FY 2001 Integrated Monitoring Plan

Rocky Flats Environmental Technology Site

Background Document

November 2000

A working group consisting of:

- **City of Arvada**
- **City of Broomfield**
- **City of Northglenn**
- **City of Thornton**
- **City of Westminster**
- **Colorado Department of Public Health and Environment**
- **Department of Energy, Rocky Flats Field Office**
- **Kaiser-Hill Team**
- **Rocky Flats Citizen Advisory Board**
- **Rocky Flats Coalition of Local Governments**
- **U.S. Environmental Protection Agency, Region VIII**

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

INTEGRATED MONITORING PLAN

November 2000

Responsible Organization: Environmental Management & Compliance

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Table of Contents

Page

1.0 INTRODUCTION 1-1

1.1 Background 1-3
1.2 References 1-5

2.0 SURFACE WATER 2-1

2.1 Introduction 2-1
2.1.1 Summary of Monitoring Objectives 2-1
2.1.2 Geologic and Hydrologic Setting 2-4
2.1.3 Assumptions 2-6
2.1.4 Outstanding Issues 2-9
2.1.5 Quality Assurance 2-9
2.1.6 Reporting 2-10
2.1.7 Surface Water Interactions with Groundwater 2-11
2.2 Site-Wide Monitoring Objectives 2-12
2.2.1 IDLH Decision Monitoring 2-12
2.2.2 Source Location Monitoring 2-18
2.2.2.1 GS10 Special Source Investigation 2-20
2.2.3 *Ad Hoc* Monitoring 2-22
2.2.3.1 CDPHE's Special Uranium ICP/MS Study 2-24
2.2.3.2 CDPHE's Nitrate Loading Analysis for Walnut Creek 2-26
2.2.4 Monitoring for Correlation of Plutonium with TSS 2-28
2.3 Industrial Area Monitoring Objectives 2-33
2.3.1 Incidental Waters Monitoring 2-34
2.3.2 Sanitary System Monitoring 2-38
2.3.2.1 Internal Waste Stream Characterization to Meet Permit Requirements 2-39
2.3.2.2 Monitoring Discharges to the WWTP 2-42
2.3.2.3 WWTP Collection System Protective Monitoring 2-46
2.3.2.4 WWTP Collection System Flow Monitoring 2-47
2.3.2.5 WWTP Radiological Monitoring 2-48
2.3.3 Performance Monitoring 2-50
2.3.3.1 Performance Monitoring Template 2-52
2.3.3.2 Performance Monitoring Implementation Options 2-54
2.3.3.4 Integrated Approach 2-54

2.3.4 National Pollutant Discharge Elimination System Permit Monitoring 2-59
2.4 Monitoring Objectives for Industrial Area Discharges to Ponds 2-59

2.4.1 New Source Detection Monitoring....2-60
2.4.2 Stream Segment 5/Point of Evaluation Monitoring....2-66
2.5 Monitoring Objectives for Terminal Detention Pond Discharges and Water Leaving the Site....2-74
2.5.1 Predischarge Monitoring....2-74
2.5.2 Stream Segment 4/Point of Compliance Monitoring....2-78
2.5.3 Non-POC Monitoring at Indiana Street....2-84
2.6 Off-Site Monitoring Objectives: Community Water Supply Management....2-88
2.6.1 Monitoring Uncharacterized Discharges....2-89
2.6.2 Community Assurance Monitoring....2-92
2.7 Watershed Integration....2-95
2.8 References....2-98

Appendix A: Additional Tables

3.0 GROUNDWATER MONITORING....3-1

3.1 Introduction....3-1
3.1.1 Purpose of the Integrated Monitoring Plan for Groundwater....3-1
3.1.2 Brief History of Groundwater Monitoring Activities....3-1
3.1.3 Current Status of the Groundwater Program....3-3
3.2 Groundwater Program Objectives....3-3
3.3 Monitoring Objectives....3-5
3.3.1 Identification of Potential Contaminants....3-6
3.3.2 Identification and Control of Contaminant Sources....3-6
3.3.2.1 Current Contaminated Areas....3-8
3.3.2.2 Hazardous Waste Management Areas....3-8
3.3.2.3 Storage Tanks....3-9
3.3.2.4 Process Waste System....3-9
3.3.2.5 Building Drains....3-9
3.3.2.6 Other Potential Contamination Sources....3-10
3.3.3 Identification of Potential Contaminant Pathways....3-10
3.3.4 Identification of Contaminant Concentrations....3-10
3.3.5 Monitoring of Remedial Actions....3-10
3.3.6 Protection from New Contaminant Sources....3-12
3.3.7 Evaluation of Groundwater Contaminant Impacts on Surface Water....3-12
3.4 Groundwater Data Quality Objectives....3-13
3.4.1 Programmatic Data Quality Objectives....3-13
3.4.2 Data Quality Objectives for Program Elements....3-13
3.4.2.1 Plume Definition Wells....3-15
3.4.2.2 Plume Extent Monitoring Wells....3-18
3.4.2.3 Drainage Monitoring Wells....3-21
3.4.2.4 Boundary Monitoring Wells....3-24
3.4.2.5 Building-Specific D&D Monitoring Wells....3-27

