

Department of Resources, Center
Troy Mills Landfill
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EPA Superfund Explanation of Significant Differences

Troy Mills Landfill Superfund Site
EPA ID: NHD980520217
Troy, NH

March 2014



**DECLARATION FOR EXPLANATION OF SIGNIFICANT DIFFERENCES
TROY MILLS LANDFILL
MARCH 2014**

SITE NAME AND LOCATION

Troy Mills Landfill Superfund Site, Troy, New Hampshire

STATEMENT OF PURPOSE

This decision document sets forth the basis for the determination to issue the attached Explanation of Significant Differences (ESD) for the Troy Mills Landfill Superfund Site (the Site), in Troy, New Hampshire.

STATUTORY BASIS FOR ISSUANCE OF THE ESD

Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Section 9617(c), requires that, if the remedial action being undertaken at a site differs significantly from the Record of Decision (ROD) for that site, EPA shall publish an ESD and the reasons such changes were made. The National Contingency Plan (NCP), 40 C.F.R. § 300.435(c)(2)(i), and Office of Solid Waste and Emergency Response (OSWER) Directive 9355.3-02, indicate that an ESD, rather than a ROD amendment, is appropriate where the adjustments being made to the ROD are significant but do not fundamentally alter the remedy with respect to scope, performance, or cost. EPA has determined that the adjustments to the September 30, 2005, ROD provided in this ESD are significant but do not fundamentally alter the overall remedy for the Site, with respect to scope, performance, or cost. Therefore, this ESD is being properly issued.

In accordance with Section 300.825(a) (2) of the NCP, this ESD will become part of the Administrative Record for the Site and will be available for public review at both the EPA Region 1 Records Center in Boston, Massachusetts and the Gay Kimball Public Library in Troy, New Hampshire.

OVERVIEW OF THE ESD

This ESD documents the following additions and changes to the CERCLA remedy, as presented in the September 30, 2005, ROD:

1. This ESD documents changes in the New Hampshire Ambient Groundwater Quality Standards (NH AGQS) (Env-Or 603.03, Table 600-1) that have been implemented since the ROD for a number of the chemicals of concern at the Site. Specifically, the NH AGQS standards for benzo(b)fluoranthene, 2-butanone, 4-isopropyltoluene, dibenzo(a,h)anthracene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-butylbenzene and n-propylbenzene were all increased.

increased. Changing these standards is not expected to change the estimated period of time for groundwater cleanup standards to be met through Monitored Natural Attenuation (MNA), as described in the ROD. These changes are detailed in Table 1 of this ESD.

2. Since the ROD was issued, the State of New Hampshire has revised and renumbered its environmental regulations and several federal ARARs have changed. This ESD updates ARARs cited in the 2005 ROD both to include the revised State and federal standards and to identify additional standards that were not specifically identified in the ROD. The updated ARARs are included in Attachment 1. None of the revisions significantly changes the scope of the remedy.

This document formally incorporates these aforementioned measures into the CERCLA remedy. The State of New Hampshire has reviewed and commented on this ESD and concurs with its issuance.

DECLARATION

For the foregoing reasons, by my signature below, I approve the issuance of an Explanation of Significant Differences for the Troy Mills Landfill Superfund Site in Troy, New Hampshire, and the changes stated therein.

03/26/14

Date


James T. Owens III, Director
Office of Site Remediation and Restoration

U.S. EPA Region 1
Explanation of Significant Differences
Troy Mills Landfill
March 2014

Contents

I.	INTRODUCTION	1
A.	Site Name and Location.....	1
B.	Site Name: Troy Mills Landfill Superfund Site (the Site).....	1
C.	Lead and Support Agencies	1
D.	Legal Authority.....	1
E.	Summary of Circumstances Necessitating this Explanation of Significant Differences.	1
F.	Availability of Documents.....	2
II.	SUMMARY OF SITE HISTORY, CONTAMINATION PROBLEMS AND SELECTED REMEDY.....	3
A.	Site History and Contamination Problems.....	3
B.	Summary of the Selected Remedy.....	4
III.	DESCRIPTION OF SIGNIFICANT DIFFERENCES.....	6
A.	Modification of Interim Cleanup Levels	6
B.	Updating the ARARs	7
IV.	SUPPORT AGENCY COMMENTS.....	8
V.	STATUTORY DETERMINATION.....	8
VI.	PUBLIC INFORMATION	8

ATTACHMENTS:

Attachment 1 - Tables of Revised Applicable and Relevant and Appropriate Standards (ARARs)

**EXPLANATION OF SIGNIFICANT DIFFERENCES
TROY MILLS LANDFILL SUPERFUND SITE
TROY, NEW HAMPSHIRE**

I. INTRODUCTION

A. Site Name and Location

Site Name: Troy Mills Landfill Superfund Site (the Site)

Site Location: Town of Troy, Cheshire County, New Hampshire

B. Lead and Support Agencies

Lead Agency: United States Environmental Protection Agency (EPA)

Support Agency: New Hampshire Department of Environmental Services
(NHDES)

C. Legal Authority

Under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9617(c), 40 C.F.R. § 300.435(c) of the National Contingency Plan (NCP), and Office of Solid Waste and Emergency Response (OSWER) Directive 9355.3-02, if EPA determines that differences in the remedial action significantly change but do not fundamentally alter the remedy selected in the Record of Decision (ROD), dated September 30, 2005, for the Site with respect to scope, performance, or cost, EPA shall publish an Explanation of Significant Differences (ESD). The ESD shall explain the differences between the remedial action being undertaken and the remedial action set forth in the ROD and the reasons such changes are being made.

D. Summary of Circumstances Necessitating this Explanation of Significant Differences

Since issuance of the 2005 ROD, the applicable NHDES groundwater standards have changed for a number of the contaminants of concern identified in the ROD. The table below specifies the contaminants for which the standards have changed, the Interim Cleanup Level (ICL) for groundwater included in the ROD and its basis, and the new cleanup level to be applied to groundwater at the Site and its basis.

