COVER SHEET
STANDARD OPERATING PROCEDURE

OPERATION TITLE: **DEVELOPMENT OF A SAMPLING AND ANALYSIS PLAN**

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Standard Operating Procedure: **RWM-DR-014**
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Effective Date: **April 3, 2009**
Revised by: **Jean Firth**
Reviewed by: **Brian Beneski**

Five Year Review No Changes Needed:

Print Name: _____ Signature: _____ Date: _____

Print Name: _____ Signature: _____ Date: _____

Print Name: _____ Signature: _____ Date: _____

Print Name: _____ Signature: _____ Date: _____

1.0 PURPOSE

The purpose of this document is to describe the Maine Department of Environmental Protection, Bureau of Remediation and Waste Management, Division of Remediation's (MEDEP/DR) procedure for developing a Sampling and Analysis Plan (SAP).

2.0 APPLICABILITY

MEDEP/DR is responsible for the investigation and remediation of hazardous substance, petroleum, and landfill sites throughout Maine. Prior to conducting investigative field work, a SAP is developed that outlines the goals of the activity and methodology to achieve that goal. With the phrase "Never start a vast project from half vast ideas" in mind, a well developed SAP that is reviewed by all field activity team members should assure that the goals are obtainable, the methodology is consistent, and the data generated will meet the Data Quality Objectives (DQOs) for the project.

3.0 RESPONSIBILITIES

All MEDEP/DR staff will follow the procedures outlined in this SOP for the development of a SAP. The project manager for a site is generally responsible for the development of the SAP, with input as appropriate from the field staff (MEDEP OHMS and MEDEP/Division of Technical Support (MEDEP/TS) Geologists). Their respective supervisors and managers are responsible for ensuring that they are familiar with and adhere to this procedure, and receive the appropriate training and guidance for developing SAPs.

4.0 GUIDELINES

A SAP may be developed as a narrative document or staff may use the standard sampling and analysis form located with the Quality Assurance Plan on the Division of Remediation's Web page (a copy of the SAP form is also found as Attachment A of this SOP). A SAP will, at a minimum, contain the following elements.

4.1 ASSESSMENT OF EXISTING DATA

The project manager for the site will review any existing information on the site. Analytical data will be analyzed for completeness, quality and usability.

4.1.1 Site Reconnaissance

Prior to sampling events, particularly large multi - day events or multi media events, it is recommended that a site reconnaissance be conducted to work out any logistical problems that may arise during sampling. This would include site access issues, physical impediments to sampling, access issues with surface water sampling, etc. Any logistical issues discovered during the site reconnaissance should be mentioned in the SAP along with recommendations for overcoming these issues.

4.1.2 Conceptual Site Model

The first step in developing any sampling plan is to develop a conceptual site model (CSM). ASTM defines a CSM as *"a written or pictorial representation of an environmental system and the biological, physical and chemical processes that determine the transport of contaminants*

from, sources through environmental media to environmental receptors within the system." The CSM is a dynamic tool to be updated as new information becomes available, and therefore it should be amended, as appropriate, after each stage of investigation.

The CSM should be site-specific and take into consideration the following information:

- What are the COCs associated with the site?
- How were the chemicals were released into the environment? Where are the sources located? Was the release due to a surface spill of a liquid, a subsurface spill from piping or a tank, improper storage of materials such as chemical soaked filters at a drycleaner, through a floor drain to the subsurface beneath a building, or through a floor drain to a surface location? Is there a NAPL?
- What are the chemical characteristics that will influence how the chemicals will act in the environment? Do they dissolve readily in water? Are they very volatile or less volatile? How much was released?
- How does the geology, preferential pathways, groundwater flow, depth to groundwater, proximity to impermeable surfaces, and chemical attenuation influence contaminant migration?
- Where are the potential receptors and how might contaminants reach them? Have all of the migration pathways been identified? Has future construction been considered?

4.1.3 Specific Requirements for USEPA Pre - Remedial Site Assessment

For federal site assessment reports (PAs, SIs, SIPs, ESIs and HRS) if scoresheets are available from a previous site assessment report, these will be reviewed. The goal in reviewing the score sheets is to identify outstanding data needs (data gaps) for accurately assess the site. If no scoresheets are available, the project manager will complete SI scoresheets for the site. Information that is available will be used. If information is unavailable, the most conservative assumption in each scenario will be used.