3.4.2.6 Performance Monitoring Wells 3-29
3.4.2.7 RCRA Monitoring Wells 3-31
3.4.2.8 Plume Degradation Monitoring Wells 3-32
3.4.3 Data Quality Objectives for Monitoring Groundwater Flow 3-37
3.4.3.1 Site-Wide Flow Monitoring 3-37
3.4.3.2 Water Quality Flow Monitoring 3-39
3.4.3.3 Industrial Area Flow Monitoring 3-41
3.4.3.4 Background Groundwater Flow Monitoring 3-44
3.4.4 Monitoring Frequencies to Meet DQOs 3-45
3.4.4.1 Aseptic Monitoring of Select Wells Containing Actinides 3-45
3.4.4.2 East Industrial Area VOC Plume Evaluation 3-46
3.4.4.3 ICP/MS Uranium Sampling Project 3-46
3.4.4.4 Natural Attenuation of the PU&D Yard VOC Plume 3-46
3.5 Quality Control Objectives for Collection/Evaluation of Groundwater Data 3-46
3.5.1 Field Data Collection 3-47
3.5.2 Data Management 3-48
3.5.3 Groundwater Assessment and Reporting 3-48
3.6 Description of the Groundwater Monitoring Program Resulting from the DQO Process 3-49
3.6.1 Groundwater Monitoring Network 3-50
3.6.2 Sampling and Analysis 3-51
3.6.3 Measurement of Groundwater Elevations 3-52
3.6.4 Groundwater Reporting 3-53
3.6.4.1 Annual Report 3-53
3.6.4.2 RFCA Quarterly Reporting 3-55
3.6.5 Evaluation of Groundwater Impacts to Surface Water 3-56
3.6.5.1 General Strategy for Groundwater Plume Management and Remediation 3-56
3.6.5.2 General Strategy for Performance/D&D Monitoring 3-58
3.6.6 Groundwater Flow Modeling 3-63
3.6.7 Well Control Program 3-63
3.6.8 Well Abandonment and Replacement 3-64
3.7 References 3-65

APPENDICES:
Appendix A: Site Description and Environmental History A-1
Appendix B: Action Level Framework for Groundwater B-1
Appendix C: Physical and Hydrologic Setting C-1
Appendix D: Site Impacts to Groundwater D-1
Appendix E: Water Quality and Water Level Monitoring Wells E-1

4.0 AIR MONITORING 4-1

4.1 Introduction 4-1
4.1.1 Air Monitoring Objectives and Regulatory Drivers 4-1

4.1.2 Site Air Monitoring Scope 4-3
4.1.2.1 Ambient Monitoring 4-3
4.1.2.2 Effluent Monitoring 4-4
4.1.2.3 Meteorological Monitoring 4-5
4.2 Rad NESHAP Compliance Monitoring 4-5
4.2.1 Ambient Rad-NESHAP Compliance Monitoring 4-5
4.2.2 Effluent Compliance Monitoring 4-7
4.3 Meteorological Monitoring 4-9
4.3.1 Data Use for Rad NESHAP 4-9
4.3.2 Data Use for Emergency Preparedness 4-9
4.3.3 Data Use for Other Compliance Modeling 4-10
4.3.4 Meteorological Monitoring Specifications 4-10
4.4 CDPHE Air Monitoring 4-11
4.4.1 Air Pollution Control Division (APCD) Non-Radiological Ambient Air Quality Monitoring 4-11
4.4.1.1 Ambient Nitrogen Dioxide (NO_2) and Particulate Monitoring 4-11
4.4.1.2 Beryllium Monitoring 4-12
4.4.2 Laboratory and Radiation Services Division (LARS) Radiological Ambient Air Quality Monitoring 4-13
4.4.2.1 Radiological Ambient Air Quality Monitoring 4-14
4.4.2.2 Precipitation Sampling 4-16
4.4.2.3 Particulate Size Distribution Monitoring 4-17
4.5 Special Project Monitoring 4-19
4.7 References 4-21

