

ADEM

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
GROUNDWATER BRANCH**

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**ARBCA FOR USTs
TIER 1 REPORT FORMS
(Revision 1.0, November 2001)**

SITE NAME:	
FACILITY I.D.:	
UST INCIDENT NO.:	
SUBMITTAL DATE:	

ADEM FORM # 471 8/02

ARBCA REPORT FORMS

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ARBCA REPORT FORMS

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<i>Attachment No.</i>	<i>Indicate the attachments provided in this ARBCA analysis. Check <input type="checkbox"/> to select. All maps submitted to the ADEM must include a bar scale, legend, north arrow, location of all known soil borings and monitoring wells, and date of map, where appropriate.</i>	
1	Topographic Map	<input type="checkbox"/>
2	Site Map with Utility Locations	<input type="checkbox"/>
3	Land Use Map (Radius of 500 feet)	<input type="checkbox"/>
4	Area Map - with detailed land use in the vicinity of the site (detailed in the downgradient direction and at least one property deep on all other sides including across the street)	<input type="checkbox"/>
5	Representative Soil Boring Logs and Well Construction Diagram - with monitoring well screen interval, size, and depth (also indicate sample depths, field screening results, and initial water level)	<input type="checkbox"/>
6	Stratigraphic Cross-Section - showing the stratigraphy of the site	<input type="checkbox"/>
7	Area Geologic Map	<input type="checkbox"/>
8	Area Map with Well Locations - within 1000 feet (for private wells) or 1 mile (for public wells) radius of the site (the wells on the map must be labeled). Map must also indicate the location of streams, lakes, etc., within a 500 foot radius of the site.	<input type="checkbox"/>
9	Groundwater Gradient Map - contoured map with the flow direction from the most recent sampling event	<input type="checkbox"/>
10	Soil Concentration Maps - for Benzene, MTBE, Total BTEX, and Naphthalene from the most recent sampling event	<input type="checkbox"/>
11	Groundwater Concentration and Contour Maps - for Benzene, MTBE, Total BTEX, and Naphthalene from the most recent sampling event. Include free product thickness, if present.	<input type="checkbox"/>
12	Time vs. Concentration Trend Graphs - for Benzene, MTBE, Total BTEX, and Naphthalene if three or more sampling events have occurred per well	<input type="checkbox"/>
13	Map Identifying all Points of Exposure - for both current and future conditions	<input type="checkbox"/>
14	Site Map showing the source dimensions (Wa, W, and Y)	<input type="checkbox"/>
15	Representative Site Concentrations – Calculations	<input type="checkbox"/>
16	Historical Groundwater Summary Tables	<input type="checkbox"/>
17	Site map showing polygons developed for off-site and on-site representative concentrations	<input type="checkbox"/>
18	Dilution Attenuation Factor calculations	<input type="checkbox"/>
19	Site map showing site-specific parameters equivalent to those indicated on Figure C-1, Appendix C of the guidance document (only for stream protection evaluation.)	<input type="checkbox"/>

ARBCA REPORT FORMS

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<i>Attachment No.</i>	<i>Indicate the attachments provided in this ARBCA analysis. Check <input type="checkbox"/> to select. All maps submitted to the ADEM must include a bar scale, legend, north arrow, location of all known soil borings and monitoring wells, and date of map, where appropriate.</i>
	<u>Other Relevant Attachments</u>
20	<input type="checkbox"/>
21	<input type="checkbox"/>
22	<input type="checkbox"/>
23	<input type="checkbox"/>
24	<input type="checkbox"/>
25	<input type="checkbox"/>
26	<input type="checkbox"/>

Include the above attachments in order and append them to the report forms.

ARBCA SUMMARY REPORT**FORM NO. 1**

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

EXECUTIVE SUMMARY

Facility name:

Facility address:

Status of facility:

 Active Inactive

Ground surface condition:

Estimated volume of product released:

Is native soil impacted?

 On-site Off-site

Is groundwater impacted?

 On-site Off-site

Has the source of release been identified?

Has free product associated with this release ever been detected?

Was free product removed?

Was free product detected in the most recent sampling event?

Has surface water been impacted by this release?

Shallowest historical depth to groundwater:

Average historical depth to groundwater:

Has a water supply well been impacted by this release?

RECOMMENDATIONS

Tier 1

- No Further Action (NFA) under Tier 1
- Remediate and NFA under Tier 1
- Perform compliance/confirmatory monitoring
- Go to Tier 2

Tier 2

- No Further Action (NFA) under Tier 2
- Remediate and NFA under Tier 2
- Perform compliance/confirmatory monitoring
- Go to Tier 3

Tier 3

- No Further Action (NFA) under Tier 3
- Remediate and NFA under Tier 3
- Perform compliance/confirmatory monitoring

ADDITIONAL NOTES

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

FACILITY INFORMATION

Facility name:

Facility address:

Facility city:

Facility county:

Tank owner/Responsible Party (RP):

Tank owner/RP address:

Tank owner/RP city/state/zip:

Tank owner/RP phone no.:

Property owner:

Property owner's address:

Property owner's city/state/zip:

CERTIFICATION

Section (a): ARBCA Evaluator:

I certify that the ARBCA evaluation as stated in this report was prepared under my supervision. I am experienced in the concepts and procedures of risk assessment and risk management as they relate to the ARBCA evaluation process. I am either an Alabama Registered Professional Engineer or a Geologist.

ARBCA Evaluator	Date	Printed Name
Registration Number(s)		Company Name

Section (b): Tank or Property Owner:

By signature below, I certify that I have reviewed this report for completeness.

Tank or Property Owner Signature	Tank or Property Owner Printed Name	Date
----------------------------------	-------------------------------------	------

ADDITIONAL NOTES

[Large shaded area for additional notes]

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

UST SITE CLASSIFICATION SYSTEM CHECKLIST (Page 1 of 2)

CLASSIFICATION	DESCRIPTION	YES	NO
CLASS A	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
A.1	Vapor concentrations at or approaching explosive levels that could cause health effects, are present in a residence or building.	<input type="checkbox"/>	<input type="checkbox"/>
A.2	Vapor concentrations at or approaching explosive levels are present in subsurface utility system(s), but no buildings or residences are impacted.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS B	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
B.1	An active public water supply well, public water supply line, or public surface water intake is impacted or immediately threatened.	<input type="checkbox"/>	<input type="checkbox"/>
B.2	An active domestic water supply well, domestic water supply line or domestic surface water intake is impacted or immediately threatened.	<input type="checkbox"/>	<input type="checkbox"/>
B.3	The release is located within a designated Source Water Assessment Area I.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS C	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
C.1	Ambient vapor/particulate concentrations exceed concentrations of concern from an acute exposure, or safety viewpoint.	<input type="checkbox"/>	<input type="checkbox"/>
C.2	Free product is present on the groundwater, at ground surface, on surface water bodies, in utilities other than water supply lines, or in surface water runoff.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS D	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
D.1	There is a potential for explosive levels, or concentrations of vapors that could cause acute effects, to accumulate in a residence or other building.	<input type="checkbox"/>	<input type="checkbox"/>
D.2	A non-potable water supply well is impacted or immediately threatened.	<input type="checkbox"/>	<input type="checkbox"/>
D.3	Shallow contaminated surface soils are open to public access, and dwellings, parks, playgrounds, day care centers, schools or similar use facilities are within 500 feet of those soils.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS E	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
E.1	A sensitive habitat or a sensitive resource (sport fish, economically important species, threatened and endangered species, etc.) is impacted and affected.	<input type="checkbox"/>	<input type="checkbox"/>

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

UST SITE CLASSIFICATION SYSTEM CHECKLIST (Page 2 of 2)

<i>CLASSIFICATION</i>	<i>DESCRIPTION</i>	<i>YES</i>	<i>NO</i>
CLASS F	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
F.1	Groundwater is impacted and a public well is located within 1 mile of the site.	<input type="checkbox"/>	<input type="checkbox"/>
F.2	Groundwater is impacted and a domestic well is located within 1,000 feet of the site.	<input type="checkbox"/>	<input type="checkbox"/>
F.3	Contaminated soils and/or groundwater are located within designated Source Water Assessment Area II.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS G	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
G.1	Contaminated soils and/or groundwater are located within areas vulnerable to contamination from surface sources.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS H	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
H.1	Impacted surface water, storm water or groundwater discharges within 500 feet of a surface water body used for human drinking water, whole body water-contact sports, or habitat to a protected or listed endangered plant and animal species.	<input type="checkbox"/>	<input type="checkbox"/>
CLASS I	LONG TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
I.1	Site has contaminated soils and/or groundwater but does not meet any of the above mentioned criteria.	<input type="checkbox"/>	<input type="checkbox"/>

Complete the classification evaluation questions listed above. Upon completion, determine the highest rank of the site (A.1 is the highest rank) based on the statements answered with an YES.