Table 1

Groundwater Chemical of Concern	ROD Interim Cleanup Level ug/L	ROD Basis	New Cleanup Level ug/L	New Basis
Benzo(b)fluoranthene	0.05	AGQS ¹	0.1	AGQS
Butanone, 2-	170	AGQS	4,000	AGQS
Isopropyltoluene, 4-	50	AGQS	260	AGQS
Dibenzo(a,h)anthracene	0.01	PQL ²	0.1	AGQS
Trimethylbenzene, 1,2,4-	50	AGQS	330	AGQS
Trimethylbenzene, 1,3,5-	50	AGQS	330	AGQS
Butylbenzene, n-	50	AGQS	260	AGQS
Propylbenzene, n-	50	AGQS	260	AGQS

Since the 2005 ROD was issued, the State of New Hampshire has revised and renumbered its environmental regulations and a number of federal standards have changed. This ESD updates ARARs cited in the 2005 ROD both to include the revised State and Federal standards and to identify additional standards that were not specifically identified in the ROD. The updated ARARs are included in Attachment 1. None of the revisions significantly changes the scope of the remedy.

This ESD will serve as the CERCLA decision document to record the following changes to the remedy that do not fundamentally deviate in terms of scope, performance or cost, from the remedy described in the 2005 ROD:

1. Updating the Interim Groundwater Cleanup Levels included in the ROD for a number of chemicals of concern for which the NH AGQS values have been changed.
2. Updating the ARARs included in the ROD to include revised State and Federal standards.

E. Updating the ARARs included in the ROD to include revised State and Federal standards. Availability of Documents

This ESD and supporting documentation shall become part of the Administrative Record for the Site. The ESD, supporting documentation for the ESD, and the Administrative Record are available to the public at the following locations and may be reviewed at the times listed below.

¹ Ambient Groundwater Quality Standard

² Practical Quantification Limit

U.S. Environmental Protection Agency Records Center
5 Post Office Square, Suite 100 (OSRR02-3)100
Boston, MA 02109-3912
Telephone: (617) 918-1440
Fax: (617) 918-1223
E-mail (rl.records-osrr@epa.gov)

Open Monday through Thursday from 9:30 AM – 3:30 PM, excluding federal holidays.

Gay Kimball Public Library
10 South Main Street
Troy, NH 03465
Phone: (603) 242-7743
Email: library@troylibrary.us

Tuesday 10:30 am to 7:30 pm
Wednesday & Thursday 1:30 pm to 7:30 pm
Saturday 10 am to 3 pm

II. SUMMARY OF SITE HISTORY, CONTAMINATION PROBLEMS AND SELECTED REMEDY

A. Site History and Contamination Problems

The Troy Mills Landfill Superfund Site (the Site) is a two-acre former drum disposal area located approximately 1.5 miles south of the center of Troy, New Hampshire. The two-acre Site is located in the southeastern corner of a larger 270-acre parcel. The Site was used by Troy Mills, Inc. to dispose of drums of hazardous substances that were generated at its manufacturing facility in the center of town. Immediately to the north of the Site is a separate eight-acre solid waste landfill, regulated by the NHDES, which was used for the disposal of waste fabric scraps and other miscellaneous solid waste. The solid waste landfill is not considered part of the Site.

From 1967 to 1978, Troy Mills, Inc., a manufacturer of acrylic fabrics for the automotive industry, disposed of an estimated 6,000 to 10,000 55-gallon drums of waste liquid and sludge containing mostly plasticizers such as bis(2-ethylhexyl)phthalate (BEHP) and a petroleum-based solvent known as Varsol™ (which contained Stoddard solvent and mineral spirits). The drums were buried at the Site and covered with clean sand from a nearby sand quarry. Other drummed wastes included pigments (containing metals such as zinc, chromium, and cadmium), surplus mixes and tank residues of vinyl resins; paint resins, and top-coating products. An average of 15 to 20 drums per week were dumped from trucks into trenches and compacted under the weight of heavy equipment.

From 1979 to the present, numerous investigations related to the Site have been conducted. Most of these investigations were performed by Troy Mills, Inc. under State of New Hampshire authority. Environmental investigations conducted throughout the

1980s documented the presence of contamination at the Site emanating from the release of hazardous wastes from the buried drums. Risk assessments completed in 1991 determined that VOCs in groundwater posed a then current risk to human health. In 2000, several months after NHDES approval of a modified containment remedy with provision for removal and treatment of contained contamination, Troy Mills, Inc. requested that NHDES defer remediation of the former drum disposal area due to unfavorable corporate and financial market conditions. The deferral was subsequently approved by NHDES. Troy Mills, Inc. filed for Chapter 11 bankruptcy in 2001.

Following the Troy Mills, Inc. bankruptcy filing, NHDES referred the Site to the EPA Region 1 Emergency Planning and Response Branch in 2001 to have the Site evaluated for a removal action. At the same time, EPA began evaluating the Site for listing on the Superfund National Priorities List (NPL). In September 2003, the Site was listed on the NPL and a time-critical removal action was initiated. The first phase of the removal action included the installation of three light, non-aqueous phase liquid (LNAPL) interceptor trenches to capture free product floating on the groundwater. The second phase of the removal action, which was initiated in July 2004, involved the excavation of 7,692 buried drums, the removal of 29,924 gallons of flammable liquid waste and 3,099 cubic yards of sludge, and the excavation of 26,244 tons of heavily contaminated soil which were all transported off-Site for disposal at permitted facilities. In the spring and summer of 2005, EPA completed its time-critical removal action with the construction of a two-foot thick permeable soil cap over the excavation area to prevent direct contact risks to underlying residual contaminated soils.

In 2005, subsequent to the removal actions within the drum disposal area, EPA completed a Remedial Investigation (RI) at the Site. The baseline human health risk assessment completed as part of the RI indicated that future recreational users and near-Site residents potentially exposed to residual contaminants of concern (COCs) in groundwater, LNAPL-contaminated leachate, and wetland soil via ingestion or direct contact may present an unacceptable human health risk (e.g., cancer risk exceeding 1E-04 and non-cancer hazard index exceeding 1.0).

In 2005 EPA issued a ROD for the Site. The selected remedy specified in the ROD included both source control and management of migration components to obtain a comprehensive remedy. The selected remedy incorporated components of the time-critical removal action and additional remedial activities to address unacceptable levels of risk posed by Site COCs.

B. Summary of the Selected Remedy

The remedial action objectives, as stated in the ROD, were to:

- Utilize Monitored Natural Attenuation (MNA) which allows naturally occurring processes to reduce contaminant concentrations in groundwater to achieve groundwater cleanup levels;

- Remove all potential floating free product, LNAPL, before it can reach the nearby wetlands in a series of existing LNAPL interceptor trenches constructed by EPA in 2003;
- Maintain a two-foot thick permeable soil cap constructed by EPA in 2005 to prevent potential contact with residual contaminated soil in the former drum disposal area. The permeable cap allows precipitation to infiltrate through and facilitate the cleanup of groundwater;
- Establish institutional controls that restrict the use of contaminated groundwater for drinking water purposes until restoration to drinking water standards is achieved; restrict activities that would disturb the permeable soil cap, prevent the disturbance of all remedy components until they are no longer needed, and require notification of any changes in the use of the land; and
- Implement a comprehensive monitoring and sampling program to evaluate groundwater, surface water, sediment, leachate, and wetlands to ensure that natural attenuation processes are continuing as expected.