5.0 ECOLOGICAL MONITORING 5-1

5.1 Introduction 5-1
5.2 Ecological Conservation and Management Goals and Objectives 5-1
5.2.1 Goals 5-1
5.2.2 Objectives 5-3
5.3 Descriptions of Vegetation Communities and the Preble's Meadow Jumping Mouse Populations 5-3
5.3.1 Xeric Tallgrass Prairie 5-3
5.3.2 Mesic Mixed Grassland 5-4
5.3.3 High Quality Wetlands (Rock Creek and Antelope Springs/Apple Orchard Springs Complexes) 5-4
5.3.4 Tall Upland Shrubland 5-5
5.3.5 Great Plains Riparian Woodland Complex 5-5
5.3.6 Aquatic Community 5-6
5.3.7 Preble's Meadow Jumping Mouse Populations 5-7
5.4 Monitoring DQOs by Vegetation Community 5-7
5.4.1 Xeric Tallgrass Prairie Vegetation Community 5-8
5.4.2 Tall Upland Shrubland Community 5-10

5.4.3 Great Plains Riparian Woodland Complex 5-11
5.4.4 High Quality Wetlands 5-13
5.4.5 Mesic Mixed Grassland Vegetation Community 5-15
5.4.6 Aquatic Community 5-16
5.5 Design for Integrated Ecological Monitoring 5-16
5.5.1 Decision Errors 5-16
5.5.2 Statement of Need 5-17
5.5.3 Monitoring Design 5-17
5.5.3.1 Vegetation Communities 5-19
5.5.3.2 Preble's Meadow Jumping Mouse 5-20
5.5.3.3 Mammals and Birds 5-21
5.6 Regulatory Compliance Monitoring DQOs 5-21
5.6.1 Threatened, Endangered, and Special-Concern Species 5-22
5.6.2 Migratory Birds 5-23
5.6.3 Wetlands 5-24
5.7 References 5-26

6.0 SOIL MONITORING 6-1

6.1 Introduction 6-1
6.1.1 Contaminant History 6-1
6.1.2 Existing Soil Contaminant Information 6-1
6.2 Site-Wide Soil Monitoring 6-2
6.3 Project-Specific Soil Characterization Sampling 6-3
6.4 Source Identification Sampling 6-3
6.5 Outstanding Issues—Actinide Migration Study 6-4
6.6 References 6-5

7.0 INTERACTIONS BETWEEN MEDIA 7-1

7.1 Overview 7-1
7.2 Water and Ecological Health 7-4
7.3 Reference 7-7

List of Figures

Page

2-1 Conceptual Sketch Major Site Surface Water Features 2-2

2-2 Conceptual Model of Site Monitoring Objectives 2-3

2-3 Sketch of Stream Segments 4a, 4b, and 5 2-6

2-4 Surface Water Performance Monitoring Decision Process 2-51

2-5 Surface Water Performance Monitoring Decision Process 2-51

2-6 Surface Water Performance Monitoring Template 2-53

3-1 Detention Ponds, Ditches, Effluent Water Courses, and Creeks at the Site 3-4

3-2 Groundwater Organization 3-7

6-1 Example Soil Isopleth Map - PU-239/240 Concentrations of Surface Soil Samples

List of Plates

Plate 1 Location Map of Groundwater Monitoring Wells

Plate 2 Potentiometric Surface Map for Groundwater

Plate 3 Composite Plume Map for Groundwater

List of Tables

Page

2-1 Monitoring Requirements (Number of Samples/Analyses) for Safe Operation of Dams. 2-17

2-2 Estimated FY01 Number of Samples and Parameter Collection Frequency for Source Location Monitoring. 2-20

2-3 Automated Synoptic Surface Water Sampling Locations 2-21

2-4 FY00 *Ad Hoc* Monitoring Locations. 2-23

2-5 Annual Monitoring Targets (Number of Samples/Analyses) to Evaluate the Relationship of Plutonium with Indicator Parameters. 2-33

2-6 Incidental Waters Screening. 2-36

2-7 Estimated Field Test Monitoring Targets (Number of Samples/Analyses) for Incidental Waters. 2-38

2-8 Internal Waste Stream Screening Tests. 2-44

2-9 Requests for Authorization to Discharge. 2-44

2-10 FY00 Performance Monitoring Locations. 2-58

2-11 Screening for New Source Detection AoIs vs. Indicator Parameters. 2-63

2-12 Monitoring Requirements for New Source Detection. 2-65

2-13 Decision Error Types and Consequences in Segment 5 . 2-68

2-14 Proposed Decision Error Limit Design Constraints for Segment 5 Monitoring. 2-69