Determined Site Classification

ADDITIONAL NOTES

UST Incident No(s): _____

Facility ID: _____

Date form completed: _____

Form completed by: _____

SITE DESCRIPTION

SITE STATUS

- Operating
- Temporarily out of service from _____ to _____
- Permanently out of service. Tanks permanently closed in _____

GROUND SURFACE CONDITION

- Unpaved
 - Paved % area paved _____ Material _____
- Any visible cracks in the pavement? YES NO

SUBSURFACE UTILITIES

In the space provided for additional notes, please indicate the locations and distances to the nearest utility access point (manholes).

Have the utilities been screened for vapor levels? YES NO **Notes:** _____

If YES, attach documentation of vapor monitoring results (Include under Other Relevant Attachments).

Are the utilities covered? YES NO **Notes:** _____

Indicate which of the following utilities currently act as conduits or are potentially liable to become conduits under the columns "Impacted by Release", and "Potentially Impacted by Release", respectively.

<u>Utilities Present at the Site</u>	<u>Depth</u> [feet]	<u>Type of Material</u>	<u>Flow Direction</u>	<u>Impacted by Release</u>	<u>Potentially Impacted by Release</u>
<input type="checkbox"/> Sanitary Sewer	_____	_____	_____	_____	_____
<input type="checkbox"/> Covered Storm Sewer	_____	_____	_____	_____	_____
<input type="checkbox"/> Open Ditch	_____	_____	_____	_____	_____
<input type="checkbox"/> Water Line	_____	_____	_____	_____	_____
<input type="checkbox"/> Gas Line	_____	_____	_____	_____	_____
<input type="checkbox"/> Electric Line	_____	_____	_____	_____	_____
<input type="checkbox"/> Telephone Line	_____	_____	_____	_____	_____

CURRENT STATUS OF EXCAVATED SOIL/SOIL CUTTINGS/PURGE WATER

If any USTs or ASTs were over-excavated, discuss the status of excavated soil.

	<u>Date</u>	<u>Quantity</u>	<u>Location</u>
<input type="checkbox"/> Stockpiled On-site	_____	_____	_____
<input type="checkbox"/> Disposed Off-site	_____	_____	_____
<input type="checkbox"/> Used (as fill material,...) On-site	_____	_____	_____
<input type="checkbox"/> Used as Road Base	_____	_____	_____
<input type="checkbox"/> Soil Farm	_____	_____	_____
<input type="checkbox"/> Stockpiled Off-site	_____	_____	_____
<input type="checkbox"/> Purge Water	_____	_____	_____

ADDITIONAL NOTES



ARBCA SUMMARY REPORT

FORM NO. 5

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

LAND USE

Current On-Site Land Use

Current

- Residential
- Commercial
- Sensitive/Special
- Other

Future On-Site Land Use

Future

- Residential
- Commercial
- Sensitive/Special
- Other

Comments: Discuss land use if "Other" option is chosen. Justify the choice for the future land use.

Immediate Off-site Land Use (within 500 feet - at a minimum, state whether residential or commercial)

North: _____
 Northeast: _____
 Northwest: _____
 South: _____
 Southeast: _____
 Southwest: _____
 West: _____
 East: _____

ADDITIONAL OFF-SITE RECEPTOR SURVEY

List the distance and direction (downgradient, upgradient, or crossgradient) to these facilities – up to a maximum distance of 1000 feet.

	<u>Distance [ft]</u>	<u>Direction</u>
Nearest residential site:	_____	_____
Nearest commercial site:	_____	_____
Nearest industrial site:	_____	_____
If site vacant, nearest inhabited building:	_____	_____
Environmentally sensitive area within a 1000 foot radius:	_____	_____
Nearest school, hospital, day care, retirement home, etc.:	_____	_____

ADDITIONAL NOTES

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

CHRONOLOGY OF EVENTS

<u>Date</u>	<u>Instructions:</u> Describe potential sources and spill events, including location, type, and estimated volume of materials stored or released, time and duration of release, and affected media (e.g. soil, groundwater, etc.). Describe monitoring well installation, soil boring activities, and slug tests. Also discuss past corrective action efforts as appropriate.

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

CHRONOLOGY OF EVENTS

Date	Instructions: Describe potential sources and spill events, including location, type, and estimated volume of materials stored or released, time and duration of release, and affected media (e.g. soil, groundwater, etc.). Describe monitoring well installation, soil boring activities, and slug tests. Also discuss past corrective action efforts as appropriate.

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

CHRONOLOGY OF EVENTS

<u>Date</u>	Instructions: Describe potential sources and spill events, including location, type, and estimated volume of materials stored or released, time and duration of release, and affected media (e.g. soil, groundwater, etc.). Describe monitoring well installation, soil boring activities, and slug tests. Also discuss past corrective action efforts as appropriate.

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

CHRONOLOGY OF EVENTS

Date	Instructions: Describe potential sources and spill events, including location, type, and estimated volume of materials stored or released, time and duration of release, and affected media (e.g. soil, groundwater, etc.). Describe monitoring well installation, soil boring activities, and slug tests. Also discuss past corrective action efforts as appropriate.

UST Incident No(s): _____

Facility ID: _____

Date form completed: _____

Form completed by: _____

RELEASE CHARACTERIZATION

- UST Removal
- Failed System Tightness Test
- Inventory Control
- Facility Remodeling/Construction activity
- Closure in Place

- Environmental Assessment
- Citizen Complaint
- Known Spill Incident
- Unknown
- Other (specify) _____

SOURCE(S) OF RELEASE

- Spills/Overfills
- Piping
- Dispenser Islands

- Tanks
- Unknown
- Other (specify) _____

SUBSTANCE(S) RELEASED

- Gasoline
- Diesel
- Used Oil
- AV Gas

- Jet Fuel
- Hydraulic Fluid
- Kerosene
- Other (specify) _____

CHEMICALS OF CONCERN

- Benzene
- Toluene
- Ethylbenzene
- Xylenes (mixed)
- Methyl-tert-Butyl-Ether
- Anthracene
- Benzo(a)anthracene
- Benzo(a)pyrene

- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(g,h,i)perylene
- Chrysene
- Fluoranthene
- Fluorene
- Naphthalene
- Phenanthrene

- Pyrene
- Arsenic
- Barium
- Cadmium
- Chromium (VI)
- Lead
- Zinc

SUMMARY OF SPILL

Has the source of release been identified? _____

Has the release been eliminated? _____

Is native soil impacted? _____

Is groundwater impacted? _____

Is surface water impacted? _____

DETAILS OF KNOWN SPILLS (if any)

<u>Date Released</u>	<u>Location</u>	<u>Quantity</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ADDITIONAL NOTES