Specific attention will be paid to pathways which score greater than 57. If data is incomplete for these pathways the sampling plan should focus on collecting samples which will clarify, confirm or disprove previous assumptions.

4.2 TITLE SECTION

The title section of an SAP will contain the name and town of project, the name and title of the person developing the SAP, and the expected date of the field work and field personnel.

4.3 INTRODUCTION

The introduction will state the DQOs which includes:

- Goals of the sampling plan;
- End use of data.

4.4 BACKGROUND INFORMATION

A brief explanation of the background of the Site will be presented.

4.4.1 Specific Background Requirements for Pre - Remedial Site Assessment Activities

For pre - remedial site assessment activities, a pathway analysis will be included in the SAP. Included in this analysis will be a discussion regarding the rationale for sampling or not sampling specific pathways and/or media.

4.5 SITE SPECIFIC HEALTH AND SAFETY PLAN

A Site Specific Health and Safety plan (HASP) will be developed and included with the SAP. The most current MEDEP/DR HASP form, which contains the minimum requirements for a HASP, can be found located with the Quality Assurance Plan on the Division of Remediation's Web page (A copy of the HASP is also found as Attachment B of this SOP).

If below grade sampling is part of the SAP, Dig - Safe must be notified at least 3 working days prior to the sampling event. Sample locations must be marked on the ground prior to calling Dig-Safe.

4.6 SAMPLING METHODOLOGY/EQUIPMENT

A description of the sampling methodology will be included in the SAP. In instances were a MEDEP/DR Standard Operating Procedures are available, reference to these procedures by either name or document number is sufficient. Also included will be an equipment checklist; a copy of the MEDEP/DR standard check list can be found located with the Quality Assurance Plan on the Division of Remediation's Web page.. This checklist will be used for loading equipment in preparation of the sampling event.

4.7 SAMPLES AND PARAMETERS

4.7.1 Sample Locations

A map showing planned sampling locations shall be included in the sampling plan. If locations are not pre - determined, the method that samples will be chosen and collected (field observations, random, etc.) will be outlined in the SAP. Also outlined will be any composite procedures, if applicable.

This section should also indicate sampling collection priority and order, to assure that the most important samples are obtained, and that sampling is generally done from low areas of contamination to higher levels of contamination. It is recommended that critical samples be collected in duplicate.

4.7.2 Media Sampled

A chart outlining the media collected and sample analysis will be included in the SAP. Generally, the media sampled will be:

- Soil;
- Groundwater (via monitoring wells and residential wells);
- Soil gas;
- Indoor air;
- Surface Water;
- Sediment; and
- Neat waste material.

4.7.3 Analytical Parameters

Parameters will be identified by either laboratory analysis methodology number, or generally accepted name of analysis.

Containers, preservation, and holding times will be as recommended by the laboratory providing analytical services. Laboratories and methods approved for use by the Division of Remediation QAPP can be found located with our Quality Assurance Plan on the Division of Remedaiton's Web site. DR staff may also use the Maine Health and Environmental Testing Laboratory (HETL).

4.8 FIELD QC SAMPLES

The specific needs for QC samples for the project will be outlined; including, but not limited to: background samples;

- Replicates;
- Trip blanks; and
- Equipment blanks

4.9 REPORT GENERATION

A Field Event Trip Report (FETR) will be developed for every sampling event (See MEDEP/DR SOP RWM-DR-013). Staff person responsible for developing the FETR will be stated in the SAP.