The source control remedial components of the selected remedy included:

- Removing all potential floating free product, LNAPL, before it can reach the nearby wetlands in the series of existing LNAPL interceptor trenches until LNAPL levels dissipate³; and
- Maintaining the 2-foot-thick permeable soil cap constructed by EPA in 2005 to prevent potential contact with residual contaminated soil in the former drum disposal area. The permeable cap also allows precipitation to infiltrate through the cap and facilitate the cleanup of groundwater.

The management of migration remedial component of the selected remedy included:

- Monitored natural attenuation (MNA) of contaminated groundwater until groundwater cleanup levels are met in approximately 30 years. Implementation of institutional controls, including the establishment of a State of New Hampshire groundwater management zone (GMZ), under applicable standards, and water use deed restrictions to prevent exposure to contaminated groundwater until groundwater has been restored to drinking water standards.

³ As anticipated in the 2005 ROD, the LNAPL interceptor trenches were decommissioned in 2013 after it was determined that measurable levels of LNAPL were no longer accumulating within the interceptor trenches over an extended period of time, and that the LNAPL interceptor trenches were not going to be kept available for continued monitoring as part of the groundwater component of the remedy.

Additional remedial components of the selected remedy included:

- Establishing Institutional Controls (ICs) that restrict the use of contaminated groundwater for drinking water purposes until groundwater cleanup levels are achieved, restrict activities that would disturb the cap, prevent the disturbance of remedy components until they are no longer needed, and require notification of any changes in the use of the land;
- Implementing a comprehensive monitoring and sampling program to evaluate groundwater, surface water, leachate, sediment, and wetlands soil to ensure that natural attenuation processes are continuing as expected; and
- Since hazardous substances will remain at the Site, review of the remedy at least once every five years after the initiation of remedial action at the Site, as required by law.

The ROD-specified Contaminant of Concern (COC) for leachate is bis (2-ethylhexyl) phthalate.

The ROD-specified COC for wetland soil is Manganese.

The ROD-specified COCs for groundwater included:

Trimethylbenzene, 1,2,4-
Trimethylbenzene, 1,3,5-
1,4-Dioxane
2-Butanone
4-Isopropyltoluene
Benzene
cis-1,2-Dichloroethene
n-Butylbenzene
n-Propylbenzene
Tetrachloroethene
Tetrahydrofuran
Toluene

Trichloroethene
Vinyl Chloride
Benzo(a)pyrene
Benzo(b)fluoranthene
Bis (2-ethylhexyl) phthalate
Dibenzo(a,h)anthracene
Naphthalene
Pentachlorophenol
Arsenic
Boron
Manganese

III. DESCRIPTION OF SIGNIFICANT DIFFERENCES

A. Modification of Interim Cleanup Levels

The ESD includes a modification of interim cleanup levels for select contaminants of concern for which the applicable regulatory standards have been changed.

Since issuance of the ROD, the applicable NHDES groundwater standards have changed for a number of the contaminants of concern identified in the ROD. The table below specifies the contaminants for which the standards have changed, the ICL for groundwater included in the ROD and its basis, and the new cleanup level to be applied to groundwater at the site and its basis. Although the change in the standards for some of the ICLs may result in less time needed to meet the cleanup levels for those constituents, no modeling effort has been undertaken to predict what the change in time may be, if any. Additionally, some of the ROD ICLs remain unchanged. The ROD estimated a period of 30 years to achieve ICLs.-

Chemical of Concern	ROD Interim Cleanup Level ug/L	ROD Basis	New Cleanup Level ug/L	New Basis
Benzo(b)fluoranthene	0.05	AGQS ⁴	0.1	AGQS
Butanone, 2-	170	AGQS	4,000	AGQS
Isopropyltoluene, 4-	50	AGQS	260	AGQS
Dibenzo(a,h)anthracene	0.01	PQL ⁵	0.1	AGQS
Trimethylbenzene, 1,2,4-	50	AGQS	330	AGQS
Trimethylbenzene, 1,3,5-	50	AGQS	330	AGQS
Butylbenzene, n-	50	AGQS	260	AGQS
Propylbenzene, n-	50	AGQS	260	AGQS

B. Updating the ARARs

The ESD updates the ARARs cited in the 2005 ROD both to include the revised State and Federal standards and to identify additional standards that were not specifically identified in the 2005 ROD (Attachment 1).

Since the 2005 ROD, the State of New Hampshire has revised and renumbered its environmental regulations pertaining to surface water and groundwater. The State of New Hampshire has also promulgated new surface water and groundwater quality standards. This ESD updates ARARs cited in the 2005 ROD both to include the revised State environmental regulations and the new State surface water and groundwater quality standards.

It also includes the addition of some federal statutes and/or regulations as ARARs in order to: 1) ensure that planning and decision-making incorporate fish and wildlife protection considerations in consultation with the resource agencies (U.S Fish and Wildlife and NH Fish and Game Department); 2) add wetlands and flood regulations to replace others that no longer exist; 3) add storm-water standards to be met in case nearby

⁴ Ambient Groundwater Quality Standard

⁵ Practical Quantification Limit

surface waters are impacted by operation and maintenance practices; and 4) clarify that groundwater cleanup standards identified in the ROD will also be used as monitoring standards to assess groundwater until Interim Cleanup Levels (ICLs) are achieved.

IV. SUPPORT AGENCY COMMENTS

The State of New Hampshire has participated with EPA in reviewing the modifications to the remedy which are described herein and concurs with the approach adopted by EPA.

V. STATUTORY DETERMINATION

In accordance with Section 121 of CERCLA, EPA, in consultation with NHDES, has determined that the modified remedy remains protective of human health and the environment, complies with all Federal and State requirements that are applicable or relevant and appropriate to this remedial action, meets the remedial action objectives specified in the ROD, and is cost-effective.