UST Incident No(s): _____

Facility ID: _____

Date form completed: _____

Form completed by: _____

FREE PRODUCT

SUMMARY OF FREE PRODUCT

Has free product been found at the site? YES NO _____

Date free product was released (if known): _____

Type of free product released: _____

Estimated quantity of free product released: _____

List the monitoring wells historically containing free product: On-site: _____

Off-site: _____

List the monitoring wells currently at the site: On-site: _____

Off-site: _____

List the monitoring wells currently containing free product: On-site: _____

Off-site: _____

Denote the greatest thickness (to the nearest 1/100 foot): _____ feet

Well ID: _____ Date: _____

FREE PRODUCT REMOVAL

Has free product removal been initiated? YES NO _____

If YES, what is the method of removal (bailer, pump, etc.)? _____

If NO, cite reason: _____

Frequency of removal (weekly, monthly, etc.): _____

Total number of recovery events to date: _____

Total amount of fluids recovered (purgewater and free product): _____

Total amount of free product recovered: _____

Date of latest free product removal event: _____

ADDITIONAL NOTES

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

SITE STRATIGRAPHY AND HYDROGEOLOGY

STRATIGRAPHY OF THE SITE

<u>Depth</u> [feet]	<u>Description of Soil</u>

Predominant Soil Type:

<u>Depth</u> [feet]	<u>Type of Bedrock & Geological Formation</u> (discuss rock properties and features)

Underlying Predominant Aquifer Name:

HYDROGEOLOGY OF THE SATURATED IMPACTED ZONE

Type of Aquifer? Confined Unconfined

Historical Range of Groundwater Level Fluctuations [\pm ft bgs]:

Historical Average Depth to Water Table/Static Water Table:

Predominant Flow Direction(s) (potentiometric surface):

Hydraulic Gradient (i) [cm/cm]:

Hydraulic Conductivity (K) [cm/sec]:

Hydraulic Conductivity Test Method:

Grain size/Sieve analysis Slug test Pumping test

Other (specify and attach literature)

Darcy Velocity (Ki) [cm/year]:

Annual Precipitation (average for last 30 years):

	<u>Value/Range</u>	<u>Estimated</u>	<u>Measured</u>	<u>Method of Analysis</u>
Saturated Zone Dry Soil Bulk Density [g/cm ³]:		<input type="checkbox"/>	<input type="checkbox"/>	
Total Porosity in the Saturated Zone [cm ³ /cm ³]:		<input type="checkbox"/>	<input type="checkbox"/>	
Fractional Organic Carbon Content in the Saturated Zone [g-C/g-Soil]:		<input type="checkbox"/>	<input type="checkbox"/>	

VADOSE ZONE CHARACTERISTICS

	<u>Value/Range</u>	<u>Estimated</u>	<u>Measured</u>	<u>Method of Analysis</u>
Unsaturated Zone Dry Soil Bulk Density [g/cm ³]:		<input type="checkbox"/>	<input type="checkbox"/>	
Total Soil Porosity in the Vadose Zone [cm ³ /cm ³]:		<input type="checkbox"/>	<input type="checkbox"/>	
Volumetric Water Content [cm ³ /cm ³]:		<input type="checkbox"/>	<input type="checkbox"/>	
Fractional Organic Carbon Content		<input type="checkbox"/>	<input type="checkbox"/>	

[g-C/g-Soil]:



ARBCA SUMMARY REPORT

FORM NO. 10

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

GROUNDWATER USE

ON-SITE USE

- Potable Domestic Supply
- Non-potable Domestic Supply
- Public/Municipal Supply
- Industrial Supply
- Agriculture
- Other (explain in Notes)

Current

YES

NO

INACTIVE

Future

YES

NO

NOTES
(Justify choice for future use)

DETAILS OF PUBLIC WELLS LOCATED WITHIN 1 MILE RADIUS AND PRIVATE WELLS WITHIN A 1000 FOOT RADIUS OF THE SITE*

Well No. 1

Well No. 2

Well No. 4

Well number/designation:

Well owner:

Year constructed:

Type of well (See choices above):

Current use** (Active, Inactive, P&A, etc.):

Total depth (ft):

Uppermost screened interval (ft):

Distance from the site (ft):

Direction (downgradient, upgradient, etc., to the site):

Within a Source Water Assessment Area I or II?

RECEPTOR SURVEY

Nearest downgradient municipal supply well:

Nearest downgradient domestic supply well:

Nearest point of exposure (current or potential) for groundwater ingestion:

ADDITIONAL NOTES

* Attach well construction details, if available. ** Unknown is not acceptable.

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

SURFACE WATER USE WITHIN 500 FOOT RADIUS OF SITE

ON-SITE USE

	<u>Current</u>		<u>Future</u>	
	<u>YES</u>	<u>NO</u>	<u>YES</u>	<u>NO</u>
Domestic Supply (potable) :	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Domestic Supply (non-potable):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public/Municipal Supply:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial Supply:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agriculture:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (explain in Notes):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTES (JUSTIFY CHOICE FOR FUTURE USE)

WATER QUALITY DETERMINATION

Refer to Chapter 6.0 and Appendix C of the ARBCA Guidance Document.

Is the receiving stream designated as intermittent or wetlands on the USGS topographic map or is the drainage area <5 sq. mile. If YES assume 7Q10 = 0; if NO, determine 7Q10.

Yes No

In Tier 1, use stream RBSLs listed in Table C-1. In Tier 2, estimate the allowable concentrations using the equations listed in Appendix C and the Computational Software. Complete Form No. 20 for Tier 1 evaluation and Form No. 28 for Tier 2 evaluation after computing the stream RBSLs and SSTLs.

Is there a public water intake within one mile downstream of the site?

Yes No

ADDITIONAL NOTES

UST Incident No(s):

Facility ID:

Date form completed:

Form completed by:

ECOLOGICAL RECEPTORS AND HABITATS

Are there visible indications of stressed receptors or habitats on or near the site that may be a result of a chemical release?

YES

NO

Is there a complete pathway at the site for an ecological impact beyond what is considered under the stream impacts evaluation?

Other (explain in Notes):

If the answer to any of the above questions is YES, contact the ADEM before proceeding any further.

ADDITIONAL NOTES

ARBCA SUMMARY REPORT

FORM NO. 13

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR SURFICIAL SOIL

MW / SB No. Sampling Date Sample Depth* (ft)	On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		ON-SITE		OFF-SITE		
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Arithmetic Average	Maximum	Arithmetic Average	Maximum
<p>ORGANICS (all concentrations must be in mg/kg)</p> <p>Benzene</p> <p>Toluene</p> <p>Ethylbenzene</p> <p>Xylenes (Total)</p> <p>MTBE</p> <p>Anthracene</p> <p>Benzo(a)anthracene</p> <p>Benzo(a)pyrene</p> <p>Benzo(b)fluoranthene</p> <p>Benzo(g,h,i)perylene</p> <p>Benzo(k)fluoranthene</p> <p>Chrysene</p> <p>Fluoranthene</p> <p>Fluorene</p> <p>Naphthalene</p> <p>Phenanthrene</p> <p>Pyrene</p> <p>METALS (all concentrations must be in mg/lb)</p> <p>Arsenic</p> <p>Barium</p> <p>Cadmium</p> <p>Chromium VI</p> <p>Lead</p> <p>Zinc</p>																					

Only for review purposes, not to be used in pathway evaluation. For pathway evaluation, use representative concentrations as per Appendix B of the Guidance Document.

NOTE:

Provide any laboratory analytical data not previously submitted to the ADEM. Non-detects must be entered as < detection limit (for example, <0.005). Maximum is the greater of (i) the detected values, and (ii) one-half of the detection limit. *: To avoid entries automatically changing into date format, use a single quote before entering the depths (for example, '1-2)

ARBCA SUMMARY REPORT

FORM NO. 13

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR SURFICIAL SOIL

MW / SB No. Sampling Date Sample Depth* (ft)	On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		ON-SITE		OFF-SITE		
	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	Arithmetic Average	Maximum	Arithmetic Average	Maximum	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>ORGANICS (all concentrations must be in mg/kg)</p> <p>Benzene</p> <p>Toluene</p> <p>Ethylbenzene</p> <p>Xylenes (Total)</p> <p>MTBE</p> <p>Anthracene</p> <p>Benzo(a)anthracene</p> <p>Benzo(a)pyrene</p> <p>Benzo(b)fluoranthene</p> <p>Benzo(k)fluoranthene</p> <p>Benzo(e,h,i)perylene</p> <p>Benzo(b)fluoranthene</p> <p>Chrysene</p> <p>Fluoranthene</p> <p>Fluorene</p> <p>Naphthalene</p> <p>Phenanthrene</p> <p>Pyrene</p> <p>METALS (all concentrations must be in mg/kg)</p> <p>Arsenic</p> <p>Barium</p> <p>Cadmium</p> <p>Chromium VI</p> <p>Lead</p> <p>Zinc</p>																									

Only for review purposes, not to be used in pathway evaluation. For pathway evaluation, use representative concentrations as per Appendix B of the Guidance Document.

