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Field Sampling Plan for Operable Unit 3-13, Group 4 Perched Water Well Installation

IDAHO NATIONAL ENGINEERING & ENVIRONMENTAL LABORATORY

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ABSTRACT

This field sampling plan describes the drilling and sampling activities that will be conducted in preparation for the installation of vadose zone instrumentation and monitoring wells and tracer testing at the Idaho Nuclear Technology and Engineering Center. This equipment installation covers Phase I of the Operable Unit 3-13 Group 4 (Perched Water) remedial design/remedial actions. The purpose of this Field Sampling Plan is to present the rationale and methods for installation of the perched water wells. Also included are the installation of instrumentation and the associated sampling and analysis. Several new monitoring wells will be installed within the security fence at Idaho Nuclear Technology and Engineering Center. The locations were selected to meet the data quality objectives detailed in this plan. Data obtained from this drilling and sampling program will be used to evaluate the effectiveness of remedial design/remedial action activities identified in the Operable Unit 3-13 Record of Decision for Group 4.

CONTENTS

ABSTRACT v

ACRONYMS xii

1. INTRODUCTION 1-1

1.1 Project Purpose 1-1

1.2 Scope 1-2

1.3 Regulatory Background 1-3

1.4 Document Organization 1-3

2. SITE DESCRIPTION AND BACKGROUND 2-1

2.1 Site Background 2-1

2.2 Conceptual Model 2-3

2.2.1 Geological Setting 2-3
2.2.2 Hydorologic Setting 2-3

2.3 Perched Water 2-5

2.3.1 Perched Water in Surficial Alluvium 2-5
2.3.2 Upper Perched Water Zone 2-5
2.3.3 Lower Perched Water Zone 2-9

2.4 Contaminants of Concern 2-11

3. FIELD SAMPLING PLAN OBJECTIVES 3-1

3.1 Data Quality Objectives 3-1

3.1.1 State the Problem 3-1
3.1.2 Identify the Decisions 3-4
3.1.3 Identify Inputs to the Decision 3-6
3.1.4 Define the Boundaries of the Study 3-9
3.1.5 Develop a Decision Rule 3-9
3.1.6 Specify Tolerable Limits on Decision Errors 3-10
3.1.7 Optimize the Design 3-11

3.2 Sampling Objectives 3-13

3.3 Data Reporting 3-14

4. FIELD ACTIVITIES 4-1

4.1 Well Locations 4-1

4.1.1 Phase I Wells 4-1
4.1.2 Phase II Wells 4-4

4.2 Monitoring and Sampling Locations 4-4

4.2.1 Perched Water Sampling Locations 4-5
4.2.2 Perched Water Level Monitoring Locations 4-5
4.2.3 Soil Moisture Monitoring Locations 4-5

4.3 Well Installation 4-5

4.3.1 Drilling Methods 4-7
4.3.2 Materials. 4-10
4.3.3 Borehole Instrument Installation. 4-12
4.3.4 Surface Completion. 4-16
4.3.5 Well Development. 4-16
4.3.6 Drilling and Sampling Equipment Decontamination 4-17
4.3.7 Sampling Location Surveys 4-17

4.4 Subsurface Sediment Collection 4-17

4.4.1 Subsurface Sediment Sample Prioritization. 4-17
4.4.2 Samples for Physical/Geotechnical Analysis. 4-18
4.4.3 Samples for Chemical Analysis. 4-18
4.4.4 Downhole Geophysical Logging. 4-18

4.5 Groundwater Sampling 4-19

4.5.1 Water Level Measurement 4-19
4.5.2 Well Purging 4-19
4.5.3 Sample Collection 4-19
4.5.4 Suction Lysimeter Sampling 4-20
4.5.5 Groundwater Sample Prioritization. 4-21

4.6 Sampling Quality Assurance/Quality Control. 4-21

4.6.1 Groundwater QA/QC Samples. 4-22

4.7 Corrective Actions 4-22

5. SAMPLE CONTROL 5-1

5.1 Sample Designation 5-1

5.1.1 Sample Identification Code 5-1
5.1.2 Sampling and Analysis Plan Table/Database 5-1

5.2 Sample Handling 5-3

5.2.1 Sample Preservation 5-3
5.2.2 Chain-of-Custody Procedures 5-3
5.2.3 Transportation of Samples 5-3

5.3 Radiological Screening 5-4

6. QUALITY ASSURANCE/ QuALITY CONTROL 6-1

6.1 Project Quality Objectives 6-1

6.1.1 Field Precision 6-1
6.1.2 Field Accuracy 6-1
6.1.3 Representativeness 6-2
6.1.4 Comparability 6-2
6.1.5 Completeness 6-2

6.2 Field Data Reduction 6-2

6.3 Data Validation 6-3

6.4 QA Objectives for Measurement 6-3

7. PROJECT ORGANIZATION AND RESPONSIBILITIES 7-1

7.1 Job-Site Personnel 7-1

7.1.1 Project Manager 7-1
7.1.2 Technical Lead 7-3
7.1.3 Field Team Leader 7-3
7.1.4 Health and Safety Officer 7-4
7.1.5 Industrial Hygienist 7-4
7.1.6 Radiological Control Technician 7-4
7.1.7 Field Geologist 7-5
7.1.8 Job-site Supervisor 7-5
7.1.9 Subcontractor Job-site Supervisor 7-5
7.1.10 Sampling Team 7-5
7.1.11 Work-site personnel 7-6

