities relating to emergency releases.

“Engineering controls” – Physical barriers designed and maintained to prevent humans or other receptors from being exposed to contaminated environmental media.

“Environmental restrictive covenant (ERC)” – A legal and administrative measure to protect human health and the environment at sites where contamination is left in place. ERCs limit human exposure by restricting activity, use, and access to properties with contamination. Restrictive covenants can be enforced by the state against current and future property owners.

“Environmental restrictive ordinance (ERO)” - An ordinance adopted by a municipal corporation that limits, regulates, or prohibits withdrawal, human consumption, and any other use of ground water.

“Fact sheet” – An agency authorized document used to provide information to external stakeholders on a specific environmental topic or issue.

“FastTRACK” - A streamlined approach to LUST site characterization that reduces the amount of information submitted to IDEM during the iterative step-out phases of the site characterization and IDEM expedites review and comments. It is designed to complete site characterization within one year from the confirmed release date.

“Federal-lead sites” – Sites for which the U.S. Environmental Protection Agency has the lead enforcement role, responsible for directing the majority of work and requires the submission of reports on a semi-annual basis.

“Hazard ranking system (HRS)” – U.S. Environmental Protection Agency’s principal mechanism for placing sites on the NPL.

“Hazardous substance” - Set forth in Section 101 of CERCLA (*42 U.S.C. 9601*). Any substance that the solid waste management board determines to be hazardous under environmental management laws pursuant to IC 13-11-2-98. Refer to the list of hazardous substances found at www.epa.gov/oust/faqs/hazusts.htm.

“Health and safety plan” - A site safety plan as outline and required under 29 CFR 1910.120.

“Incident number” - A unique number generated by the Underground storage tank/ Leaking underground storage tank/ Community right to know/ Emergency response System (ULCERS) database and assigned to a spill notification call when the minimum required data fields are filled.

“Incident report” - An electronic form filled out by emergency response staff to record data regarding spills of hazardous materials, petroleum and objectionable substances.

“Indiana Code (IC)” - The codification of laws enacted by the Indiana General Assembly that is maintained by the Indiana Legislative Council.

“Indiana Department of Environmental Management (IDEM)” - An agency of Indiana State Government.

“Institutional Controls” – Administratively or legally enforceable measures that limit human exposure to contaminants that exceed residential remediation objectives.

“Maximum contaminant level (MCL)” – Maximum concentration of a chemical allowed in drinking water systems by the National Primary Drinking Water regulation (40 CFR 141.22 [*inorganic chemicals*] and 141.61 [*organic chemicals*]).

“Memorandum of agreement (MOA)” - A partnership agreement, in which the two parties have a common goal. Memorandums of Agreement are (*generally*) limited to state and federal agencies, whereby (*generally*) both parties have duties under the agreement, which involve financial obligations.

“Memorandum of understanding (MOU)” - A partnership agreement, in which the two parties have a common goal. Memorandums of Understanding are limited to: Agency to state agencies, agency to local government entities, agency to recognized state committees, agency to recognized state educational institutions and agency to federal agencies, whereby (*generally*) both parties have duties under the agreement, which do not (*generally*) involve payments.

“Monitoring well” - A well installed to obtain hydrogeological information or to monitor the quality or quantity of ground water (312 IAC 13-1-18).

“National Contingency Plan (NCP)” - Regulation that establishes roles, responsibilities and authorities for responding to hazardous substance releases. The NCP established the HRS as the principal mechanism for placing sites on the NPL.

“National Oil and Hazardous Substances Contingency Plan (NCP)” – The rules that implement CERCLA.

“National Priorities List (NPL)” - Under the Superfund Program, the list of releases and potential releases of hazardous substances pollutants, and contaminants that appear to pose the greatest threat to public health, welfare and the environment.

“No further remedial action planned (NFRAP)” – A site disposition decision that further response under the Federal Superfund Program is not necessary.

“Nonrule policy document (NPD)” - Indiana Department of Environmental Management (IDEM) agency statement or policy that is consistent with IC 13-14-1-11.5(a) that:

- A. Interprets, supplements or implements state environmental statutes or rules;
- B. Has not undergone the rulemaking process established in IC 4-22-2;
- C. Is not intended by the agency to have the effect of law; and
- D. Is not related solely to internal agency organization; but that has been made available for public inspection, comment and presented to the appropriate State Environmental Board(s) as required by IC 13-14-1-11.5(a).

“Notice” - Announcements to the public about pending and completed actions and/or decisions of the agency.

“Office of Land Quality (OLQ)” – The Office of Land Quality (OLQ) within the Indiana Department of Environmental Management (IDEM).

“Office of Legal Counsel (OLC)” - The Office of Legal Counsel (OLC) within the Indiana Department of Environmental Management (IDEM).