NOTE:

Provide any laboratory analytical datasheets not previously submitted to the ADEM. Non-detects must be entered as < detection limit (for example, <0.005). Maximum is the greater of (i) the detected values, and (ii) one-half of the detection limit. * To avoid entries automatically changing into date format, use a single quote before entering the depths (for example, '1-2')

ARBCA SUMMARY REPORT

FORM NO. 14

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR SUBSURFACE SOIL

MW / SB No. Sampling Date Sample Depth* (ft)	On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		ON-SITE		OFF-SITE				
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Arithmetic Average	Maximum	Arithmetic Average	Maximum
<p>ORGANICS (all concentrations must be in mg/kg)</p> <p>Benzene</p> <p>Toluene</p> <p>Ethylbenzene</p> <p>Xylenes (Total)</p> <p>MTBE</p> <p>Anthracene</p> <p>Benzo(a)anthracene</p> <p>Benzo(a)pyrene</p> <p>Benzo(b)fluoranthene</p> <p>Benzo(g,h,i)perylene</p> <p>Benzo(k)fluoranthene</p> <p>Chrysene</p> <p>Fluoranthene</p> <p>Fluorene</p> <p>Naphthalene</p> <p>Phenanthrene</p> <p>Pyrene</p> <p>METALS (all concentrations must be in mg/kg)</p> <p>Arsenic</p> <p>Barium</p> <p>Cadmium</p> <p>Chromium VI</p> <p>Lead</p> <p>Zinc</p>																											

Only for review purposes, not to be used in pathway evaluation. For pathway evaluation, use representative concentrations as per Appendix B of the Guidance Document.

NOTE:
Provide any laboratory analytical data sheets not previously submitted to the ADEM.
Non-detects must be entered as < detection limit (for example, <0.005).
Maximum is the greater of (i) the detected values, and (ii) one-half of the detection limit.
* To avoid entries automatically changing into date format, use a single quote before entering the depths (for example, '1-2')

ARBCA SUMMARY REPORT

FORM NO. 14

UST Incident No(s): Facility ID:

Date Form Completed: Form Completed By:

ANALYTICAL DATA SUMMARY FOR SUBSURFACE SOIL

MW / SB No.	Sampling Date	Sample Depth* (ft)	On-site		Off-site		On-site		Off-site		On-site		Off-site		ON-SITE		OFF-SITE		
			On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	Arithmetic Average	Maximum	Arithmetic Average	Maximum	
ORGANICS (all concentrations must be in mg/kg)																			
Benzene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Toluene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Ethylbenzene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Xylenes (Total)			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
MTBE			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Anthracene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Benzo(a)anthracene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Benzo(a)pyrene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Benzo(b)fluoranthene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Benzo(g,h,i)perylene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Benzo(k)fluoranthene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Chrysene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Fluoranthene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Fluorene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Naphthalene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Phenanthrene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Pyrene			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
METALS (all concentrations must be in mg/kg)																			
Arsenic			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Barium			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Cadmium			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Chromium VI			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Lead			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA
Zinc			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NA	NA	NA	NA

Only for review purposes, not to be used in pathway evaluation. For pathway evaluation, use representative concentrations as per Appendix B of the Guidance Document.

NOTE:
 Provide any laboratory analytical datasets not previously submitted to the ADEM.
 Non-detects must be entered as <detection limit (for example, <0.005).
 Maximum is the greater of (i) the detected values, and (ii) one-half of the detection limit.
 * To avoid entries automatically changing into date format, use a single quote before entering the depths (for example, '1-2)

ARBCA SUMMARY REPORT

FORM NO. 14

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR SUBSURFACE SOIL

MW / SB No.	Sampling Date	Sample Depth* (ft)	On-site		Off-site		On-site		Off-site		On-site		Off-site		ON-SITE		OFF-SITE		
			On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	Arithmetic Average	Maximum	Arithmetic Average	Maximum	
ORGANICS (all concentrations must be in mg/kg)																			
Benzene																NA	NA	NA	NA
Toluene																NA	NA	NA	NA
Ethylbenzene																NA	NA	NA	NA
Xylenes (Total)																NA	NA	NA	NA
MTBE																NA	NA	NA	NA
Anthracene																NA	NA	NA	NA
Benzo(a)anthracene																NA	NA	NA	NA
Benzo(a)pyrene																NA	NA	NA	NA
Benzo(b)fluoranthene																NA	NA	NA	NA
Benzo(g,h,i)perylene																NA	NA	NA	NA
Benzo(k)fluoranthene																NA	NA	NA	NA
Chrysene																NA	NA	NA	NA
Fluoranthene																NA	NA	NA	NA
Fluorene																NA	NA	NA	NA
Naphthalene																NA	NA	NA	NA
Phenanthrene																NA	NA	NA	NA
Pyrene																NA	NA	NA	NA
METALS (all concentrations must be in mg/kg)																			
Arsenic																NA	NA	NA	NA
Barium																NA	NA	NA	NA
Cadmium																NA	NA	NA	NA
Chromium VI																NA	NA	NA	NA
Lead																NA	NA	NA	NA
Zinc																NA	NA	NA	NA

Only for review purposes, not to be used in pathway evaluation. For pathway evaluation, use representative concentrations as per Appendix B of the Guidance Document.

NOTE:
 Provide any laboratory analytical datasheets not previously submitted to the ADEM.
 Non-detects must be entered as <detection limit (for example, <0.005).
 Maximum is the greater of (i) the detected values, and (ii) one-half of the detection limit.
 * To avoid entries automatically changing into date format, use a single quote before entering the depths (for example, '1-2')

ARBCA SUMMARY REPORT

FORM NO. 14

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA SUMMARY FOR SUBSURFACE SOIL

MW / SB No.	Sampling Date	Sample Depth* (ft)	On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		ON-SITE		OFF-SITE		
			On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	Arithmetic Average	Maximum	Arithmetic Average
ORGANICS (all concentrations must be in mg/kg)																							
Benzene																				NA	NA	NA	NA
Toluene																				NA	NA	NA	NA
Ethylbenzene																				NA	NA	NA	NA
Xylenes (Total)																				NA	NA	NA	NA
MTBE																				NA	NA	NA	NA
Anthracene																				NA	NA	NA	NA
Benzo(a)anthracene																				NA	NA	NA	NA
Benzo(a)pyrene																				NA	NA	NA	NA
Benzo(b)fluoranthene																				NA	NA	NA	NA
Benzo(g,h,i)perylene																				NA	NA	NA	NA
Benzo(k)fluoranthene																				NA	NA	NA	NA
Chrysene																				NA	NA	NA	NA
Fluoranthene																				NA	NA	NA	NA
Fluorene																				NA	NA	NA	NA
Naphthalene																				NA	NA	NA	NA
Phenanthrene																				NA	NA	NA	NA
Pyrene																				NA	NA	NA	NA
METALS (all concentrations must be in mg/kg)																							
Arsenic																				NA	NA	NA	NA
Barium																				NA	NA	NA	NA
Cadmium																				NA	NA	NA	NA
Chromium VI																				NA	NA	NA	NA
Lead																				NA	NA	NA	NA
Zinc																				NA	NA	NA	NA

Only for review purposes, not to be used in pathway evaluation. For pathway evaluation, use representative concentrations as per Appendix B of the Guidance Document.