5.0 ACRONMYMS

- MEDEP/DR - Maine Department of Environmental Protection, Division of Remediation
- MEDEP/TS - Maine Department of Environmental Protection, Division of Technical Services
- SAP - Sampling and Analysis Plan
- DQO - Data Quality Objectives
- USEPA - United States Environmental Protection Agency Region I
- PA - Preliminary Assessment
- SI - Site Inspection
- SIP - Site Inspection Prioritization
- ESI - Expanded Site Inspection
- HRS - Hazard Ranking System
- HASP - Health and Safety Plan
- FETR - Field Event Trip Report

ATTACHMENT A
SAMPLING AND ANALYSIS PLAN FORM

MEDEP DIVISION of REMEDIATION
SAMPLING and ANALYSIS PLAN

SITE NAME:

DATE of SAMPLING:

MEDEP PERSONNEL: (list names, titles and roles such as person responsible for ordering containers and completing trip reports)

OTHER PERSONNEL: (list name affiliation, title and role)

CONCEPTUAL SITE MODEL: (ASTM defines a CSM as "*a written or pictorial representation of an environmental system and the biological, physical and chemical processes that determine the transport of contaminants from, sources through environmental media to environmental receptors within the system.*" The CSM is a dynamic tool to be updated as new information becomes available, and therefore it should be amended, as appropriate, after each stage of investigation.) All active sites in the Division of Remediation should have a CSM. Staff should work with their geologist to develop and update this as necessary. Provide the following information for the site from the CSM.

Hydrogeologic Setting: (prepare a narrative describing what is known about the site-specific geology and hydrology with respect to its effect on contaminant distribution and migration.
Contaminants of Concern: (list contaminants and their chemical properties that will influence how they act in the environment)
Method of Release: (look at all releases)
Migration/Exposure Pathways: (groundwater, soil, surface water and or air)
Receptors: (list potential receptors and describe the risk to the receptor posed by contamination).

EVALUATION OF PREVIOUS DATA and DATA GAP ANALYSIS: (Review previous data to determine the environmental and physical conditions existing at the site. For example, if wells are present, well diameter and depth to water will govern the type of sampling equipment that is necessary to sample the wells. Other information such as whether it is necessary to filter samples may also be available. If samples were previously collected, were they analyzed for the appropriate parameters? In addition, previous studies may indicate there is a high degree of confidence with data that has been collected in one portion of the site, but not the other. In order to avoid or fill data gaps, all available data should be assessed and compared to the current CSM. This will result in an efficient and complete site assessment.)

SITE RECONNAISSANCE: (Depending on the objectives of the sampling and the date of the last site visit staff may need to visit the site prior to conducting the sampling. List the date of last site visit or reconnaissance)

INVESTIGATION PURPOSE and DATA QUALITY OBJECTIVES: (fill out and attach forms for the pathway which will be sampled)

___ Groundwater Sampling
___ Soil Sampling
___ Surface Water/Sediment Sampling
___ Air Sampling

ADDITIONAL ATTACHMENTS:

___Sample SUMMARY OF SITE INVESTIGATION Table- (example attached)
___Sample location map
___Container list
___HASP
___Equipment Checklist
___Previous "flow sheets"

GROUNDWATER SAMPLING:

DQOs:

- ☐ To determine if contamination onsite has impacted groundwater
- ☐ To determine if contamination in groundwater poses a risk to people drinking the water
- ☐ To determine if concentrations of contaminants have changed
- ☐ To determine if groundwater is discharging to surface water
- ☐ Other_____

Sample Point:

- ☐ Existing monitoring wells (list date last sampled, attach previous "flow sheets")
- ☐ Wells which will be installed (with _____)
- ☐ Pore water
- ☐ Residential Wells
- ☐ Other:_____

Regulatory Standards/Guidelines that will be used for comparison:

- ☐ MEGs/MCLs
- ☐ Background

Sample Method:

- ☐ Low Flow
  - ☐ Peristaltic Pump
  - ☐ Submersible Pump
- ☐ Other:_____

Field Screening:

- ☐ pH
- ☐ eh
- ☐ conductivity
- ☐ turbidity
- ☐ DO
- ☐ Temperature
- ☐ Water level
- ☐ Flow rate
- ☐ Other:_____

Analytical Method: (list the method and make sure the method meets the objective)

- ☐ VOCs:
- ☐ Metals:
- ☐ Pesticides/Herbicide:
- ☐ SVOCs:
- ☐ Petroleum:
- ☐ Other:_____

SOIL SAMPLING:

DQOs:

- ☐ To determine if a release of contaminants has occurred
- ☐ To determine if contaminants pose a risk to residential/recreational receptors (i.e. <2"
- ☐ To determine if contaminants pose a risk to workers (i.e. >2')
- ☐ To determine the extent of contamination
- ☐ Determining disposal criteria
- ☐ Other:_____

Regulatory Standard/Guideline:

- ☐ RAGs:
- ☐ Waste Disposal Criteria:
- ☐ Background:
- ☐ Other:_____

Sample Method: **(CALL DIG SAFE)**

- ☐ Shovel/trowel
- ☐ Geoprobe
  - ☐ Hand
  - ☐ Drill Rig
- ☐ Excavator
- ☐ Other:_____

Field Screening:

- ☐ PID
- ☐ FID
- ☐ XRF
- ☐ Other:_____

Analytical Method: (list the method and make sure the method meets the objective)

- ☐ VOCs:
- ☐ Metals (filtered/unfiltered):
- ☐ Pesticides/Herbicide:
- ☐ SVOCs:
- ☐ Petroleum:
- ☐ PCBs:

SURFACE WATER/ SEDIMENT SAMPLING

DQOs:

- ☐ To determine if contaminants from the site is discharging to the surface water body
- ☐ To determine the extent of contamination in the surface water body
- ☐ To determine if contamination in the surface water body exceeds regulatory standards
- ☐ Other:_____

Media:

- ☐ Water
- ☐ Sediment

Regulatory Standard/Guideline:

- ☐ AWQC
- ☐ SQIRT
- ☐ Background
- ☐ Other:_____

Sample Methods:

- ☐ Shovel/Trowel
- ☐ Ponar
- ☐ Beta/Kemmerer
- ☐ Peristaltic pump:
- ☐ Other:_____

Field Screening:

- ☐ PID
- ☐ XRF
- ☐ DO
- ☐ Eh
- ☐ pH
- ☐ Conductivity
- ☐ Temperature
- ☐ Other:_____

Analytical Method: (list the method and make sure the method meets the objective)

- ☐ VOCs:
- ☐ Metals:
- ☐ Pesticides/Herbicide:
- ☐ SVOCs:
- ☐ Petroleum:
- ☐ PCBs:
- ☐ Other:_____

AIR SAMPLING

DQOs:

- ☐ To determine if vapors are present in soil gas at levels that pose a threat to receptors.
- ☐ To determine how vapors are migrating from the site.
- ☐ To determine if vapors are present in indoor air at levels that pose a risk.
- ☐ To determine if landfill gasses are present at a site.
- ☐ Other:_____

Sample Point:

- ☐ Soil gas
- ☐ Preferential pathway
- ☐ Subslab
- ☐ Indoor Air
- ☐ Ambient air
- ☐ Other:_____

Regulatory Guideline:

- ☐ Ambient Air Guideline
- ☐ Indoor Air Target
  - ☐ Residential 1 compound
  - ☐ Residential Multiple compounds
  - ☐ Commercial 1 compound
  - ☐ Commercial multiple compounds
  - ☐ Residential sub chronic
  - ☐ Commercial sub chronic
- ☐ Soil Screening level (this assumes an attenuation factor for soil gas to indoor air)
- ☐ Other:_____

Sample Method:

- ☐ Tedlar bag
- ☐ Summa canister
- ☐ Other:_____

Field Screening:

- ☐ PID
- ☐ FID
- ☐ Oxygen
- ☐ Hydrogen Sulfide
- ☐ Methane
- ☐ Other:_____

Analytical Method:

- ☐ Mobile lab
- ☐ TO-15
- ☐ TO-17
- ☐ APH
- ☐ Other:_____

ATTACHMENT A

EXAMPLE

SUMMARY OF SITE INVESTIGATION

AOC	TASK/MEDIA	SAMPLE IDS	DEPTH OF SAMPLE	ANALYTICAL PARAMETER	NUMBER OF LAB SAMPLES[2]	NUMBER OF DUPS	RATIONALE	FIELD ANALYSES/ OBSERVATIONS[3]
AOC I: Site Building	Wipe Sampling	WS101 WS102 WS103	N/A	PCBs	3	1	To assess building materials for potential future demolition disposal	None
	Soil Investigation	TP107	0 to 10 feet	DRO, VOCs	1	0	To assess soil conditions in the area of the 275-gallon AST and associated fill and vent pipes	PID and XRF Field-Screening, Visual Observations
AOC 2: Former Coal Yard	Soil Investigation	TP101 TP102	0 to 10 feet	Metals, PAHs	1	0	To assess subsurface conditions and evaluate potential impacts from former coal storage area.	PID and XRF Field-Screening, Visual Observations
	Groundwater Investigation	OW101	Unknown	DRO, VOCs	1	1	To evaluate the groundwater conditions in the vicinity of the former coal storage yard	Water Quality Parameters, Visual Observations
AOC 3: Potential UST Location, West of Building	Soil Investigation	TP-103	0 to 10 feet	DRO, PAHs, VOCs	1	0	To assess subsurface conditions and evaluatc possible impacts from potential UST.	PID and XRF Field-Screening, Visual Observations
	Groundwater Investigation	MW103	Unknown	DRO, VOCs	1	1	To evaluate groundwater quality downgradient of potential UST.	Water Quality Parameters, Visual Observations
AOC 4: Potential UST Location Northeast of Building	Soil Investigation	TP104	0 to 10 feet	DRO, PAHs, VOCs	1	0	To assess subsurface conditions and evaluate possible impacts from potential UST.	PID and XRF Field-Screening, Visual Observations
	Groundwater Investigation	MW102	Unknown	DRO, VOCs	1	0	To evaluate groundwater quality downgradient of potential UST.	Water Quality Parameters, Visual Observations

ATTACHMENT B
HEALTH AND SAFETY PLAN FORM

DEP Limited Operation Site Safety & Health Plan

SITE INFORMATION			
SITE NAME:		JOB/FILE/SPILL #	
SITE LOCATION (ADDRESS):		TOWN:	
DIRECTIONS TO SITE:			
WORK OBJECTIVE:			
MAP/DIAGRAM (SKETCH ON LAST PAGE) MUST INCLUDE:	SITE MAP (DETAIL WHERE THIS PLAN APPLIES ☐ WORK ZONES (EXCLUSION, HAZARD REDUCTION, SUPPORT & CLEAN) ☐ ESCAPE ROUT FROM WORK AREAS & REFUGE AREA/OFF SITE CHECK IN AREA ☐ BASIC SITE TOPOGRAPHY ☐		
ENVIRONMENTAL CONDITIONS:	TEMPERATURE:	CLOUD COVER	
	WIND DIRECTION:	WIND SPEED:	

EMERGENCY RESPONSE PLAN			
FIELD STAFF TO EXIT SITE IN CASE OF EMERGENCY (NOT RESPOND) ☐		FIELD STAFF TO RESPOND IN EMERGENCY ☐	
RESPONDING FIRE DEPT:		TEL #:	
RESPONDING RESCUE SERVICE:		TEL #:	
ON-SITE CONTRACTOR(S):		TEL #:	
ON-SITE CONTRACTOR(S):		TEL #:	
ON-SITE CONTRACTOR(S):		TEL #:	
POLICE:		TEL #:	
HOSPITAL:		TEL #:	
AMBULANCE SERVICE:		TEL #:	
PRIMARY FIRST AID ATTENDANT:		TEL #:	

MEDICAL TREATMENT BY DEP STAFF IS LIMITED TO BASIC FIRST AID

RESCUE PERSONNEL (WHILE EXITING AREA, RESCUE PERSONNEL WILL ASSIST OTHERS REQUIRING ASSISTANCE OR AS DESIGNATED IN ATTACHED REQUIRED PERMITS. OTHER RESCUE WILL BE BY OFF-SITE RESCUE SERVICE:	
SITE SAFETY COORDINATOR (RESPONSIBLE TO ACCOUNT FOR PERSONNEL FROM THE SITE AT CHECK-IN AREA; TO COORDINATE ON-SITE EMERGENCY ACTIONS & WITH OFF-SITE RESPONDERS):	

DEP LIMITED OPERATION SITE SAFETY & HEALTH PLAN CONTINUED

SITE SUPERVISOR (RESPONSIBLE TO COORDINATE NON-EMERGENCY ON-SITE ACTIVITIES; TO INITIATE CALL FOR OFF-SITE EMERGENCY PERSONNEL AS APPROPRIATE THROUGH OFF-SITE COMMUNICATION SYSTEM):				
ALARM SYSTEM:	VOICE ☐	3 BLAST AUTO HORN ☐	OTHER (SPECIFY):	
COMMUNICATIONS (ON-SITE):	WALKIE TALKIE ☐	HEADSET RADIO ☐	SIGNALS ☐	
COMMUNICATIONS (OFF-SITE:	RADIO ☐	SITE TEL #:		

OTHER EMERGENCY TELEPHONE NUMBERS:	
DEP REGIONAL OFFICES:	AUGUSTA: (207) 287-7800
	BANGOR: (207) 941-4570
	PORTLAND: (207) 822-6300
	PRESQUE ISLE: (207) 764-0477
	DEP SAFETY DIRECTOR, LINDA DORAN: (207) 287-7867
	NATIONAL RESPONSE CENTER: (800) 424-8802
	POISON CONTROL CENTER: (800) 222-1222

SITE OPERATIONAL RISKS			
CHEMICAL RISKS (ATTACH MSDS):		CONCENTRATION HAZARD (INCLUDE PEL & LEL):	
CHEMICAL RISKS (ATTACH MSDS):		CONCENTRATION HAZARD (INCLUDE PEL & LEL):	
CHEMICAL RISKS (ATTACH MSDS):		CONCENTRATION HAZARD (INCLUDE PEL & LEL):	
CHEMICAL RISKS (ATTACH MSDS):		CONCENTRATION HAZARD (INCLUDE PEL & LEL):	

PHYSICAL RISKS				
CONFINED SPACES (ATTACH CONFINED SPACE ENTRY PERMIT OR NON-HAZARD DECLARATION) ☐		ELECTRICAL HAZARD (LOCK OUT/TAG OUT REQUIRED FOR DEACTIVATED EQUIPMENT; 10 FT FROM HIGH VOLTAGE) ☐		
TRENCHING/EXCAVATION (ENTRY CONSIDERED CONFINED IF SPACE IS GREATER THAN 4 FT.) ☐		UTILITIES CONTACTED ☐	DIG SAFE CALLED (800) 344-7233 ☐	
HEAVY EQUIPMENT ☐	DRUM HANDLING/SAMPLING ☐	HEAT/COLD ☐	ANTICIPATED TEMP RANGE:	
ELEVATED AREA/FALL HAZARD (GREATER THAN 6 FT) ☐	NOISE (HEARING PROTECTION REQUIRED IF POSSIBILITY OF OVER 85 DECIBELS) ☐		VEHICULAR TRAFFIC ☐	
OTHER (SPECIFY): ☐				

WORK PRACTICE/ENGINEERING CONTROLS				
AREA/SPACE VENTILATION ☐	EXPLOSION-PROOF FAN (S) ☐	MARK OFF AREA SIGNS/TAPE ☐		
VEHICULAR CONTROLS ☐	CONES ☐	BARRICADES ☐	FLAG PERSON ☐	
EXCAVATION TRENCH ☐	SLOPED ☐	SHORED ☐	BARRICADES ☐	
SEAL OFF/POLY OFF WORK AREA ☐	ELECTRICAL ☐	LOCK OUT/TAG OUT ☐	SHIELD/INSULATE ☐	MAINTAIN 10 FT SEPARATION ☐

DEP LIMITED OPERATION SITE SAFETY & HEALTH PLAN CONTINUED

IGNITION SOURCES SECURED ☐	EQUIPMENT BONDED & GROUNDED ☐	SPARK RESISTANT TOOLS ☐	CLEAN AREA ESTABLISHED FOR EATING/RESTING ☐

SPILL/ACCIDENT CONTROL

FIRE EXTINGUISHER(S) ☐	TYPE(S):	

CONTAINMENT ☐	SORBENT ☐	OVER-PACK DRUMS ☐	BOOMS ☐	BARRIER MATERIAL ☐

PREVENTION PROCEDURES (DESCRIBE):	
HAZARD RECOGNITION (DESCRIBE):	

ADDITIONAL SAFETY EQUIPMENT

FIRST AID KIT ☐	FIRE BLANKET ☐	SAFETY EYEWASH/SHOWER ☐
ESCAPE LADDERS ☐	BODY HARNESS & LIFELINE ☐	TRIPOD WINCH ☐

SITE MONITORING (ATTACH DAILY AIR MONITORING LOGS)

THERMOMETER ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
HYGROMETER ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
WIND SOCK ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
CGI ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
OXYGEN METER ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
PID (LAMP) ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
FID ☐	C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:		ACTION LEVELS:
OTHER (SPECIFY) ☐		C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:	ACTION LEVELS:
OTHER (SPECIFY) ☐		C ☐	CA ☐	P ☐	INTERVAL IF PERIODIC:	ACTION LEVELS:
COLOROMETRIC ☐	TUBE USED:					ACTION LEVELS:

C = CONTINUOUS CA = CONTINUOUS WITH ALARM P = PERIODIC

PERSONAL PROTECTIVE EQUIPMENT: RESPIRATORY

TASK(S):		LEVEL:		RESPIRATOR USED (CARTRIDGE & TYPE):	
TASK(S):		LEVEL:		RESPIRATOR USED (CARTRIDGE & TYPE):	
TASK(S):		LEVEL:		RESPIRATOR USED (CARTRIDGE & TYPE):	

PERSONAL PROTECTIVE EQUIPMENT: CHEMICAL PROTECTIVE CLOTHING

TASK(S):		LEVEL:		CLOTHING USED:	
TASK(S):		LEVEL:		CLOTHING USED:	
TASK(S):		LEVEL:		CLOTHING USED:	

DEP LIMITED OPERATION SITE SAFETY & HEALTH PLAN CONTINUED

PERSONAL PROTECTIVE CLOTHING: GLOVES					
TASK(S):		INNER (TYPE & MATERIAL):		OUTER (TYPE & MATERIAL):	
TASK(S):		INNER (TYPE & MATERIAL):		OUTER (TYPE & MATERIAL):	
TASK(S):		INNER (TYPE & MATERIAL):		OUTER (TYPE & MATERIAL):	
PERSONAL PROTECTIVE EQUIPMENT: BOOTS					
TASK(S):		INNER (TYPE & MATERIAL):		OUTER (TYPE & MATERIAL):	
TASK(S):		INNER (TYPE & MATERIAL):		OUTER (TYPE & MATERIAL):	
TASK(S):		INNER (TYPE & MATERIAL):		OUTER (TYPE & MATERIAL):	
OTHER EQUIPMENT					
TASK(S):		EQUIPMENT:		DESCRIPTION:	
TASK(S):		EQUIPMENT:		DESCRIPTION:	

DECONTAMINATION	
PERSONNEL	*PROTOCOL*
BETWEEN TASKS:	
LEAVING SITE:	
EMERGENCY DECONTAMINATION:	
RESPIRATOR	*PROTOCOL*
BETWEEN TASKS:	
FIELD DECONTAMINATION:	
FINAL SANITIZATION:	
PROTECTIVE CLOTHING	*PROTOCOL*
BETWEEN TASKS:	
FIELD DECONTAMINATION:	
FINAL WASH:	
EQUIPMENT	*PROTOCOL*
BETWEEN TASKS:	
FIELD DECONTAMINATION:	
FINAL DECONTAMINATION:	

DEP LIMITED OPERATION SITE SAFETY & HEALTH PLAN CONTINUED

I have read/understand the contents of this plan, supporting material referenced, and have completed field certification to perform tasks as called for in this plan.

SITE SUPERVISOR SIGNATURE:		**DATE:**	
SITE SAFETY COORDINATOR SIGNATURE:		**DATE:**	
OTHER (SPECIFY):		**SIGNATURE:**	**DATE:**
OTHER (SPECIFY):		**SIGNATURE:**	**DATE:**
OTHER (SPECIFY):		**SIGNATURE:**	**DATE:**
OTHER (SPECIFY):		**SIGNATURE:**	**DATE:**