“Party” – Any responsible party/person, potentially responsible party/person, participant, applicant or owner/ operator who interacts with IDEM in regard to a site that is or may be contaminated.

“Permit” - Any written authorization, license or equivalent document to regulate the discharge of pollutant(s), the construction of wastewater treatment facilities or land application of sludge or waste products.

“Permit manager” - Nonsupervisory agency staff responsible for overseeing the permit process in their respective program area (*for example, approvals, denials, correspondence, applications, review, etc.*).

“Person” - An individual, a corporation, a limited liability company, a partnership, an unincorporated association or a governmental entity.

“Petroleum” Petroleum and crude oil or any part of petroleum or crude oil that is liquid at standard conditions of temperature and pressure (*60 degrees Fahrenheit and 14.7 pounds per square inch absolute*) pursuant to IC 13-11-2-160. For purposes of the UST rule, petroleum USTs means an UST system that contains petroleum or a mixture of petroleum with *de minimis* quantities of other regulated substances. Such systems include those containing any of the following: motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, or used oils pursuant to 329 IAC 9-1-36.

“Plan” - A document describing how a task is to be performed or implemented for example, sampling plan.

“Pre-CERCLIS screening (PCS)” - A review of information on potential Superfund sites to determine whether the site should be entered into the CERCLIS database.

“Preliminary assessment (PA)” - A limited-scope investigation performed by states and/or the U.S. Environmental Protection Agency (U.S. EPA) on every CERCLIS site. PA investigators collect readily available information and conduct a site and environs reconnaissance. The PA distinguishes between sites that pose little or no threat to human health and the environment and sites that require further investigation. The PA also identifies sites requiring assessment for possible emergency response actions.

“Product” - A regulated substance (*329 IAC 9-1-38.1*).

“Program Participant or Participant” - The individual, agency, political subdivision, corporation, limited liability company, partnership, association or other entity that voluntarily investigates or remediates a site under a program of the Indiana Department of Environmental Management.

“Project manager” – An employee or representative of the Indiana Department of Environmental Management who has been tasked with conducting/coordinating site related activities. This individual is seen as the director over the site activities and manager of other staff brought on-site to conduct specific portions of the site work.

“Public notice” – A notice published in a local newspaper, or other common source concerning a decision, meeting or hearing.

“Public hearing” - Formal official public meetings where a court reporter or tape recorder documents all questions and comments. A hearing officer presides over hearings. Following a hearing, the court reporter prepares a hearing transcript. The Indiana Department of Environmental Management (IDEM) makes the hearing transcript, with responses, available to the public when announcing the final decision on a proposed action. IDEM programs may hold an informal public meeting before or after a public hearing.

“Public meeting” - Informal meetings with the public during which agency staff present information and answer questions about a proposed action. A public meeting promotes dialogue and discussion, and permit staff try to respond directly to questions from the public. Oral questions and responses are informal at a public meeting. The agency does not document or provide written responses to questions and comments addressed during a meeting. However, the public may submit written comments during a meeting or at any point during a public notice period for a formal agency response.

“Quality assurance project plan (QAPP)” - A formal technical document describing detailed quality assurance/quality control, and other technical procedures to ensure that the quality of environmental data will satisfy stated performance criteria for the data collection activity.

“Quality assurance/quality control (QA/QC)” - An integrated system of management activities involving planning, implementation, documentation, assessment, reporting and quality improvement to ensure that a process, item or service is of the type and quality needed and expected by the client and the overall system of technical activities that measures the attributes and performance of a process, item or service against defined standards to verify that they meet the stated requirements established by the customer; operational techniques and activities that are used to fulfill requirements for quality.

“Record of decision (ROD)/ROD amendment (RODA)/interim ROD” - A public document that documents the remedial action plan for a site or operable unit. The ROD certifies the remedy selection process was carried out in accordance with CERCLA and the NCP, describes the technical parameters of the remedy as well as remediation goals, and provides the public with a consolidated source of information about the site and the chosen remedy, including the rationale behind the selection. It contains site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, scope and role of response action and the remedy selected for cleanup.

“Regulated substance” - For purposes of USTs includes petroleum and hazardous substances but excludes any substance regulated as a hazardous waste under: Subtitle C of the federal Solid Waste Disposal Act, as amended (*42 U.S.C. 6921 through 6939[a]*) or IC 13-22-2-3 pursuant to IC 13-11-2-183.

“Release” - This term has program specific definitions under IC 13-11-2-184. For purposes of the UST system is any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into ground water, surface water, subsurface soils or surface soils. In addition, a release for purposes of UST operation is any spilling or overfilling during the transfer of product to and from the UST system or during any upgrade or maintenance activities.

“Remediation objective” – An environmental condition such that exposure will not occur that results in unacceptable risk to receptors. Remediation objectives are based on levels of contamination that may include screening levels, site-specific levels, and background concentrations.