VI. PUBLIC INFORMATION

In accordance with Section 117(d) of CERCLA and Section 300.825(a) of the NCP, this ESD and the Administrative Record are available for public review at the locations and times listed in Section 1 above as well as on the internet at www.epa.gov/region1/superfund. Adobe Reader is required to review the documents. Notice of the release of the ESD will be published in the Keene Sentinel newspaper.

Attachment 1

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
<u>Federal Requirement</u>					
Hazardous Waste	Resource Conservation and Recovery Act (RCRA), 42 U S C §§ 6901 <i>et seq.</i> , Standards for identification and listing of hazardous waste, 40C.F.R. Part 261	Applicable	New Hampshire has been delegated the authority to administer these RCRA standards through its state hazardous waste management regulations (Env-Hw 100-1100). These provisions have been adopted by the State.	Any wastes generated by remedial activity will be analyzed by appropriate test methods. If found to be hazardous wastes, then they will be managed in accordance with the substantive requirements of the State hazardous waste regulations.	As cited in the ROD
Hazardous Waste	RCRA, Standards applicable to generators of hazardous wastes, 40 C.F.R. Part 262	Applicable	New Hampshire has been delegated the authority to administer these RCRA standards through its state hazardous waste management regulations (Env-Hw 100-1100). These provisions have been adopted by the State.	If remedial activity generates hazardous wastes, then they will be managed in accordance with the substantive requirements of the State hazardous waste regulations.	As cited in the ROD
Hazardous Waste	RCRA, Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities, 40 C.F.R. Part 264	Applicable	New Hampshire has been delegated the authority to administer these RCRA standards through its state hazardous waste management regulations (Env-Hw 100-1100). These provisions have been adopted by the	If a component of the remedy generates hazardous waste it will be operated, maintained and eventually closed in compliance with the substantive requirements of the State hazardous waste regulations.	As cited in the ROD

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			State.		
Hazardous Waste	RCRA, Air Emissions from Process Vents, 40 C.F.R. Part 264, Subpart AA	Applicable	Establishes air emission controls for process vents, closed vent systems, and control devices at hazardous waste facilities; and apply to distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that "manage hazardous wastes with organic concentrations of a least 10 ppmv." New Hampshire has not yet adopted these regulations so these federal regulations are the applicable standard.	If a component of the remedy generates hazardous waste and utilizes a process regulated by this section, air emission controls will be implemented if the applicability threshold is met.	As cited in the ROD. Remaining contamination and remedial measures (particularly after the decommissioning of the LNAPL collection trench) on site unlikely to generate sufficient air emissions to require implementing these requirements.
Hazardous Waste	RCRA, Air Emission Standards for Equipment Leaks, 40 C.F.R. Part 264, Subpart BB	Applicable	Establishes air emission standards for equipment leaks at hazardous waste facilities where equipment "contains or contacts hazardous wastes with organic concentrations of at least 10 per cent by weight." New Hampshire has not yet adopted these regulations so these federal regulations	If equipment used for the collection of LNAPL or other remedial action covered by this standard handles hazardous substances at concentrations that meet this regulation's threshold, then air emission controls will be implemented.	As cited in the ROD. Remaining contamination and remedial measures (particularly after the decommissioning of the LNAPL collection trench) on site unlikely to generate sufficient air

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			are the applicable standard.		emissions to require implementing these requirements.
Air	Clean Air Act (CAA), National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 42 U.S.C. §112(b)(1), 40 C.F.R. Part 61	Applicable	The regulations establish emissions standards for 189 hazardous air pollutants. Standards set for air strippers, dust control and other release sources.	Active removal of LNAPL by vacuum truck, or other process, or any other remedial activities on the Site which generates air emissions (including dust) or which may release any of the listed air pollutants, will meet these standards.	As cited in the ROD.
Surface Water	Clean Water Act (CWA), Section 402, 33 U.S.C. § 1342; 40 C.F.R. 122, 125, 131, 136, 450 - Discharge of Pollutants	Applicable/ Stormwater Standards are Relevant and Appropriate if less than one acre is disturbed by construction or development.	These standards address water discharges which may be directed to surface water. Also establishes stormwater standards for construction and development projects that are over one acre.	If a discharge from the remedial action is directed to surface water the discharge will be treated, if necessary, so that these standards will be achieved. Monitoring may be performed, if required to determine whether operation and maintenance of the remedy could potentially affect nearby surface water bodies, in accordance with Env-Or-607 (see below). Any remedial action that will disturb one acre or more, including future cap construction, will meet these stormwater standards.	Not cited in the ROD.

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Surface Water	CWA, National Recommended Water Quality Criteria (NRWQC), 40 C.F.R. 122.44	Relevant and Appropriate	Federal NRWQC establish water quality standards for the protection of human health and aquatic life.	Used to establish monitoring standards for surface waters and sediments, if required for the remedial action.	Cited as a Ambient Water Quality Criteria (AWQC) in the ROD.
Groundwater	Safe Drinking Water Act (42 U.S.C. §300f <i>et seq.</i>); National primary drinking water regulations (40 C.F.R. 141, Subpart B and G)	Relevant and Appropriate	Establishes maximum contaminant levels (MCLs) for common organic and inorganic contaminants applicable to public drinking water supplies. Used as relevant and appropriate monitoring standards for aquifers and surface water bodies that are potential drinking water sources.	Used to establish monitoring standards for groundwater.	Not specifically identified as action-specific groundwater monitoring standards in the ROD (cited as chemical-specific cleanup standards).
Groundwater	Safe Drinking Water Act (42 U.S.C. §300f <i>et seq.</i>); National primary drinking water regulations (40 C.F.R. 141, Subpart F)	Relevant and Appropriate for non-zero MCLGs only; MCLGs set as zero are To Be Considered.	Establishes maximum contaminant level goals (MCLGs) for public water supplies. MCLGs are health goals for drinking water sources. These unenforceable health goals are available for a number of organic and inorganic compounds.	Used to establish monitoring standards for groundwater. Non-zero MCLGs are relevant and appropriate. MCLGs set at zero are to be considered.	Not specifically identified as action-specific groundwater monitoring standards in the ROD (cited as chemical-specific cleanup standards).