2-15 Monitoring Targets for Segment 5 POEs. 2-71

2-16a Estimated Minimum Segment 5 Action Level Monitoring Requirements for POE GS10, SW093, and SW027. 2-73

2-16b Analytical Targets for 995 POE. 2-73

2-17a Pre-discharge Monitoring Targets. 2-77

2-17b Pre-discharge Monitoring Targets (Number of Samples/Analyses). 2-77

2-18 POC Monitoring Station Designators for Segment 4. 2-81

2-19 Decision Error Types and Consequences in Segment 4. 2-82

2-20 POC Monitoring Targets for Segment 4 POCs. 2-84

2-21 Non-POC Monitoring Requirements at Indiana Street. 2-87

2-22 Off-Normal Discharge Monitoring Inputs..... 2-90

2-23 Monitoring Targets for Community Assurance Monitoring. 2-95

2-24 Anticipated Monitoring Requirements for Watershed Integration..... 2-97

3-1 Checklist for Determination of Biodegradation 3-34

4-1 Detection Limits (MDA) for Ambient Air Samples 4-7

4-2 Detection Limits (MDA) for Effluent Air Sampler..... 4-9

4-3 Detection Limits for CDPHE Air Samples 4-15

5-1 Conservation and Management Goals..... 5-2

5-2 Decision Errors and Their Consequences 5-17

5-3 Parameters to be Measured vs. Vegetation Community 5-19

7-1 Interactions Between Media, Significance at RFETS, and Monitoring to Evaluate Interactions 7-1

7-2 Buffer Zone Flow Monitoring Stations 7-5

List of Acronyms, Abbreviations, and Measurements

µ	Micro-
µCi	Microcuries
µg	Microgram
µmho	Micromhos
AA	Atomic Absorption
Ag	Silver
ALARA	As Low as Reasonably Achievable
ALF	Action Levels and Standards Framework
Am	Americium
AoI	Analyte of Interest
APCD	Air Pollution Control Division
APEN	Air Pollutant Emission Notice
AQM	Air Quality Management
As	Arsenic
ASI	Advanced Sciences, Inc.
Ba	Barium
Be	Beryllium
BMP	Best Management Practice
BOD	Biological Oxygen Demand
C	Celsius
CAA	Clean Air Act

CAB	Citizens Advisory Board
CAPARS	Computer Assisted Protective Action Recommendations System
CAQCC	Colorado Air Quality Control Commission
CAS	Chemical Abstracts Service
CBOD	Carbonaceous Biological Oxygen Demand
CCR	*Code of Colorado Regulations*
Cd	Cadmium
CDPHE	Colorado Department of Public Health and Environment
CEARP	Comprehensive Environmental Assessment and Response Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cf	Cubic Foot
CFR	*Code of Federal Regulations*
cfs	Cubic Feet Per Second
Ci	Curie(s)
CLP	Contract Laboratory Program
cm	Centimeter
cm^2	Square Centimeter
cm^3	Cubic Centimeter
Co.	County
COD	Chemical Oxygen Demand
ComRad	Community Radiation
Cr	Chromium
CRS	*Colorado Revised Statutes*

Cu	Copper
CWA	Clean Water Act
CWQCC	Colorado Water Quality Control Commission
CY	Calendar Year
D&D	Decontamination and Decommissioning
DEFT	Decision Error Feasibility Trial
DIS	Drain Identification Study
DMR	Discharge Monitoring Report
DNAPL	Dense Nonaqueous Phase Liquid
DOE	Department of Energy
DQO	Data Quality Objective
ECO	Environmental Compliance and Operations
EDE	Effective Dose Equivalent
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
F	Fahrenheit
ft	Feet
ft^3	Cubic Foot
Fe	Iron
FERC	Federal Energy Regulatory Commission
FFCA	Federal Facility Compliance Agreement
FID	Flame Ionization Detector
FIP	Field Implementation Plan