“Remediation Services Branch (RSB)” - A collection of sections in the OLQ responsible for oversight of various environmental remediation programs.

“Remediation Work Plan” - Document that provides a comprehensive summary of site conditions and the remedy proposed to remediate a site.

“Remedy” – One or more measures taken to reduce risks to human health and/or the environment arising from a contaminant release. Measures may include contaminant treatment, contaminant removal, institutional controls, or engineered controls, alone or in combination.

“Resource Conservation and Recovery Act (RCRA)” – Federal legislation that established cradle-to-grave accountability for hazardous wastes, from the point of generation to the point of disposal.

“Responsible Party (RP)” - The individual, company, group, or other entity legally responsible for areas where contaminants are known to have been released, or legally responsible for compliance under state or federal environmental regulations.

“Sampling and analysis plan (SAP)” – A site-specific plan detailing sampling rationale, protocols, and analyses. The protocols provide for documentation of all field work.

“Screening level” – A contaminant-specific concentration level that IDEM has determined to be sufficiently protective at any site, provided it is applied under appropriate land use scenarios.

“Section chief (SC)” – A first-level agency supervisor responsible for managing nonsupervisory agency staff.

“Site” - The geographical area where environmental chemical of concern evaluation is desired. This may consist of an entire facility and surrounding property or a single area of concern within a facility or property, depending upon the applicable regulatory program. For the purposes of IC 13-25-5, site means a parcel of real property for which an application has been submitted under IC 13-25-5-2.

“Site investigations (SI)” - Section in the Office of Land Quality responsible for assessing potential hazardous waste sites and prioritizing them for cleanup.

“Site status letter (SSL)” - A letter issued to a party that demonstrates that current levels of contaminants at the brownfield substantially meet remediation objectives as established by the Indiana Department of Environmental Management (IDEM) under the *Remediation Closure Guide*. The potential liability of the party requesting the letter is not addressed. The SSL states that based on a technical analysis of information submitted to IDEM pertaining to site conditions, IDEM concludes that current conditions do not present a threat to human health or the environment and that IDEM does not plan to take a response action at the brownfield site.

“Solid waste”- A waste classification that includes garbage, refuse, sludge or other discarded material, including solid, liquid, semi-solid or contained gaseous material resulting from industrial, commercial, mining or agricultural operations or from community activities.

“Solid waste facility” - A facility that produces, transports, stores or disposes of solid waste as defined in 40 CFR 261 Subpart A.

“Solid waste management unit (SWMU)” - Any discernable unit, permitted or unpermitted, existing or historical, at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at which hazardous constituents have been routinely and systematically released.

“Spills” - Spills are defined in 327 IAC 2-6.1. In general a spill is any unauthorized release of a hazardous material, petroleum or any other substance that due to the volume released, the toxicity of the substance or the location of the release results in damage or potential damage to water, including ground water.

“Spill Line” - The 24 hour spill reporting telephone hotline established by 327 IAC 2-6.1. Parties responsible for spills covered by 327 IAC 2-6 are required to report the spills by dialing (888) 233-7745 or (317) 233-7745.

“State-lead sites” – Superfund sites for which Indiana Department of Environmental Management (IDEM) has the lead enforcement role and is responsible for directing the majority of work.

“Unconditional Closure” – A closure that adequately addresses risk from a release without relying on any continuing activity and/or activity restriction.

“Underground storage tank (UST)” - A tank or a combination of tanks, including underground pipes connected to the tank or combination of tanks that is used to contain an accumulation of regulated substances and the volume of which, including the volume of the underground connected pipes, is at least 10 percent beneath the surface of the ground.

“Underground Storage Tank (UST) Section” - The section within the Office of Land Quality, Compliance and Response Branch responsible for compliance of underground storage tank systems in Indiana.

“U.S. Environmental Protection Agency (U.S. EPA)” – An agency of the federal government charged with protecting human health and with safeguarding the natural environment: air, water and land.

“Virtual file cabinet (VFC)” - The agency’s electronic digital image document repository system, that stores, files, indexes, redacts, reassembles and securely accesses electronic documents of all types both received and created by the various program areas within the agency.

“Wellhead protection area (WHPA)” - The surface and subsurface area delineated by fixed radius, hydrogeological mapping, and analytical, semi-analytical or numerical flow/solute transport methods, which contributes water to a community public water supply system production well or well field and through which contaminants are likely to move through and reach the well within a specified period.

“Wetland” - Those areas classified as jurisdictional wetlands or jurisdictional waters of the U.S. by the U.S. Army Corps of Engineers under the authority from the Clean Water Act.

“Work plan” – A site-specific document that includes project description, project objective, site history, and rationale for sampling locations, chemical analysis request, quality assurance, quality control and may include the Health and Safety Plan.