



Milltown Reservoir Sediments Operable Unit

of the Milltown Reservoir/Clark Fork River Superfund Site

Record of Decision

Part 4: Acronyms and Abbreviations, and References



U.S. Environmental Protection Agency Region 8

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Acronyms and Abbreviations

ARAR	Applicable or Relevant and Appropriate Requirements for cleanup, such as regulatory requirements
ATSDR	Agency for Toxic Substances and Disease Registry
BMPs	Best Management Practices
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act; also known as the Federal Superfund law
CFRTAC	Clark Fork River Technical Assistance Committee
CFR	Code of Federal Regulations
cfs	cubic feet per second
CSKT	Confederated Salish and Kootenai Tribes
CT	community type
cy	cubic yards
DCRP	Draft Conceptual Restoration Plan
DEQ	Montana Department of Environmental Quality
DOI	U.S. Department of the Interior
DQO	Data Quality Objective
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
EQIP	Environmental Quality Incentives Program
FAWQC	Federal Ambient Water Quality Criteria
FDWR	Federal Drinking Water Standards
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FWP	Montana Fish, Wildlife, and Parks
I-90	Interstate 90
IC	Institutional Control

IRD	inflatable rubber dam
MCA	Montana Code Annotated
MCCHD	Missoula City/County Health Department
MCL	Maximum Concentration Level
MCLG	Maximum Contaminant Level Goal
mcy	million cubic yards
MDHES	Montana Department of Health and Environmental Science
MEAC	Milltown Endangerment Assessment Committee public group
MESS	Milltown EPA Superfund Site public group
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MRSOU	Milltown Reservoir Sediments Operable Unit
MTAC	Milltown Technical Advisory Committee
MWUA	Montana Water Users Association
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPL	National Priorities List; the Superfund list of sites
NPV	net present value
NRDP	Natural Resource Damages Program
OU	operable unit
PCB	Polychlorinated biphenyl
PDF	portable document format (Acrobat Reader)
ppb	parts per billion
ppm	parts per million
RAO	Remedial Action Objective
RG	Remedial Goal
RAO	Remedial Action Objective
RI/FS	Remedial Investigation/Feasibility Study

RP	Responsible Party
SAA	sediment accumulation area
SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control, and Countermeasures
TAG	Technical Assistance Grant
TCRA	Time Critical Removal Action
TMDL	Total Maximum Daily Load
TRV	toxicity reference values
TSS	total suspended solids
µg/l	micrograms per liter
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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References

- Atlantic Richfield Company. 2004a. *Milltown Reservoir Dry Removal Scour Evaluation – Final Technical Memorandum*. Prepared by Envirocon and EMC2. Bozeman, Montana. May 2004.
- _____. 2004b. *Milltown Reservoir Dry Removal Scour Evaluation – Addendum 1*. Prepared by Environcon and EMC2 for the Atlantic Richfield Company. Bozeman, Montana. October 2004.
- _____. 2002a. *December 2001 Groundwater Monitoring Event, Data Summary Report, Milltown Reservoir Operable Unit*. Prepared by Land & Water Consulting, Inc.
- _____. 2002b. Milltown Reservoir Cost Group meeting Handouts. April 5, 2002.
- _____. 2002c. *Combined Feasibility Study*. Prepared by EMC2. 2002.
- _____. 2001a. *December 2000 Groundwater Monitoring Event, Data Summary Report, Milltown Reservoir Operable Unit*. Prepared by Land & Water Consulting, Inc.
- _____. 2001b. *June 2001 Groundwater Monitoring Event, Data Summary Report, Milltown Reservoir Operable Unit*. Prepared by Land & Water Consulting, Inc.
- _____. 2001c. *Milltown Reservoir Sediments Site Draft Combined Feasibility Study*. Prepared by EMC2, Bozeman, Montana.
- _____. 2000a. *December 1999 Groundwater Monitoring Event, Data Summary Report, Milltown Reservoir Operable Unit*. Prepared by Land & Water Consulting, Inc.
- _____. 2000b. *Milltown Reservoir Sediments Site Draft Focused Feasibility Study*. Prepared by EMC2, Bozeman, Montana.
- _____. 1999a. *Groundwater Quality Statistical Analysis, Milltown Reservoir Superfund Site*. Prepared by Land & Water Consulting, Inc.
- _____. 1999b. *June 1999 Groundwater Monitoring Event, Data Summary Report, Milltown Reservoir Operable Unit*. Prepared by Land & Water Consulting, Inc.
- _____. 1998. *Clark Fork River and Milltown Reservoir Channel Cross Section Surveys, 1997*. Prepared by Land and Water Consulting, Inc., Missoula, Montana.
- _____. 1996. *Milltown Reservoir Sediments NPL Site: Milltown Reservoir Operable Unit—Feasibility Study Report*. Prepared by Pioneer Technical Services, Inc.: Butte, Montana.
- _____. 1995. *Milltown Reservoir Sediments Operable Unit—Final Remedial Investigation Report*. Prepared by Titan Environmental Corporation: Bozeman, Montana.
- CH2M HILL. 2004a. *Biological Assessment Bull Trout, Biological Assessment of the Milltown Reservoir Sediments Operable Unit Revised Proposed Plan and Surrender Application for*