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Groundwater	Health Advisories (EPA Office of Drinking Water)	To Be Considered	Health Advisories are estimates of risk due to consumption of contaminated drinking water; they consider non-carcinogenic effects only. To be considered for contaminants in groundwater that may be used for drinking water where the standard is more conservative than either federal or state statutory or regulatory standards. The Health Advisory standard for manganese is 0.3 mg/l.	Used to establish monitoring standards for groundwater.	Not specifically identified as action-specific groundwater monitoring standards in the ROD (cited as a chemical-specific TBC).
Groundwater	Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites, OSWER Directive 9200.4-17P (April 21, 1999)	To Be Considered	EPA guidance regarding the use of monitored natural attenuation for the cleanup of contaminated groundwater. In particular, a reasonable time frame for achieving cleanup standards through monitored attenuation would be comparable to that which could be achieved through active restoration.	MNA can attain federal drinking water and risk standards as defined by this guidance within a reasonable time frame.	As cited in the ROD

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Groundwater	Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration June 26, 2009 OSWER Directive 9283.1-33	To Be Considered	Guidance on developing groundwater remedies at CERCLA sites.	Groundwater within the Site is considered a potential drinking water source except within the compliance boundary of the landfill. Therefore, groundwater must achieve federal drinking water and risk-based standards or more stringent State groundwater standards. Groundwater use restrictions will be maintained until groundwater cleanup standards are achieved. An additional buffer zone beyond the compliance boundary to prevent groundwater wells from being installed that would draw contaminated groundwater beyond the compliance boundary may also be established, if required.	The ROD does not cite this TBC.
Soil	EPA Guidance: Risk-based Clean Closure, March 16, 1998	To Be Considered	This guidance describes risk-based clean closure at RCRA hazardous waste units.	Clean closure standards for the backfilled soil at the former drum disposal area will be assessed utilizing this guidance.	As cited in the ROD.
Soil	EPA Presumptive Remedy for CERCLA Municipal Landfill Sites Guidance EPA540-F-93-035, Sept. 1993	To Be Considered	Guidance on developing a presumptive remedy for hazardous and solid waste landfills.	Guidance used to develop presumptive capping remedy for the former drum disposal area.	As cited in the ROD.

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
<u>State Requirements</u>					
Groundwater/ Soil	Contaminated Site Management, NH Admin. Code Env-Or 600: Part 607, Groundwater Management Permits; Part 608, Activity and Use Restrictions; Part 610, Monitoring; Part 611, Contaminated Soils	Applicable	Env-Or Part 607 provides for establishment of Groundwater Management Zones (GMZ) to control use of groundwater that exceeds AGQS, requires monitoring of the groundwater quality within the GMZ, requires implementation of measures to restore the groundwater quality, and requires an evaluation of the effectiveness of the measures. Part 608 establishes standards for setting institutional controls to protect human health and components of the remedy. Part 610 establishes standards for monitoring groundwater, including requirements and criteria for constructing, developing, and decommissioning monitoring wells. Part 611 establishes standards for managing contaminated soils.	A GMZ, will be established to protect against use of contaminated groundwater. Groundwater use restrictions will be established to prevent human exposure to contaminated groundwater. Groundwater monitoring will be required until State ground water standards are achieved throughout the GMZ. Groundwater monitoring wells will be installed, operated, and decommissioned under these standards. Contaminated soils generated from installation of wells, operation and maintenance of the soil cover, and any other remedial activity will be managed in compliance with these standards. Activity and use restrictions, along with a soil management plan, will be established to prevent disturbance to the components of the remedy (including monitoring wells, landfill covers/cap, gas venting system) and exposure to soil contaminants. There will be at least yearly compliance monitoring to ensure groundwater use and soil activity and use restrictions remain in place and are enforced.	Groundwater Protection Standards: NH Admin. Code Env-Wm 1403 cited in the ROD incorporated into Env-Or by the State. The ROD does not cite the other regulatory requirements of Env-Or 600, including standards for activity and use restrictions and remediating contaminated soils.

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Solid Waste/Soil	RSA Ch. 149-M, New Hampshire Solid Waste Management Act; NH Admin. Code Env-Wm 100-300, 2100-3700 <i>et seq.</i>	Relevant and Appropriate	These provisions establish standards applicable to the treatment, storage and disposal of solid waste and the closure of solid waste facilities.	The specific portions of the State regulations that are relevant and appropriate to the remedial measures at the former drum disposal area are closure and postclosure requirements for monitoring and institutional controls. Requirements calling for landfill impermeable cover requirements are not relevant and appropriate since the alternative's permeable cover is a component of the natural attenuation remedy for groundwater at the Site. Once the groundwater standards are achieved then any remaining soil risk within the cover area and potential need to require an impermeable cover will be assessed.	The ROD's citation of Env-Wm 100-300, 2100-3700 <i>et seq.</i> has been changed to Env-Sw 100-200, 400-2000 by the State.
LNAPL	Reporting and Remediation of Oil Discharges, Env-Or 605.03	Relevant and Appropriate	The discharge or spillage of NAPL or oil into the public surface waters and groundwaters of the state is prohibited. Env-Wm 1600 establish procedures and requirements for notification, reporting, investigations and response actions for oil and NAPL discharges.	LNAPL removal as part of the remedy will be in compliance with the substantive provisions of these standards.	The ROD's citation of Env-Wm 1600 has been changed to Env-Or 605.03 by the State. Remaining contamination and remedial measures (particularly after the decommissioning of the LNAPL collection trench)

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
					on site unlikely to trigger these requirements.
Hazardous Waste	Identification and Listing of Hazardous Wastes, N.H.. Admin. Code Env-Hw 400	Applicable	These standards list particular hazardous wastes and identify the maximum concentration of contaminants for which the waste would be a RCRA characteristic waste. The analytical test set out in Appendix II of 40 C.F.R. Part 261 is referred to as the Toxicity Characteristic Leaching Procedure (TCLP). The federal requirements 40 C.F.R. Part 261 are incorporated by reference.	Any wastes generated by remedial activity will be analyzed to determine whether they are listed or characteristic hazardous waste under RCRA. Materials that are listed waste or exceed TCLP hazardous waste thresholds will be disposed off-Site in a RCRA Subtitle C facility. Non-hazardous materials will be disposed appropriately.	The ROD's citation of Env-Wm 403.06 has been changed to Env-Hw 400 by the State.

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Hazardous Waste	Requirements for Hazardous Waste Generators, N.H. Admin. Code Env-Hw 500 including Part 507 Storage Requirements; Part 513 Emergency/Remedial Actions	Applicable	Requires a determination as to whether waste materials are hazardous and, if so, requirements for managing such materials on site prior to shipment off site. The federal requirements under 40 C.F.R. Part 262 are incorporated by reference.	If remedial activity generates hazardous wastes, then they will be managed in accordance with the substantive requirements of these regulations prior to off-Site shipment.	The ROD's citation of Env-Wm 500 has been changed to Env-Hw 400 by the State.
Hazardous Waste	Requirements for Owners and Operators of Hazardous Waste Facilities/Hazardous Waste Transfer Facilities, N.H. Admin. Code Env-Hw 700	Applicable	This regulation establishes requirements for owners or operators of hazardous waste sites. Part 700 incorporates by reference the federal requirements under 40 C.F.R. Part 264, including but not limited to Subpart G (closure/post closure).	An interim cover has been established over the landfill to permit the implementation of the groundwater remedy. Once groundwater standards are achieved the landfill will be closed based on these standards.	The ROD's citation of Env-Wm 700 has been changed to Env-Hw 700 by the State.

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Hazardous Waste	Miscellaneous Units, Env-Hw 708.03(d)(8)	Applicable	General design and operation requirements for miscellaneous units for addressing hazardous wastes.	If the interceptor trench generates hazardous waste it will be operated, maintained and eventually closed in compliance with these standards.	<p>The ROD's citation of Env-Wm 708(d)(8) has been changed to Env-Hw 700(d)(8) by the State.</p> <p>The interceptor trench has been decommissioned so these standards no longer are in effect.</p>
Groundwater	Drinking Water Quality Standards: NH Admin. Code Env-Dw 700	Relevant and Appropriate for MCLs and non-zero MCLGs only; MCLGs set as zero are To Be Considered.	State MCLs and MCLGs establish maximum contaminant levels permitted in public water supplies and are the basis of State Ambient Groundwater Quality Standards (AGQS) that are applicable to site ground water. The regulations are generally equivalent to the Federal Safe Drinking Water Act (SDWA).	Any state standards that are more stringent than federal standards will be used as monitoring standards.	Not identified as action-specific groundwater monitoring standards in the ROD.

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Groundwater	New Hampshire Ambient Groundwater Quality Standards (NH AGQS) (Env-Or 603.03, Table 600-1).	Relevant and Appropriate	Establishes maximum concentration levels for regulated contaminants in groundwater which result from human operations or activities. NH AGQS are equivalent to MCLs for contaminants that have MCLs. NH AGQS have been established for site groundwater contaminants for which no MCLs are established, and are derived to be protective for drinking water uses. The NH AGQS will be used for site contaminants where MCLs are not currently established.	Any state standards that are more stringent than federal standards will be used as monitoring standards.	Not identified as action-specific groundwater monitoring standards in the ROD.
Groundwater	Groundwater Quality Criteria: NH Admin. Code Env-Or 603.01(a),(b),and (c)	Applicable	Wm-Or 603.01(a), (b) and (c) provide that groundwater shall be suitable for use as drinking water without treatment; shall not contain any regulated contaminant in concentrations greater than ambient groundwater quality standards established in Env-Or.603.03; and shall	Any state standards that are more stringent than federal standards will be used as monitoring standards.	Not identified as action-specific groundwater monitoring standards in the ROD.

Attachment I
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			not contain any regulated contaminant at a concentration such that the natural discharge of that groundwater to surface water will cause a violation of a surface water quality standard established in Env-Wq 1700.		
Groundwater	Nondegradation of Groundwater to Protect Surface Water: NH Admin. Code Env-Or 603.01 (c)	Applicable	Wm-Or 603.01(c) provides that, unless naturally occurring, groundwater shall not contain any contaminants at concentrations such that groundwater to surface water results in a violation of surface water standards in any surface water body within or adjacent to the site. Env-Or 603.01 (c) therefore incorporates surface water standards set forth at Env-Ws 1700.	Any state standards that are more stringent than federal standards will be used as monitoring standards	Not identified as action-specific groundwater monitoring standards in the ROD.
Surface Water	Surface Water Quality Regulations, NH Admin. Code Env-Wq 1700	Applicable	These rules establish water quality standards for the state's surface waters. Water quality criteria for toxic substances are	Standards will be used for monitoring to measure the performance and effectiveness of the remedial action in preventing contaminated groundwater from degrading nearby surface waters and sediment. Antidegradation	The ROD's citation of Env-Ws 1700 has been changed to Env-Hq 1700 by the State.

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			established. [See Part Env-Wq 1703 Water Quality Standards and Env-Wq 1704 Alternative Site Specific Criteria]. Antidegradation standards are included in Env-Wq 1708. These rules are applicable to point or non-point discharge(s) of pollutants to surface waters.	standards require beneficial uses and the water quality to sustain existing beneficial uses to be maintained and protected by requiring discharges to surface water to meet the standards.	
Surface Water/ Groundwater	Water Discharge Permits, R.S.A. 485-A: 13	Applicable	Discharge or disposal into surface or groundwater must comply with effluent limitations.	Remedial measures involving discharges to ground or surface water must comply with these standards. On-site discharges do not require permits.	Not cited in the ROD.
Surface Water/ Groundwater	Enforcement of Classification, R.S.A. 485-A:12	Applicable	Any discharge to groundwater or surface water that lowers the quality of the water below its classification is prohibited.	Remedial alternatives involving the discharge to groundwater or surface water must comply with these standards.	Not cited in the ROD.
Wells	Standards for Construction, Maintenance and Abandonment of Wells, NH Admin. Code We 600	Applicable for drinking water wells; Relevant and Appropriate for monitoring wells	This provision requires that wells be constructed, maintained, relocated, and/or abandoned according to these regulations. We 602.05 address restrictions on locating wells in contaminated areas.	Wells used for the remedy will be created, operated, and closed in compliance with these standards. Well restriction standards shall be incorporated into institutional controls to prevent groundwater use until groundwater cleanup standards are achieved (except for any monitoring wells required to be maintained for the	The ROD only cited well abandonment section We 604.