7.2 Supporting Personnel 7-6

7.2.1 Environmental Restoration Director 7-6
7.2.2 INTEC Site Director 7-6
7.2.3 ER S&H/QA Manager 7-7
7.2.4 INTEC S&H/QA Manager 7-7
7.2.5 Safety Coordinator 7-7
7.2.6 Radiological Engineer 7-7
7.2.7 Environmental Restoration Quality Engineer 7-8
7.2.8 Sample Management Office 7-8
7.2.9 Integrated Environmental Data Management System Technical Leader 7-8
7.2.10 Waste Generator Services 7-8

7.2.11 Occasional workers 7-8
7.2.12 Visitors 7-9

8. WASTE MANAGEMENT 8-1

8.1 Waste Minimization and Segregation 8-1

9. HEALTH AND SAFETY 9-1

10. DOCUMENT MANAGEMENT 10-1

10.1 Documentation 10-1

10.1.1 Sample Container Labels 10-1
10.1.2 Field Guidance Form 10-1
10.1.3 Field Logbooks 10-1
10.1.4 Photographs 10-2

10.2 Document Revision Requests 10-2

11. REFERENCES 11-1

Appendix A—Sampling and Analysis Plan (SAP) Tables

Appendix B—Sampling and Analysis Tables

FIGURES

1-1. Logic diagram for Group 4 activities. 1-4

2-1. Map showing location of the INTEC at the INEEL. 2-2

2-2. Map of INTEC showing existing and proposed wells. 2-4

2-3. Cross-section of the vadose zone at the INTEC. 2-6

2-4. Approximate extent of the shallow Perched Water at the INTEC. 2-8

4-1. Map of INTEC showing existing and proposed well locations. 4-3

4-2. Conceptual diagram for aquifer well completion. 4-11

4-3a. Conceptual diagram for allivium zone instrument installation. 4-13

4-3b. Conceptual diagram for shallow perched water zone instrument installation. 4-14

4-3c. Conceptual diagram for deep perched water zone instrument installation. 4-15

7-1. Project organizational structure. 7-2

TABLES

3-1. WAG-3 OU 3-13 Group 4, Perched Water DQO Table. 3-2

4-1. Phase I and proposed Phase II wells that will be installed to support the Group 4 sampling and monitoring. 4-6

4-2. INTEC perched water wells that contained water during recent measurement events. 4-8

4-3. Perched water analytes for Phase I and initial Phase II sampling of well network. 4-20

4-4. Specific sample requirements for perched water samples. 4-21

8-1. Waste segregation summary. 8-2

ACRONYMS

AA	Alternative Actions
ALARA	As Low As Reasonably Achievable
amsl	above mean sea level
ARDC	Administrative Records and Document Control
BBWI	Bechtel BWXT Idaho, LLC
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CLP	contract laboratory program
CoC	chain-of-custody
COC	contaminant(s) of concern
CPP	(Idaho) Chemical Processing Plant (now known as INTEC)
DOE	U.S. Department of Energy
DOE-ID	U.S. Department of Energy Idaho Operations Office
DOT	U.S. Department of Transportation
DQO	Data Quality Objective
DR	Decision Rule
DS	Decision Statement
EPA	U.S. Environmental Protection Agency
ER	environmental restoration
ERIS	Environmental Restoration Information System
ES&H	environmental safety and health
ES&H/QA	environmental safety and health/ quality assurance
FFA/CO	Federal Facility Agreement and Consent Order
FSP	field sampling plan
FTL	field team leader
FUM	Facilities, Utilities, and Maintenance

HASP	health and safety plan
HP	horsepower
HSO	health and safety officer
IDHW/DEQ	Idaho Department of Health and Welfare/Division of Environmental Quality
IEDMS	Integrated Environmental Data Management System
IH	industrial hygienist
INEEL	Idaho National Engineering and Environmental Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
JRC	Job Requirements Checklist
JSS	job-site supervisor
LMITCO	Lockheed Martin Idaho Technologies Company
MCL	maximum contaminant level
MCP	management control procedure
M&O	management and operation
MSIP	Monitoring System Implementation Plan
NEPA	National Environmental Policy Act
OMP	Occupational Medical Program
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PEW	Process Equipment Waste
PM	project manager
PPE	personal protective equipment
PRD	program requirements directives
PSQ	Primary Study Question
PVC	polyvinyl chloride
QA	quality assurance
QA/QC	quality assurance/quality control
QAPjP	quality assurance project plan

RBC	risk based concentration
RCRA	Resource Conservation and Recovery Act
RCT	radiological control technician
RD/RA	remedial design/ remedial action
RI/FS	Remedial Investigation/Feasibility Study
RML	Remote Measurements Laboratory
ROD	Record of Decision
RPD	relative percent difference
RSD	relative standard deviation
SAP	sampling and analysis plan
SC	safety coordinator
SMO	Sample Management Office
SNF	spent nuclear fuel
SOP	standard operating procedure
SRPA	Snake River Plain Aquifer
STL	Sample Team Lead
STP	sanitary treatment ponds
TAL	Target Analyte List
TPR	technical procedure
USACE	United States Army Corps of Engineers
USGS	United States Geologic Survey
WAG	waste area group
WGS	Waste Generator Services
WMP	Waste Management Plan