FO	Field Operations
FY	Fiscal Year
g	Gram
gal	Gallon
GC/MS	Gas Chromatography/Mass Spectroscopy
GIS	Geographic Information System
GPMPP	*Groundwater Protection and Monitoring Program Plan*
GRRASP	General Radiochemistry and Routine Analytical Services Protocol
GT	Geotechnical
GW	Groundwater
GWAP	*Groundwater Assessment Plan*
H-3	Tritium
HEPA	High-Efficiency Particulate Air (filter)
Hg	Mercury
hr	Hour
HRR	Historic Release Report
HSL	Hazardous Substances List
HSU	Hydrostratigraphic Unit
IAG	Interagency Agreement
ICP	Inductively Coupled Plasma
ICRP	International Commission on Radiation Protection
IDLH	Imminent Danger to Life and Health
IHSS	Individual Hazardous Substance Site

IM/IRA	Interim Measures/Interim Remedial Actions
IMP	*Integrated Monitoring Plan*
ITS	Interceptor Trench System
IWS	Internal Waste Streams
Kaiser-Hill	Kaiser-Hill Company, L.L.C.
L	Liter
LARS	Laboratory and Radiation Services
LEL	Lower Explosive Limit
LHSU	Lower Hydrostratigraphic Unit
LTL	Lower Tolerance Level
m	Meter
m^3	Cubic Meters
MCL	Maximum Contaminant Level
MDA	Minimum Detectable Activity
mg	Milligram
Mgal	Thousand Gallons
min	Minute
ml	Milliliter
mm	Millimeter
Mn	Manganese
mrem	Millirem
msl	Mean Sea Level
N	Nitrogen

NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
Ni	Nickel
NO_2	Nitrogen Dioxide, Nitrite
NO_3	Nitrate
Non-PA	Non-Protected Area
NPDES	National Pollutant Discharge Elimination System
NSD	New Source Detection
NSQ	Non-Sufficient Quantity
NVSS	Nonvolatile Suspended Solids
OLF	Old Landfill
OP	Operating Procedure
OU	Operable Unit
P	Phosphorous
PA	Protected Area
PAC	Personnel Access Control
PAM	Proposed Action Memorandum
PARCC	Precision, Accuracy, Representativeness, Comparability, and Completeness
Pb	Lead
PCB	Polychlorinated Biphenyl
PCE	Perchloroethylene
PCOC	Potential Contaminants of Concern

pCi	Picocuries
PID	Photoionization Detector
PM_{10}	Particulate Matter (less than 10 micrometers)
PNNL	Pacific Northwest National Laboratory
POC	Point of Compliance
POE	Point of Evaluation
POps	Pond Operations Plan
POTW	Publicly Owned Treatment Works
ppm	Parts per Million
PPRG	Preliminary Programmatic Remediation Goal
PSL	Process Simulation Laboratory
Pu	Plutonium
PU&D	Property Utilization and Disposal
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QAPD	Quality Assurance Program Description
QAPP	Quality Assurance Program Plan
QC	Quality Control
QCO	Quality Control Objective
RAAMP	Radioactive Ambient Air Monitoring Program
Rad NESHAP	National Emissions Standards for Emissions of Radionuclides Other than Radon from DOE Facilities (40 CFR, 61, Subpart H)
RCRA	Resource Conservation and Recovery Act

RFCA	*Rocky Flats Cleanup Agreement*
RFETS	Rocky Flats Environmental Technology Site
RFFO	Rocky Flats Field Office
RI/FS	Remedial Investigation/Feasibility Study
RMRS	Rocky Mountain Remediation Services, L.L.C.
SAP	Sampling and Analysis Plan
SCMP	Site-Wide Commitments Management Program
Se	Selenium
sec	Second
SEP	Solar Evaporation Pond
SID	South Interceptor Ditch
Site	Rocky Flats Environmental Technology Site
SOP	Standard Operating Procedure
SPCC/BMP	Spill Prevention, Control, and Countermeasures/Best Management Practices
SSC	Species of Special Concern
SVOC	Semivolatile Organic Compound
SW	Surface Water
SWD	Site Soil and Water Database
SWMU	Solid Waste Management Unit
SWWG	Surface Water Working Group
TAL	Target Analyte List
T&E	Threatened and Endangered (Species)
TCA	Trichloroethane

TCE	Trichloroethylene
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
tpy	Tons Per Year
TRAC	Terrain Responsive Atmospheric Code
TSP	Total Suspended Particulates
TSS	Total Suspended Solids
U	Uranium
UHSU	Upper Hydrostratigraphic Unit
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UTL	Upper Tolerance Level
VOA	Volatile Organic Analysis
VOC	Volatile Organic Compound
WARP	Well Abandonment and Replacement Program
WER	Well Evaluation Report
WET	Whole Effluent Toxicity
WM&T	Water Management and Treatment
WWTP	Wastewater Treatment Plant
yr	Year
Zn	Zinc

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