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Non-detects must be entered as <detection limit (for example, <0.005). Maximum is the greater of (i) the detected values, and (ii) one-half of the detection limit. * To avoid entries automatically changing into date format, use a single quote before entering the depths (for example, '1-2)

ARBCA SUMMARY REPORT

FORM NO. 15

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA FROM GROUNDWATER SUPPLY WELLS (DATA FROM WELLS LISTED IN REPORT FORM NO. 10)

	On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		On-site		Off-site		
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water Well ID																					
Sampling Date																					
ORGANICS (all concentrations must be in mg/L)*																					
Benzene																					
Toluene																					
Ethylbenzene																					
Xylenes (Total)																					
MTBE																					
Anthracene																					
Benzo(a)anthracene																					
Benzo(a)pyrene																					
Benzo(b)fluoranthene																					
Benzo(g,h,i)perylene																					
Benzo(k)fluoranthene																					
Chrysene																					
Fluoranthene																					
Fluorene																					
Naphthalene																					
Phenanthrene																					
Pyrene																					
METALS (all concentrations must be in mg/L)*																					
Arsenic																					
Barium																					
Cadmium																					
Chromium VI																					
Lead																					
Zinc																					

NOTE:
 Provide any laboratory analytical data sheets not previously submitted to the ADEM.
 Non-detects must be entered as < detection limit (for example, <0.005).
 *. Enter the most recent sampling event data for groundwater supply wells. Please include historical data as an attachment to this sheet.
Recommended Attachment: Summary tables of historic data from groundwater supply wells.

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11		MW-12		
	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	
Screen Interval (ft. below TOC)	<input checked="" type="checkbox"/>																								
Water Level-recent average (ft. below TOC)																									
Installation Date																									
Number of Measurements																									
Benzene MCL = 0.005 mg/L	Historic no. of Detects																								
	Historic Max (mg/L)																								
	Historic Min (mg/L)																								
	Recent Max (mg/L)																								
	Recent AAverage (mg/L)																								
	Historic Trend																								
Toluene MCL = 1.0 mg/L	Historic no. of Detects																								
	Historic Max (mg/L)																								
	Historic Min (mg/L)																								
	Recent Max (mg/L)																								
	Recent AAverage (mg/L)																								
	Historic Trend																								
Ethylbenzene MCL = 0.7 mg/L	Historic no. of Detects																								
	Historic Max (mg/L)																								
	Historic Min (mg/L)																								
	Recent Max (mg/L)																								
	Recent AAverage (mg/L)																								
	Historic Trend																								
Xylenes MCL = 10 mg/L	Historic no. of Detects																								
	Historic Max (mg/L)																								
	Historic Min (mg/L)																								
	Recent Max (mg/L)																								
	Recent AAverage (mg/L)																								
	Historic Trend																								

NOTE: Provide any laboratory analytical datasets not previously submitted to the ADEM. Add additional sheets as needed.
Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.
 For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.
 AAverage = Arithmetic average

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-1 Off-site	MW-2 On-site	MW-3 Off-site	MW-4 On-site	MW-5 On-site	MW-6 On-site	MW-7 On-site	MW-8 On-site	MW-9	MW-10	MW-11	MW-12
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
MTBE												
MCL = 0.02 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Anthracene												
MCL = NA												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Benzo(a)anthracene												
MCL = NA												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Benzo(a)pyrene												
MCL = 0.0002 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Add additional sheets as needed.
 Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.
 For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.
 AAverage = Arithmetic average

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-13 On-site	MW-14 On-site	MW-15 On-site	MW-16 On-site	MW-17	MW-18	MW-19	MW-20	MW-21 On-site	MW-22 On-site	MW-23 On-site	MW-24 On-site
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
MTBE MCL = 0.02 mg/l	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent AAverage (mg/L)											
Historic Trend												
Anthracene MCL = NA	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent AAverage (mg/L)											
Historic Trend												
Benzo(a)anthracene MCL = NA	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent AAverage (mg/L)											
Historic Trend												
Benzo(a)pyrene MCL = 0.0002 mg/l	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent AAverage (mg/L)											
Historic Trend												

NOTE: Provide any laboratory analytical data sheets not previously submitted to the ADEM. Add additional sheets as needed.

Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.

For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.

AAverage = Arithmetic average

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-1 Off-site	MW-2 On-site	MW-3 Off-site	MW-4 On-site	MW-5 On-site	MW-6 On-site	MW-7 On-site	MW-8 On-site	MW-9	MW-10	MW-11	MW-12
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
Benzo(b)fluoranthene MCL = NA	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent Average (mg/L)											
Historic Trend												
Benzo(g,h,i)perylene MCL = NA	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent Average (mg/L)											
Historic Trend												
Benzo(k)fluoranthene MCL = NA	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent Average (mg/L)											
Historic Trend												
Chrysene MCL = NA	Historic no. of Detects											
	Historic Max (mg/L)											
	Historic Min (mg/L)											
	Recent Max (mg/L)											
	Recent Average (mg/L)											
Historic Trend												

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Add additional sheets as needed.
Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.
 For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.
 AAverage = Arithmetic average

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-13 On-site	MW-14 On-site	MW-15 On-site	MW-16 On-site	MW-17	MW-18	MW-19	MW-20	MW-21 On-site	MW-22 On-site	MW-23 On-site	MW-24 On-site
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
Benzo(b)fluoranthene												
MCL = NA												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Benzo(g,h,i)perylene												
MCL = NA												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Benzo(k)fluoranthene												
MCL = NA												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Chrysene												
MCL = NA												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Add additional sheets as needed.

Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.

For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.

AAverage = Arithmetic average

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-13 On-site	MW-14 On-site	MW-15 On-site	MW-16 On-site	MW-17	MW-18	MW-19	MW-20	MW-21 On-site	MW-22 On-site	MW-23 On-site	MW-24 On-site
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
Pyrene												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Arsenic												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Barium												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Cadmium												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Add additional sheets as needed.

Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.

For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.

AAverage = Arithmetic average

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-1 Off-site	MW-2 On-site	MW-3 Off-site	MW-4 On-site	MW-5 On-site	MW-6 On-site	MW-7 On-site	MW-8 On-site	MW-9	MW-10	MW-11	MW-12
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
Chromium VI												
MCL = 0.1 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Lead												
MCL = 0.015 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Zinc												
MCL = 2.0 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Add additional sheets as needed.
Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.
AAverage = Arithmetic average
Historic refers to the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.

ARBCA SUMMARY REPORT

FORM NO. 16

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

ANALYTICAL DATA SUMMARY FOR GROUNDWATER

Monitoring Well #	MW-13 On-site	MW-14 On-site	MW-15 On-site	MW-16 On-site	MW-17	MW-18	MW-19	MW-20	MW-21 On-site	MW-22 On-site	MW-23 On-site	MW-24 On-site
Screen Interval (ft. below TOC)												
Water Level-recent average (ft. below TOC)												
Installation Date												
Number of Measurements												
Chromium VI												
MCL = 0.1 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Lead												
MCL = 0.015 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												
Zinc												
MCL = 2.0 mg/l												
Historic no. of Detects												
Historic Max (mg/L)												
Historic Min (mg/L)												
Recent Max (mg/L)												
Recent AAverage (mg/L)												
Historic Trend												

NOTE: Provide any laboratory analytical datasheets not previously submitted to the ADEM. Add additional sheets as needed.
Recent refers to an approximate 1-2 year period. For the selection of the appropriate time period, refer to Appendix B and Section 6 of the guidance document.
 For free product, enter the effective solubility of the COC (refer to Table B-1 in the guidance document) or the highest (historic or recent as the case may be) detected value, whichever is greater. This applies to historical and recent maxima.
 AAverage = Arithmetic average

ARBCA SUMMARY REPORT

UST Incident No(s): _____ **Facility ID:** _____
Date Form Completed: _____ **Form Completed By:** _____

SITE CONCEPTUAL EXPOSURE MODEL - ON-SITE RESIDENT (CHILD AND ADULT)

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Outdoor inhalation of vapors and particulate matter, ingestion, and dermal contact with surficial soil				
SUBSURFACE SOIL				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
GROUNDWATER				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
Ingestion of groundwater from an on-site water supply well				