- the Milltown Hydroelectric Project (FERC No.2543)*. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho. August 2004.
- _____. 2004b. *Biological Assessment Bald Eagle, Grizzly Bear, Gray Wolf, Canada Lynx, Yellow-Billed Cuckoo, and Water Howallia – Biological Assessment of the Milltown Reservoir Sediments Operable Unit Revised Proposed Plan and of the Surrender Application for the Milltown Hydroelectric Project (FERC No. 2543)*. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho. October 2004.
- _____. 2003. Draft Analysis of Groundwater and Bank Storage Inflow on Water Quality in the Clark Fork River at the Milltown Reservoir Sediments Operable Unit, Technical Memorandum. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho. June 2003.
- _____. 2002. Acid-Base-Potential (ABP) for Area I Milltown Reservoir and Clark Fork Channel Sediments. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho. December 2004.
- Lambing, John H. 1998. *Estimated 1996-1997 and Long-Term Average Annual Load for Suspended Sediment and Selected Trace Metals in Streamflow of the Upper Clark Fork Basin from Warm Springs to Missoula, Montana*. U.S. Geological Survey Water Resources Investigations Report 98-4137.
- Missoula Board of County Commissioners. 1998. *Missoula Urban Comprehensive Plan 1998 Update*. Missoula Consolidated Planning Board. Missoula, Montana.
- Schroeder, P. 2001. Estimation of Contaminant Release from the Dredging of Clark Fork and Blackfoot River Sediments in Area 1 of Milltown Reservoir. Technical Memorandum. U.S. Army Engineer Research and Development Center Water Map Experimental Station. Vicksburg, MS. December 2001.
- Smith, J. D., J. H. Lambing, D. A. Nimick, C. Paret, M. Ramey, and W. Schafer. 1998. *Geomorphology, Flood-Plain Tailings, and Metal Transport in the Upper Clark Fork Valley, Montana*. U.S. Geological Survey Water-Resources Investigation Report 98-4170.
- Stratus. 2002. Reduced Growth of Rainbow Trout Fed a Live Invertebrate Diet Pre-Exposed to Metal-Contaminated Sediments Collected from the Clark Fork River Basin, Montana. Prepared for Montana Natural Resource Damage Program.
- U.S. Environmental Protection Agency. *Superfund Program Revised Proposed Clean-Up Plan: Milltown Reservoir Sediments Operable Unit of the Milltown Reservoir/Clark Fork River Superfund Site (Revised Proposed Plan)*. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho. May 2004.
- _____. 2003. *Superfund Program Proposed Clean-Up Plan: Milltown Reservoir Sediments Operable Unit of the Milltown Reservoir/Clark Fork River Superfund Site (Original Proposed Plan)*. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho. April 2003.
- _____. 2000. *Ecological Baseline Risk Assessment Addendum*. Prepared by CH2M HILL for EPA Region 8. Boise, Idaho.

- _____. 1999. *Clark Fork River Ecological Risk Assessment*. Prepared by ISSI Consulting Group. Denver, Colorado.
- _____. 1993a. *Baseline Ecological Risk Assessment—Milltown Reservoir Operable Unit, Milltown Reservoir Superfund Site*. Prepared by Environmental Toxicology International for EPA Region 8. Seattle, Washington.
- _____. 1993b. *Baseline Human Health Risk Assessment—Milltown Reservoir Operable Unit, Milltown Reservoir Superfund Site*. Prepared by Environmental Toxicology International for EPA Region 8. Seattle, Washington.
- _____. 1993c. *Continuing Releases Risk Assessment Milltown Reservoir Operable Unit, Milltown Reservoir Superfund Site*. Prepared by Environmental Toxicology International for EPA Region 8. Seattle, Washington.
- U.S. Fish and Wildlife Service. 2004. Biological Opinion for threatened and endangered species: USEPA Superfund Program Revised Proposed Clean-up Plan for the Milltown Reservoir Sediments Operable Unit of the Milltown Reservoir/Clark Fork River Superfund Site. December 2004.
- _____. 1991a. Milltown Reservoir Sediments Site Endangerment Assessment Wetland Delineation and Classification, 23 pp.
- Water Consulting, Inc., and Dave Rosgen. 2004. *Amendment to Draft Conceptual Restoration Plan for the Clark Fork River and Blackfoot River near Milltown Dam (DCRP)*. Amended June 2004.
- _____. 2004. *Draft Conceptual Restoration Plan for the Clark Fork River and Blackfoot River near Milltown Dam (DCRP)*. February 2003.
- Woessner, W.W. and J.N. Moore. 1984. *Final Report: Arsenic Source and Water Supply Remedial Action Study, Milltown, Montana*. Prepared for the Solid Waste Bureau, Montana Department of Health and Environmental Sciences, Helena, Montana.