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
				soil cover remedy).	
Wells	Groundwater Monitoring Wells, Env-Or 610.04	Relevant and Appropriate	These standards establish requirements and criteria for constructing, developing, and decommissioning monitoring wells.	The construction, development, and decommissioning of monitoring wells will be conducted in accordance with the requirements of this section.	The ROD's citation of Env-Ws 1403.27 has been changed to Env-Or 610.04 by the State.
Uplands/ Wetlands	Terrain alteration, Env-Wq 1500 and RSA 485-A:17.	Applicable - Relevant and Appropriate for Disturbed Areas under 100,000 square feet	The purpose of these rules is to protect drinking water, surface water and groundwater from degradation resulting from any activity which significantly alters terrain or occurs in or on the border of the surface waters of the state. Env-Wq 1505.04 specifically addresses Stormwater Management and Erosion and Sediment Control.	Any remedial activities on the Site which disturb the Site will comply with these regulation's substantive erosion control and runoff standards.	Location-specific standards, but ROD lists these as Action-Specific. The citation (Env-Ws 415) changed to Env-Wq 1500 by the State.
Air	RSA Ch. 125-C, Air Pollution Control; NH Admin. Code ENV-A 100 - 3800 Rules Governing the Control of Air Pollution	Applicable	These provisions establish standards for the release of air emissions, including VOCs and hazardous air pollutants.	If there are remedial process that result in releases of contaminants into the air, air quality standards will be complied with during remedial activities.	As cited in the ROD.

Attachment 1
Troy Mills Explanation of Significant Differences
Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Air	NH Admin. Code Env-A 300, Ambient Air Quality Standards	Applicable	These regulations set primary and secondary ambient air quality standards (equivalent to federal standards). The standards do not allow significant deterioration of existing air quality in any portion of the state for: particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone hydrocarbons and lead.	If there are remedial process that result in releases of contaminants into the air, air quality standards will be complied with during remedial activities.	As cited in the ROD.
Air	NH Admin. Code Env-A Part 1400, Regulated Toxic Air Pollutants	Applicable	This regulation identifies toxic air pollutants to be regulated. These pollutants are also listed by EPA in 40 CFR 261. High, moderate and low Toxicity Classifications are established. Air toxics in these classifications are regulated when they occur in concentrations that cause adverse health effects including increased cancer risk.	If there is active removal of LNAPL by vacuum truck or other process, air quality standards will be complied with during remedial activities.	As cited in the ROD. Remaining contamination and remedial measures (particularly after the decommissioning of the LNAPL collection trench) on site unlikely to generate sufficient air emissions to require implementing these requirements.

Attachment I
 Troy Mills Explanation of Significant Differences
 Action-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Air	Fugitive Dust, N.H. Admin. Code Env-A Part 1002	Applicable	Requires precautions to prevent, abate and control fugitive dust during specified activities, including excavation, maintenance, and construction.	Precautions to control fugitive dust emissions will be required during site remediation activities that could generate dust, such as maintenance of the landfill cap and monitoring well installation.	As cited in the ROD.

Attachment 1
Troy Mills Explanation of Significant Differences
Chemical-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
<i>Federal Requirements</i>					
Groundwater/ Soil	EPA Risk Reference Dose (RfDs)	To Be Considered	RfDs are considered to be the levels unlikely to cause significant adverse health effects associated with a threshold mechanism of action in human exposure for a lifetime.	Hazards due to noncarcinogens with EPA RfDs were used to develop target cleanup levels. Monitored Natural Attenuation will achieve these standards over time for groundwater. For the cap, they will be used to assess remaining risks from residual soils under the permeable soil cap.	No change from the ROD.
Groundwater/ Soil	EPA Carcinogenicity Slope Factor	To Be Considered	Slope factors are developed by EPA from Health Effects Assessments and present the most up-to-date information on cancer risk potency. Slope factors are developed by EPA from Health Effects Assessments by the Carcinogenic Assessment Group.	Risks due to carcinogens as assessed with slope factors were used to develop target cleanup levels.	No change from the ROD.
Groundwater/ Soil	Guidelines for Carcinogen Risk Assessment EPA/630/P-03/001F (March 2005)	To Be Considered	Guidance for assessing cancer risk.	Risks due to carcinogens will be assessed using these guidelines as part of future remedial decisions.	The ROD does not cite this TBC.

Attachment I
Troy Mills Explanation of Significant Differences
Chemical-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Groundwater/ Soil	Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens EPA/630/R-03/003F (March 2005)	To Be Considered	Guidance of assessing cancer risks to children.	Risks to children due to carcinogens will be assessed using these guidelines as part of future remedial decisions.	The ROD does not cite this TBC.
Groundwater	Safe Drinking Water Act (42 U.S.C. §300f <i>et seq.</i>); National primary drinking water regulations (40 C.F.R. 141, Subpart B and G)	Relevant and Appropriate	Establishes maximum contaminant levels (MCLs) for common organic and inorganic contaminants applicable to public drinking water supplies. Used as relevant and appropriate cleanup standards for aquifers and surface water bodies that are potential drinking water sources.	Groundwater in and around the property boundary is considered a potential drinking water source. Analytes detected at the Site at levels above MCLs are presented (along with the MCLs) in Table 8 of Appendix A of the FS. Monitored Natural Attenuation will achieve these standards over time.	The ROD does not specifically cite Subparts B and G of the regulations at 40 C.F.R. 141 that specifically pertain to MCLs.
Groundwater	Safe Drinking Water Act (42 U.S.C. §300f <i>et seq.</i>); National primary drinking water regulations (40 C.F.R. 141, Subpart F)	Relevant and Appropriate for non-zero MCLGs only; MCLGs set as zero are To Be Considered	Establishes maximum contaminant level goals (MCLGs) for public water supplies. MCLGs are health goals for drinking water sources. These unenforceable health goals are available for a number of organic and inorganic compounds.	Groundwater in and around the property boundary is considered a potential drinking water source. Non-zero MCLGs are relevant and appropriate. MCLGs set at zero are to be considered. Monitored Natural Attenuation will achieve these standards over time.	The ROD does not specifically cite Subpart F of the regulations at 40 C.F.R. 141 that specifically pertain to MCLGs.
Groundwater	Health Advisories (EPA Office of Drinking Water)	To Be Considered	Health Advisories are estimates of risk due to consumption of	Health advisories will be used to evaluate the noncarcinogenic risk resulting from exposure to certain	No change from the ROD.

Attachment I
Troy Mills Explanation of Significant Differences
Chemical-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			contaminated drinking water; they consider non-carcinogenic effects only. To be considered for contaminants in groundwater that may be used for drinking water where the standard is more conservative than either federal or state statutory or regulatory standards. The Health Advisory standard for manganese is 0.3 mg/l.	compounds (e.g., manganese).	
<u>State Requirements</u>					
Groundwater	Drinking Water Quality Standards: NH Admin. Code Env-Dw 700	Relevant and Appropriate for MCLs and non-zero MCLGs only; MCLGs set as zero are To Be Considered	State MCLs and MCLGs establish maximum contaminant levels permitted in public water supplies and are the basis of State Ambient Groundwater Quality Standards (AGQS) that are applicable to site groundwater. The regulations are generally equivalent to the Federal Safe Drinking Water Act (SDWA).	Groundwater in and around the property boundary is considered a potential drinking water source. Monitored Natural Attenuation will achieve these standards over time.	ROD citation (Env-Ws 316 and 317) changed to Env-Dw 700 by the State.

Attachment 1
Troy Mills Explanation of Significant Differences
Chemical-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Groundwater	New Hampshire Ambient Groundwater Quality Standards (NH AGQS) (Env-Or 603.03, Table 600-1)	Relevant and Appropriate	Establishes maximum concentration levels for regulated contaminants in groundwater which result from human operations or activities. NH AGQS are equivalent to MCLs for contaminants that have MCLs. NH AGQS have been established for site groundwater contaminants for which no MCLs are established, and are derived to be protective for drinking water uses. The NH AGQS will be used for site contaminants where MCLs are not currently established.	Used to establish cleanup standards for groundwater when more stringent than federal standards. Groundwater in and around the property boundary is considered a potential drinking water source. Monitored Natural Attenuation will achieve these standards over time.	Not cited in the ROD.
Groundwater	Groundwater Quality Criteria: NH Admin. Code Env-Or 603.01(a),(b),and (c)	Applicable	Wm-Or 603.01(a), (b) and (c) provide that groundwater shall be suitable for use as drinking water without treatment; shall not contain any regulated contaminant in concentrations greater than ambient groundwater quality standards established in Env-Or 603.03; and shall not contain any regulated contaminant at a concentration such that the natural discharge of that	Used to establish cleanup standards for groundwater when more stringent than federal standards. Groundwater in and around the property boundary is considered a potential drinking water source. Monitored Natural Attenuation will achieve these standards over time.	Not cited in the ROD.

Attachment I
Troy Mills Explanation of Significant Differences
Chemical-Specific ARARs

Medium	Requirement	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			groundwater to surface water will cause a violation of a surface water quality standard established in Env-Ws 1700.		
Soil	Soil Remediation Criteria, Env-Or 606.19	Applicable	Numeric soil remediation standards for organic and inorganic contaminants are established, with a provision for development of risk-based site-specific soil remediation standards.	Risks posed by contaminated soils and debris under the soil cover will be controlled through operation and maintenance of the cover and institutional controls.	Not cited in the ROD

Attachment 1
Troy Mills Explanation of Significant Differences
Location-Specific ARARs

Medium	Requirements	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
Federal Requirements					
Wetlands/ Fish and Wildlife Habitat	Fish and Wildlife Coordination Act (16 U.S.C. §661 <i>et seq.</i>)	Applicable	Any modification of a body of water or wetland requires consultation with the U.S. Fish and Wildlife Service and the appropriate state wildlife agency to develop measures to prevent, mitigate, or compensate for losses of fish and wildlife.	The Site includes streams, wetlands, and downstream waterbodies. Although operation, maintenance and closure of the monitoring wells and other components of the remedy is not anticipated to impact these resource areas directly, planning and decision making will incorporate fish and wildlife protection considerations in consultation with the resource agencies.	The ROD cites regulations under the Act at 40 C.F.R. 6.302(g) that no longer exist.
Wetlands and Floodplain	Floodplain Management and Protection of Wetlands (44 C.F.R. § 9)	Relevant and Appropriate	Federal Emergency Management Agency (FEMA) regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands. Under these regulations no activity that adversely affects a federal jurisdictional wetland shall be permitted if a practicable alternative with lesser effects is available.	All practicable means will be used to minimize harm to the wetlands. Wetlands disturbed by well installation, maintenance, monitoring or other remedial activities will be mitigated in accordance with requirements. The public will be kept informed of activities involving wetlands, as required. The Site includes areas defined to be within the 100-year floodplain. Remedial actions that involve construction in the floodplain areas will include all practicable means to	Former wetland and floodplain regulations that incorporated Executive Orders 11988 and 11990 at 40 C.F.R. Part 6, Appendix no longer exist so have been replaced by requirements to meet the Executive Order standards at 44 C.F.R. § 9.

Attachment I
Troy Mills Explanation of Significant Differences
Location-Specific ARARs

Medium	Requirements	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
			Action to avoid, whenever possible, the long- and short-term impacts on wetlands and to preserve and enhance wetlands.	minimize harm to and preserve beneficial values of floodplains. Floodplains disturbed by remedial actions will be restored to their original conditions and utility.	
Wetlands	Clean Water Act, Section 404 (33 U.S.C. § 1344); Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 C.F.R. Part 230 and 33 C.F.R. Parts 320-323)	Applicable	Under this requirement, no activity that adversely affects a federal jurisdictional wetland shall be permitted if a practicable alternative with lesser effects is available. Controls discharges of dredged or fill material to protect aquatic ecosystems.	Well installation, maintenance, monitoring or other remedial actions that include dredging or filling in wetlands will be implemented to meet these requirements.	No change from the ROD.
State Requirements					
Wetlands	Criteria and Conditions for Fill and Dredge In Wetlands: RSA Ch. 482-A and NH	Applicable	These standards regulate filling and other activities in or adjacent to wetlands, and establish criteria for the protection of wetlands from adverse impacts on fish, wildlife, commerce,	Remedial activities in wetlands located in or adjacent to the Site must comply with these wetlands protection requirements.	ROD citation (Env-Wm 300-400, 600, 700) changed to Env-Wt 100-900 by the State.

Attachment 1
Troy Mills Explanation of Significant Differences
Location-Specific ARARs

Medium	Requirements	Status	Requirement Synopsis	Action to be Taken to Attain ARAR	Changes from 2005 ROD
	Admin. Code Env-Wt Parts 100-900		and public recreation.		
Uplands/ Wetlands	Terrain alteration Env-Wq 1500 and RSA 485-A:17	Applicable - Relevant and Appropriate for Disturbed Areas under 100,000 square feet	The purpose of these rules is to protect drinking water, surface water and groundwater from degradation resulting from any activity which significantly alters terrain or occurs in or on the border of the surface waters of the state. Env-Wq 1505.04 specifically addresses Stormwater Management and Erosion and Sediment Control.	Any remedial activities on the Site which disturb the Site will comply with these regulation's substantive erosion control and runoff standards.	ROD lists these as Action-Specific standards. The citation (Env-Ws 415) changed to Env-Wq 1500 by the State.