NOTE:
 * C : Complete Pathway NC : Not Complete
 Recommended Attachment: None

ARBCA SUMMARY REPORT **FORM NO. 17 - ON-SITE COMMERCIAL WORKER**

UST Incident No(s): **Facility ID:**

Date Form Completed: **Form Completed By:**

SITE CONCEPTUAL EXPOSURE MODEL - ON-SITE COMMERCIAL WORKER

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Outdoor inhalation of vapors and particulate matter, ingestion, and dermal contact with surficial soil				
SUBSURFACE SOIL				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
GROUNDWATER				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
Ingestion of groundwater from an on-site water supply well				

NOTE:

* C : Complete Pathway NC : Not Complete

Recommended Attachment: None

UST Incident No(s): Facility ID:

Date Form Completed: Form Completed By:

SITE CONCEPTUAL EXPOSURE MODEL - ON-SITE CONSTRUCTION WORKER

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Outdoor inhalation of vapors and particulate matter, ingestion, and dermal contact with surficial soil				
SUBSURFACE SOIL				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
GROUNDWATER				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
Ingestion of groundwater from an on-site water supply well				

NOT APPLICABLE

NOTE:
 * C : Complete Pathway NC : Not Complete
 Recommended Attachment: None

ARBCA SUMMARY REPORT

FORM NO. 17 - OFF-SITE RESIDENT

UST Incident No(s): Facility ID:

Date Form Completed: Form Completed By:

SITE CONCEPTUAL EXPOSURE MODEL - OFF-SITE RESIDENT (CHILD AND ADULT)

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Outdoor inhalation of vapors and particulate matter, ingestion, and dermal contact with surficial soil				
SUBSURFACE SOIL				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
GROUNDWATER				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
Ingestion of groundwater from an off-site water supply well				

NOTE:

* C : Complete Pathway NC : Not Complete

Recommended Attachment: None

ARBCA SUMMARY REPORT **FORM NO. 17 - OFF-SITE COMMERCIAL WORKER**

UST Incident No(s): **Facility ID:**

Date Form Completed: **Form Completed By:**

SITE CONCEPTUAL EXPOSURE MODEL - OFF-SITE COMMERCIAL WORKER

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Outdoor inhalation of vapors and particulate matter, ingestion, and dermal contact with surficial soil				
SUBSURFACE SOIL				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
GROUNDWATER				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
Ingestion of groundwater from an off-site water supply well				

NOTE:

* C : Complete Pathway NC : Not Complete

Recommended Attachment: None

ARBCA SUMMARY REPORT

UST Incident No(s): Facility ID:

Date Form Completed: Form Completed By:

SITE CONCEPTUAL EXPOSURE MODEL - OFF-SITE CONSTRUCTION WORKER

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Outdoor inhalation of vapors and particulate matter, ingestion, and dermal contact with surficial soil				
SUBSURFACE SOIL				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
GROUNDWATER				
Indoor inhalation of vapors				
Outdoor inhalation of vapors				
Ingestion of groundwater from an off-site water supply well				

NOT APPLICABLE

NOTE:
 * C : Complete Pathway NC : Not Complete

Recommended Attachment: None

ARBCA SUMMARY REPORT

FORM NO. 18 - ON-SITE RESIDENT CHILD

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

COMPARISON OF TIER I RBSLs WITH REPRESENTATIVE ON-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER		
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indgestion of Water	
	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	Use the historic maximum concentration from the water use well as the Rep. Conc.	Target Levels [mg/L] E/ NE
Select the representative concentration (Rep. Conc.) for each medium.	E/ NE	E/ NE	E/ NE	E/ NE	E/ NE	E/ NE	E/ NE	E/ NE	
ORGANICS									
Benzene									
Toluene									
Ethybenzene									
Xylenes (Total)									
MTBE									
Anthracene									
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Chrysene									
Fluoranthene									
Flourene									
Naphthalene									
Phenanthrene									
Pyrene									
METALS									
Arsenic									
Barium									
Cadmium									
Chromium VI									
Lead									
Zinc									

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.

N/A: Not applicable
 C: Complete Pathway
 NC: Not a Complete Pathway

ARBCA SUMMARY REPORT

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER I RBSLs WITH REPRESENTATIVE ON-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER												
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation		Outdoor Inhalation		Indoor Inhalation		Outdoor Inhalation		Ingestion of Water									
		<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L]		Use the historic maximum concentration from the water use well as the Rep. Conc. [mg/L]								
Select the representative concentration (Rep. Conc.) for each medium.	E/NE	E/NE	E/NE	E/NE	E/NE	E/NE	E/NE	E/NE	E/NE										
ORGANICS																			
Benzene																			
Toluene																			
Ethylbenzene																			
Xylenes (Total)																			
MTBE																			
Anthracene																			
Benzo(a)anthracene																			
Benzo(a)pyrene																			
Benzo(b)fluoranthene																			
Benzo(g,h,i)perylene																			
Benzo(k)fluoranthene																			
Chrysene																			
Fluoranthene																			
Flourene																			
Naphthalene																			
Phenanthrene																			
Pyrene																			
METALS																			
Arsenic																			
Barium																			
Cadmium																			
Chromium VI																			
Lead																			
Zinc																			

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.
 C: Complete Pathway
 NC: Not a Complete Pathway
 N/A: Not applicable

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER I RBSLS WITH REPRESENTATIVE ON-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER			
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Ingestion of Water	
	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/NE Target Levels [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/NE Target Levels [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/NE Target Levels [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	Use the historic maximum concentration from the water use well as the Rep. Conc.	
ORGANICS										
Benzene										
Toluene										
Ethylbenzene										
Xylenes (Total)										
MTBE										
Anthracene										
Benzo(a)anthracene										
Benzo(a)pyrene										
Benzo(b)fluoranthene										
Benzo(g,h,i)perylene										
Benzo(k)fluoranthene										
Chrysene										
Fluoranthene										
Flourene										
Naphthalene										
Phenanthrene										
Pyrene										
METALS										
Arsenic										
Barium										
Cadmium										
Chromium VI										
Lead										
Zinc										

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.
 C: Complete Pathway
 NC: Not a Complete Pathway
 N/A: Not applicable

ARBCA SUMMARY REPORT

FORM NO. 18 - ON-SITE CONSTRUCTION WORKER

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER I RBLS WITH REPRESENTATIVE ON-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER			
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	
	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. * Target Levels [mg/kg] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/kg] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/kg] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. Target Levels [mg/L] E/NE
ORGANICS										
Benzene										
Toluene										
Ethylbenzene										
Xylenes (Total)										
MTBE										
Anthracene										
Benzo(a)anthracene										
Benzo(a)pyrene										
Benzo(b)fluoranthene										
Benzo(g,h,i)perylene										
Benzo(k)fluoranthene										
Chrysene										
Fluoranthene										
Flourene										
Naphthalene										
Phenanthrene										
Pyrene										
METALS										
Arsenic										
Barium										
Cadmium										
Chromium VI										
Lead										
Zinc										

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 C: Complete Pathway
 NE: Representative concentration does not exceed the calculated allowable concentration.
 NC: Not a Complete Pathway
 * The higher of the representative concentrations for surficial and subsurface soil should be entered in the representative concentration column. The target level is the target level for surficial soil.

