



INEEL/EXT-99-00020

Revision 1

April 2001

**Test Area North Operable Unit 1-07B
Final Groundwater Remedial Action
Health and Safety Plan**

BECHTEL BWXT IDAHO , LLC

**INEEL/EXT-99-00020
Revision 1**

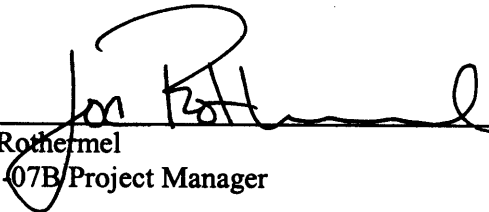
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**Prepared by Bechtel BWXT Idaho, LLC
for the
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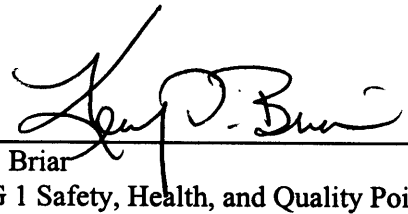
Test Area North Operable Unit 1-07B Final Groundwater Remedial Action Health and Safety Plan

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4/5/01
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WAG 1 Safety, Health, and Quality Point of Contact

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ABSTRACT

From 1955 to 1972, injection well TSF-05 at the Idaho National Engineering and Environmental Laboratory Test Area North facility was used for wastewater disposal. Tests from 1987 to 1990 and in 1992 and 1993 confirmed that TSF-05 is a source of trichloroethene, tetrachloroethene, and 1,2 dichloroethene contamination in the groundwater surrounding the injection well (the hot spot) and in a plume downgradient of the well. Other contaminants of concern (for example, strontium 90 and tritium) have also been detected.

To reduce risk to human health and to prevent future residents from ingesting contaminated water, the hot spot and the plume will be remediated by 2095, 100 years after the date of the Record of Decision signature, which was August 4, 1995. During the first phase of remediation, contaminated water from the hot spot was pumped, treated, and then reinjected into the Snake River Plain Aquifer. During the next remediation phases, hot spot, medial zone, and distal zone, remediation will continue.

The areas to be remediated are part of operable unit 1-07B. To eliminate or minimize health and safety risks to workers during remediation, the Occupational Safety and Health Administration requires a health and safety plan, and this plan fulfills that requirement.

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ACRONYMS AND ABBREVIATIONS

ACGIH	American Conference of Government Industrial Hygienists
AL	action level
ALARA	as low as reasonably achievable
ANSI	American National Standards Institute
APF	assigned protection factors
APR	air purifying respirator
ARDC	Administrative Record and Document Control
ASTU	Air Stripper Treatment Unit
BBWI	Bechtel BWXT Idaho, LLC
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CNS	central nervous system
COC	contaminant of concern
CPR	cardiopulmonary resuscitation
CRC	contamination reduction corridor
CRZ	contamination reduction zone
D&D&D	deactivation, decontamination and decommissioning
DAC	derived air concentration
dBA	decibel A-weighted
DCE	dichloroethene
DEQ	Department of Environmental Quality
DOE	U. S. Department of Energy
DOE-ID	DOE Idaho Operations Office

DOT	Department of Transportation
DQO	data quality objective
EA	exposure assessment
EAM	emergency action manager
EC	emergency coordinator
EDF	engineering design file
EPA	Environmental Protection Agency
ER	Environmental Restoration
ERO	Emergency Response Organization
ERPC	Environmental Restoration Program oordination
ES&H	environmental, safety, and health
ESH&Q	environmental, safety, health, and quality
ESH&QA	environmental, safety, health, and quality assurance
EWP	Enhanced Work Planning
EZ	exclusion zone
FCC	field construction coordinator
FEWP	field evaluation work plan
FFA/CO	Federal Facility Agreement/Consent Order
FSP	field sampling plan
FTL	field team leader
FY	fiscal year
GWTF	Groundwater Treatment Facility
HASP	health and safety plan
HASS	Hazards Assessment and Sampling System
HAZMAT	hazardous material
HAZWOPER	Hazardous Waste Operations and Emergency Response

HEPA	high-efficiency particulate air
HSO	health and safety officer
ICS	Incident Command System
IDC	internal dosimetry coordinator
IDLH	immediately dangerous to life or health
IEDMS	Integrated Environmental Data Management System
IH	industrial hygienist
INEEL	Idaho National Engineering and Environmental Laboratory
IRT	Incident Response Team
ISB	in situ bioremediation
ISCO	in situ chemical oxidation
ISMS	Integrated Safety Management System
IWCP	Integrated Work Control Process
JSA	job safety analysis
JSS	job site supervisor
LLW	low-level waste
MCL	maximum contaminant level
MCP	management control procedure
MDA	minimum detectable activity
MNA	monitored natural attenuation
MSDS	material safety data sheet
NA	natural attenuation
NEPA	National Environmental Policy Act
NGWTF	New Groundwater Treatment Facility
NIOSH	National Institute of Occupational Safety and Health

NPTF	New Pump and Treat Facility
OMP	Occupational Medical Program
OSC	on-scene commander
OSHA	Occupational Safety and Health Administration
OU	operable unit
PAL	personnel accountability leader
PCE	tetrachloroethene
PE	project engineer
PEL	permissible exposure limit
PM	project manager
POC	point of contact
POD	plan of the day
PPE	personal protective equipment
ppm	parts per million
PRD	program requirements document
PVA	polyvinyl alcohol
QA	quality assurance
QAPjP	quality assurance project plan
RA	remedial action
RADCON	Radiation Control
RAO	remedial action objective
RBA	Radiological Buffer Area
RCE	radiological control engineer
RCO	radiological control organization
RCRA	Resource Conservation and Recovery Act
RCT	radiological control technician

RD	remedial design
RD/RA	remedial design/remedial action
RE	radiological engineer
REL	recommended exposure limit
ROD	Record of Decision
RW	radiological worker
RWP	radiological work permit
SAD	site area director
SAP	sample and analysis plan
SH&Q	safety, health, and quality
SH&QA	safety, health, and quality assurance
SMO	sample management office
SOP	standard operating procedure
SP	safety professional
SRPA	Snake River Plain Aquifer
SS	shift supervisor
SSC	systems, structures, or components
STEL	short-term exposure limit
SWP	safe work permit
SWPPT	single-well push-pull test
SZ	support zone
TAA	temporary accumulation area
TAN	Test Area North
TCE	trichloroethene
TLV	threshold-limit value
TPR	technical procedure

TRAIN	Training, Reporting, and Information Network
TRU	transuranic
TSB	Technical Support Building
TSF	Technical Support Facility
TWA	time-weighted average
USCG	United States Coast Guard
VOC	volatile organic compound
VPP	Voluntary Protection Program
WAG	waste area group
WCC	Warning Communications Center