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER I RBLS WITH REPRESENTATIVE OFF-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER			
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indgestion of Water		
	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/NE Target Levels [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/NE Target Levels [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/NE Target Levels [mg/kg]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/NE Target Levels [mg/L]	Use the historic maximum concentration from the water use well as the Rep. Conc.			
ORGANICS										
Benzene										
Toluene										
Ethybenzene										
Xylenes (Total)										
MTBE										
Anthracene										
Benzo(a)anthracene										
Benzo(a)pyrene										
Benzo(b)fluoranthene										
Benzo(g,h,i)perylene										
Benzo(k)fluoranthene										
Chrysene										
Fluoranthene										
Flourene										
Naphthalene										
Phenanthrene										
Pyrene										
METALS										
Arsenic										
Barium										
Cadmium										
Chromium VI										
Lead										
Zinc										

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.
 C: Complete Pathway
 NC: Not a Complete Pathway
 N/A: Not applicable

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER 1 RBLS WITH REPRESENTATIVE OFF-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER		
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indgestion of Water	
	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/ Target Levels [mg/kg] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/ Target Levels [mg/kg] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/ Target Levels [mg/kg] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/ Target Levels [mg/L] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/ Target Levels [mg/L] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/ Target Levels [mg/L] NE	Use the historic maximum concentration from the water use well as the Rep. Conc.		
ORGANICS									
Benzene									
Toluene									
Ethylbenzene									
Xylenes (Total)									
MTBE									
Anthracene									
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Chrysene									
Fluoranthene									
Flourene									
Naphthalene									
Phenanthrene									
Pyrene									
METALS									
Arsenic									
Barium									
Cadmium									
Chromium VI									
Lead									
Zinc									

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.
 C: Complete Pathway
 NC: Not a Complete Pathway
 N/A: Not applicable

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER 1 RBLS WITH REPRESENTATIVE OFF-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER			
	Outdoor Inhalation, Ingestion, & Dermal Contact	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indoor Inhalation	Outdoor Inhalation	Indgestion of Water		
	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/ Target Levels [mg/kg] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/ Target Levels [mg/kg] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/kg] E/ Target Levels [mg/kg] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/ Target Levels [mg/L] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/ Target Levels [mg/L] NE	<input type="checkbox"/> Maximum <input type="checkbox"/> Arithmetic Average <input type="checkbox"/> Area-Weighted Average Rep. Conc. [mg/L] E/ Target Levels [mg/L] NE	Use the historic maximum concentration from the water use well as the Rep. Conc.		Rep. Conc. [mg/L]	Target Levels [mg/L]
Select the representative concentration (Rep. Conc.) for each medium.										
Benzene										
Toluene										
Ethylbenzene										
Xylenes (Total)										
MTBE										
Anthracene										
Benzo(a)anthracene										
Benzo(a)pyrene										
Benzo(b)fluoranthene										
Benzo(g,h,i)perylene										
Benzo(k)fluoranthene										
Chrysene										
Fluoranthene										
Flourene										
Naphthalene										
Phenanthrene										
Pyrene										
METALS										
Arsenic										
Barium										
Cadmium										
Chromium VI										
Lead										
Zinc										

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.
 C: Complete Pathway
 NC: Not a Complete Pathway
 N/A: Not applicable

ARBCA SUMMARY REPORT

FORM NO. 18 - OFF-SITE CONSTRUCTION WORKER

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

COMPARISON OF TIER 1 URBSLs WITH REPRESENTATIVE OFF-SITE CONCENTRATIONS

CHEMICALS OF CONCERN	SURFICIAL SOIL			SUBSURFACE SOIL			GROUNDWATER							
	Outdoor Inhalation, Ingestion, & Dermal Contact			Outdoor Inhalation			Indoor Inhalation			Outdoor Inhalation				
	Maximum	Arithmetic Average	Area-Weighted Average	Maximum	Arithmetic Average	Area-Weighted Average	Maximum	Arithmetic Average	Area-Weighted Average	Maximum	Arithmetic Average	Area-Weighted Average		
Rep. Conc. * [mg/kg]	Target Levels [mg/kg]	E/NE	Rep. Conc. [mg/kg]	Target Levels [mg/kg]	E/NE	Rep. Conc. [mg/kg]	Target Levels [mg/kg]	E/NE	Rep. Conc. [mg/L]	Target Levels [mg/L]	E/NE	Rep. Conc. [mg/L]	Target Levels [mg/L]	E/NE
ORGANICS														
Benzene														
Toluene														
Ethylbenzene														
Xylenes (Total)														
MTBE														
Anthracene														
Benzo(a)anthracene														
Benzo(a)pyrene														
Benzo(b)fluoranthene														
Benzo(g,h,i)perylene														
Benzo(k)fluoranthene														
Chrysene														
Fluoranthene														
Flourene														
Naphthalene														
Phenanthrene														
Pyrene														
METALS														
Arsenic														
Barium														
Cadmium														
Chromium VI														
Lead														
Zinc														

NOTE: This comparative evaluation is performed automatically after the user has (i) completed Form Nos. 13 to 17 and (ii) entered the representative concentrations.

E: Representative concentration exceeds the calculated allowable concentration.

NE: Representative concentration does not exceed the calculated allowable concentration.

* The higher of the representative concentrations for surficial and subsurface soil should be entered in the representative concentration column. The target level is the target level for surficial soil.

ARBCA SUMMARY REPORT

FORM NO. 19

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

TIER I GROUNDWATER RESOURCE PROTECTION TARGET CONCENTRATIONS

Distance from source to the point of exposure (POE):

CHEMICALS OF CONCERN	COMPARISON FOR SOURCE SOIL			COMPARISON FOR SOURCE GROUNDWATER			COMPARISON FOR COMPLIANCE WELLS					
	Soil Source Rep. Conc. 1 [mg/kg]	Allowable Soil Conc. 2 [mg/kg]	E/ NE	GW Source Rep. Conc. 3 [mg/L]	Allowable GW Conc. at a POC 4 [mg/L]	E/ NE	CW Rep. Conc. 5 [mg/L]	Allowable GW Conc. at a POC 6 [mg/L]	E/ NE	CW Rep. Conc. 5 [mg/L]	Allowable GW Conc. at a POC 6 [mg/L]	E/ NE
ORGANICS												
Benzene												
Toluene												
Ethylbenzene												
Xylenes (Total)												
MTBE												
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(g,h,i)perylene												
Benzo(k)fluoranthene												
Chrysene												
Fluoranthene												
Fluorene												
Naphthalene												
Phenanthrene												
Pyrene												
METALS												
Arsenic												
Barium												
Cadmium												
Chromium VI												
Lead												
Zinc												

NOTE: Use the *ARBCA Computational Software* to calculate the allowable (i) soil source conc., (ii) GW source conc., and (iii) compliance well conc.

1: The soil source representative concentrations have to be calculated and entered here.

2: Allowable soil concentrations at the source protective of groundwater at the POE.

3: The groundwater source representative concentrations have to be calculated and entered here.

4: Allowable groundwater concentrations at the source protective of groundwater at the POE.

5: The representative concentrations in the compliance well.

6: Allowable groundwater concentrations at a point of compliance (POC) protective of a POE.

E: Representative concentration exceeds the calculated allowable concentration.

NE: Representative concentration does not exceed the calculated allowable concentration.

Recommended Attachment: A map showing the location of the soil source, location of POE, and location of POCs.

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

TIER I GROUNDWATER RESOURCE PROTECTION TARGET CONCENTRATIONS

Distance from source to the point of exposure (POE): _____

COMPARISON FOR COMPLIANCE WELLS

CHEMICALS OF CONCERN	5		6		5		6		E/ NE
	CW Rep. Conc. [mg/L]	Allowable GW Conc. at a POC [mg/L]	CW Rep. Conc. [mg/L]	Allowable GW Conc. at a POC [mg/L]	CW Rep. Conc. [mg/L]	Allowable GW Conc. at a POC [mg/L]	CW Rep. Conc. [mg/L]	Allowable GW Conc. at a POC [mg/L]	
COMPLIANCE WELL NO.									
DISTANCE FROM SOURCE									
RECENT TREND									
ORGANICS									
Benzene									
Toluene									
Ethylbenzene									
Xylenes (Total)									
MTBE									
Anthracene									
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Chrysene									
Fluoranthene									
Fluorene									
Naphthalene									
Phenanthrene									
Pyrene									
METALS									
Arsenic									
Barium									
Cadmium									
Chromium VI									
Lead									
Zinc									

NOTE: Use the ARBCA Computational Software to calculate the allowable (i) soil source conc., (ii) GW source conc., and (iii) compliance well conc.
 5: The representative concentrations in the compliance well.
 E: Representative concentration exceeds the calculated allowable concentration.
 NE: Representative concentration does not exceed the calculated allowable concentration.
 Recommended Attachment: A map showing the location of the soil source, location of POE, and location of POCs.

ARBCA SUMMARY REPORT

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

TIER 1 STREAM PROTECTION TARGET CONCENTRATIONS

CHEMICALS OF CONCERN	COMPARISON FOR SOURCE SOIL		COMPARISON FOR SOURCE GROUNDWATER		COMPARISON FOR COMPLIANCE WELL AT THE STREAM BANK		COMPARISON FOR COMPLIANCE WELLS BETWEEN THE SOURCE AND THE STREAM BANK				
	Soil Source Rep. Conc. 1 [mg/kg]	Allowable Soil Conc. 2 [mg/kg]	GW Source Rep. Conc. 3 [mg/L]	Allowable GW Conc. at a POC 4 [mg/L]	CW Rep. Conc. 5 [mg/L]	Allowable GW Conc. at a POC 6 [mg/L]	CW Rep. Conc. 5 [mg/L]	Allowable GW Conc. at a POC 6 [mg/L]	CW Rep. Conc. 5 [mg/L]	Allowable GW Conc. at a POC 6 [mg/L]	E/NE
Distance from source to the stream: _____											
COMPLIANCE WELL NO. _____											
DISTANCE FROM SOURCE _____											
RECENT TREND _____											
ORGANICS											
Benzene											
Toluene						0.011					
Ethylbenzene						0.175					
Xylenes (Total)						0.453					
MTBE						NA					
Anthracene						NA					
Benzo(a)anthracene						7.241					
Benzo(a)pyrene						0.00002					
Benzo(b)fluoranthene						0.00002					
Benzo(g,h,i)perylene						0.00002					
Benzo(k)fluoranthene						NA					
Chrysene						0.00002					
Fluoranthene						0.00002					
Fluorene						0.0398					
Naphthalene						0.966					
Phenanthrene						0.62					
Pyrene						NA					
						0.724					
METALS											
Arsenic						0.33					
Barium						NA					
Cadmium						0.0027					
Chromium VI						0.011					
Lead						0.0028					
Zinc						0.18					

NOTE: Use the ARBCA Computational Software to calculate the allowable (i) soil source conc., (ii) GW source conc., and (iii) compliance well conc.

1: The soil source representative concentrations have to be calculated and entered here.

2: Allowable soil concentrations at the source protective of groundwater at the POE.

3: The groundwater source representative concentrations have to be calculated and entered here.

4: Allowable groundwater concentrations at the source protective of groundwater at the POE.

5: The representative concentrations in the compliance well.

6: Allowable groundwater concentrations at a point of compliance (POC) protective of a POE.

E: Representative concentration exceeds the calculated allowable concentration.

NE: Representative concentration does not exceed the calculated allowable concentration.

Recommended Attachment: A map showing the location of the soil source, location of stream, and location of POCs.

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

TIER 1 STREAM PROTECTION TARGET CONCENTRATIONS

Distance from source to the stream:

COMPARISON FOR COMPLIANCE WELLS BETWEEN THE SOURCE AND THE STREAM BANK

CHEMICALS OF CONCERN	5		6		5		6		E/ NE	5	6	E/ NE	5	6	E/ NE	5	6	E/ NE	
	CW Rep. Conc.	Allowable GW Conc. at a POC	CW Rep. Conc.	Allowable GW Conc. at a POC	CW Rep. Conc.	Allowable GW Conc. at a POC	CW Rep. Conc.	Allowable GW Conc. at a POC											
COMPLIANCE WELL NO.																			
DISTANCE FROM SOURCE																			
RECENT TREND																			
ORGANICS																			
Benzene																			
Toluene																			
Ethylbenzene																			
Xylenes (Total)																			
MTBE																			
Anthracene																			
Benzo(a)anthracene																			
Benzo(a)pyrene																			
Benzo(b)fluoranthene																			
Benzo(g,h,i)perylene																			
Benzo(k)fluoranthene																			
Chrysene																			
Fluoranthene																			
Fluorene																			
Naphthalene																			
Phenanthrene																			
Pyrene																			
METALS																			
Arsenic																			
Barium																			
Cadmium																			
Chromium VI																			
Lead																			
Zinc																			

NOTE: Use the ARBCA Computational Software to calculate the allowable (i) soil source conc., (ii) GW source conc., and (iii) compliance well conc.

5: The representative concentrations in the compliance well.

6: Allowable groundwater concentrations at a point of compliance (POC) protective of a POE.

E: Representative concentration exceeds the calculated allowable concentration.

NE: Representative concentration does not exceed the calculated allowable concentration.

Recommended Attachment: A map showing the location of the stream.

ARBCA SUMMARY REPORT

FORM NO. 21a

UST Incident No(s): _____ Facility ID: _____

Date Form Completed: _____ Form Completed By: _____

TIER 1 ON-SITE TARGET LEVELS FOR INHALATION AND INGESTION

NOTE: The RBSLs listed for each route of exposure are the minimum RBSLs for all the receptors for that particular route of exposure. The Tier 1 on-site target levels are the minimum RBSLs of all routes of exposures within each medium.

CHEMICALS OF CONCERN	SURFICIAL SOIL		SUBSURFACE SOIL		GROUNDWATER				
	Outdoor Inhalation, Ingestion, & Dermal Contact [mg/kg]	On-Site Tier 1 Target Levels [mg/kg]	Indoor Inhalation [mg/kg]	Outdoor Inhalation [mg/kg]	On-Site Tier 1 Target Levels [mg/kg]	Indoor Inhalation [mg/L]	Outdoor Inhalation [mg/L]	Ingestion of Water [mg/L]	On-Site Tier 1 Target Levels [mg/L]
ORGANICS									
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIBK	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
METALS									
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium VI	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTE:
NA: Not Available

ARBCA SUMMARY REPORT

FORM NO. 21b

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

TIER I OFF-SITE TARGET LEVELS FOR INHALATION AND INGESTION

NOTE: The RBSLs listed for each route of exposure are the minimum RBSLs for all the receptors for that particular route of exposure. The Tier I on-site target levels are the minimum RBSLs of all routes of exposures within each medium.

CHEMICALS OF CONCERN	SURFICIAL SOIL		SUBSURFACE SOIL		GROUNDWATER			
	Outdoor Inhalation, Ingestion, & Dermal Contact [mg/kg]	Off-Site Tier I Target Levels [mg/kg]	Indoor Inhalation [mg/kg]	Outdoor Inhalation [mg/kg]	Indoor Inhalation [mg/L]	Outdoor Inhalation [mg/L]	Ingestion of Water [mg/L]	Off-Site Tier I Target Levels [mg/L]
ORGANICS								
Benzene	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (Total)	NA	NA	NA	NA	NA	NA	NA	NA
MBE	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(e)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA
METALS								
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium VI	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA

NOTE:

NA: Not Available

UST Incident No(s):

Facility ID:

Date Form Completed:

Form Completed By:

TIER 1 CONCLUSIONS AND RECOMMENDATIONS

1.	Has the site been adequately investigated and characterized?
2.	Has free product been removed?
3.	Have threats to utilities been mitigated? (if applicable)
4.	Have nuisance conditions (i.e., odor, taste, etc.) been properly mitigated? (if applicable)
5.	Is the groundwater plume stable or shrinking, based on the concentration trend plots?
6.	Have threats to ecological receptors been addressed? (if applicable)
7.	Are on-site soil and groundwater concentrations protective of current and reasonable future on-site receptors?
8.	Are off-site soil and groundwater concentrations protective of current and reasonable future off-site receptors?
9.	Are soil and groundwater concentrations at the source protective of groundwater at a POE?

UST Incident No(s):	Facility ID:
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Date Form Completed:	Form Completed By:
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TIER 1 CONCLUSIONS AND RECOMMENDATIONS

10.	Are groundwater concentrations at the POC protective of groundwater at a POE?
11.	Are soil and groundwater concentrations at the source protective of a stream?
12.	Is compliance monitoring of groundwater recommended?
13.	Is an interim remediation and Tier 1 reevaluation recommended?
14.	Is remediation to Tier 1 target levels recommended?
15.	Is site recommended for NFA status?
16.	Is a Tier 2 recommended?
17.	Other relevant information:

