

**Readopt with amendment Env-Or 601, effective 6-1-15 (Document #10831), cited and to read as follows:**

## CHAPTER Env-Or 600 CONTAMINATED SITE MANAGEMENT

Statutory Authority: RSA 146-A:11-c, IV, V, & V-a; RSA 146-C:9, X & XI; RSA 147-A:3, VII; RSA 147-F:18, I(b) & (h); RSA 485:3-b, I; RSA 485-C:4, III, VIII, IX, & X; RSA 541-A:16, I(b); RSA 485-H:9

## PART Env-Or 601 PURPOSE AND APPLICABILITY

Env-Or 601.01 Purpose. The purpose of these rules is to establish:

- (a) Procedures and requirements for the investigation, management, and remediation of contamination from the discharge of regulated contaminants that adversely affect human health or the environment resulting from human operations or activities;
- (b) Procedures to obtain a groundwater management permit as required by RSA 485-C;
- (c) Procedures to restrict future property use pursuant to RSA 147-F:15;
- (d) Procedures and requirements for notification of, and emergency and initial response actions in response to, a discharge of a regulated contaminant;
- (e) Procedures for determining fees for expedited reviews of environmental site assessment reports pursuant to RSA 485:3-b, I; and
- (f) Definitions and requirements specific to investigation and remediation of sites that have been contaminated by PFAS.

Env-Or 601.02 Applicability.

(a) This chapter shall apply to:

- (1) All environmental investigations and remediation of discharges of regulated contaminants identified in this chapter, including oil, whether conducted pursuant to RSA 146-A, RSA 146-C, RSA 147-A, RSA 147-B, RSA 147-F, or RSA 485-C;
- (2) Groundwater management zones and groundwater management permits;
- (3) The procedures for the notification of discharges of regulated contaminants identified in this chapter, including oil;
- (4) Emergency and initial response actions conducted in response to a discharge of any regulated contaminant identified in this chapter, including oil; and
- (5) Requests for expedited review of environmental site assessment reports pursuant to RSA 485:3-b, I.

(b) Nothing in this chapter shall be construed to prohibit or limit the ability of the department to obtain cost recovery for any action authorized by law or rule, including the provision of potable water by the department, as authorized by statute, with or without notice to the responsible party.

**Readopt with amendment Env-Or 602.03, effective 6-1-15 (Document #10831), to read as follows:**

Env-Or 602.03 “Background” means the concentration of a substance present in the environment that would exist at a location in the absence of a discharge, including substances that are ubiquitous and consistently present at or in the vicinity of the site such as:

- (a) Coal or wood ash associated with fill material;
- (b) Petroleum residues that are incidental to the normal operation of motor vehicles;
- (c) Asphalt pavement and petroleum compounds contained in associated sub-base materials;
- (d) Fertilizers in soil that were applied in a manner consistent with their labeling; and
- (e) Pesticides in soil that were applied in a manner consistent with their labeling.

**Readopt with amendment Env-Or 602.07, effective 6-1-15 (Document #10831), to read as follows:**

Env-Or 602.07 “Contamination” means the presence of any regulated contaminant, as defined herein, other than naturally occurring substances at naturally occurring or natural background levels, in soil, groundwater, soil gas, air, sediment, surface water, construction/excavation debris, or any other material.

**Adopt Env-Or 602.11, and renumber existing sections accordingly, so that Env-Or 602.11 reads as follows:**

Env-Or 602.11 “Fully fluorinated carbon atom” means a carbon atom on which all of the hydrogen substituents have been replaced by fluorine.

**Adopt Env-Or 602.20, and renumber existing sections accordingly, so that Env-Or 602.20 reads as follows:**

Env-Or 602.20 “Perfluoroalkyl substance” means a chemical of which all of the alkyl carbon atoms are fully fluorinated carbon atoms.

**Adopt Env-Or 602.22 and Env-Or 602.23, and renumber existing sections accordingly, so that Env-Or 602.22 and Env-Or 602.23 read as follows:**

Env-Or 602.22 “PFAS” means all perfluoroalkyl and polyfluoroalkyl substances.

Env-Or 602.23 “PFAS precursor” means any fluorinated substance that might break down or combine to form a PFAS compound.

**Adopt Env-Or 602.25, and renumber existing sections accordingly, so that Env-Or 602.25 reads as follows:**

Env-Or 602.25 “Polyfluoroalkyl substance” means a chemical containing at least one fully fluorinated carbon atom and at least one carbon atom that is not a fully fluorinated carbon atom.

**Readopt with amendment and renumber Env-Or 602.26, effective 6-1-15 (Document #10831), as Env-Or 602.31 to read as follows:**

Env-Or 602.31 “Regulated contaminant” means any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, which adversely affects human health or the environment, and includes, but is not limited to, oil as defined in RSA 146-A:2, III, as reprinted in Appendix C, hazardous substance as defined in RSA 146-C:1, VII-a, as reprinted in Appendix C, hazardous materials as defined in RSA 147-B:2, VIII, as reprinted in Appendix C, hazardous waste as defined in RSA 147-A:2, VII and RSA 147-B:2, VII, both as reprinted in Appendix C, and

substances at concentrations in groundwater greater than AGQS or in soil greater than soil remediation standards.

**Readopt with amendment and renumber Env-Or 602.29, effective 6-1-15 (Document #10831), as Env-Or 602.34 to read as follows:**

Env-Or 602.34 “Responsible party” means any person subject to the strict liability provisions of RSA 146-A:3-a, RSA 147-A:9, RSA 146-C:11, or RSA 147-B:10, or any person required to perform an investigation or remediation pursuant to RSA 146-A, RSA 146-C, RSA 147-A, RSA 147-B, RSA 485, RSA 485-C, or RSA 485-H. For any site where there is more than one responsible party, the term includes all responsible parties or the point of contact, as applicable from the context of the rule where the term is used.

**Adopt Env-Or 603.04 to read as follows:**

Env-Or 603.04 Safe Alternate Water.

(a) Any person who is liable for, or has otherwise caused or contributed to contamination in excess of an AGQS, shall provide potable water to any impacted well owner by:

(1) Providing bottled water as an interim mitigation measure until a long-term alternative water supply identified in paragraph (a)(2) is provided; and

(2) Providing a long-term alternative water supply by either:

a. Installing, testing, and maintaining a point-of-entry water treatment system at each structure served; or

b. Connecting each structure served by drinking water to a public water system.

(b) Connection to a public water system shall be required whenever practicable and consistent with the provisions of this chapter and any applicable laws and rules.

**Readopt with amendment Env-Or 604.02 and Env-Or 604.05 through Env-Or 604.08, effective 6-1-15 (Document #10831), to read as follows:**

Env-Or 604.02 Notification of Groundwater Quality Violation.

(a) Unless exempted under Env-Or 604.03, the responsible party who becomes aware of the groundwater quality violation shall notify the department no more than 60 days after obtaining knowledge of a violation of the groundwater quality criteria of Env-Or 603.01.

(b) Any person required to notify the department pursuant to (a), above, shall provide notification to the department in writing, including as much of the following information as is available at the time of notification:

(1) The name, daytime telephone number, and email address, if any, of the individual notifying the department;

(2) The location of the site;

(3) The nature and location of the violation;

(4) The name, daytime telephone number, and email address, if any, of each responsible party, and if there is more than one responsible party, the name, daytime telephone number, and email address, if any, of a point of contact;

- (5) The proximity of the violation to receptors and potential receptors including water supply wells and surface water; and
- (6) All available reports and sampling results related to the discovery of the violation.

Env-Or 604.05 Non-Aqueous Phase Liquid (NAPL) Notification.

(a) The responsible party shall notify the department either orally or in writing within 24 hours after obtaining knowledge of the detection of NAPL of greater than 1/8 inch in thickness on groundwater unless the NAPL is being managed in accordance with the following:

- (1) An emergency or initial response action conducted pursuant to Env-Or 605.03 or Env-Or 605.04;
- (2) A remedial action plan approved pursuant to Env-Or 606.10; or
- (3) A groundwater management permit issued pursuant to Env-Or 607.

(b) The responsible party required by (a), above, to notify the department shall provide as much of the following information as is available at the time of notification:

- (1) The name, daytime telephone number, and email address, if any, of the individual notifying the department;
- (2) The location of the discharge site including the department site identification number;
- (3) The type and thickness of the NAPL layer observed; and
- (4) A description of proposed NAPL recovery actions.

Env-Or 604.06 Discharges of Regulated Contaminants Requiring Immediate Notification. The responsible party and in the case of an oil discharge, any other person who becomes aware of a discharge shall notify the department immediately, as soon as practical but within one hour, after obtaining knowledge that a discharge meeting one or more of the following criteria has occurred:

- (a) A discharge of any regulated contaminants into surface water or groundwater of the state except for sheens resulting from an incidental discharge of oil from a properly functioning vessel engine;
- (b) A discharge of 25 gallons or more of oil to land;
- (c) A discharge of less than 25 gallons of oil to land, unless the discharge is cleaned up within 24 hours of discovery and properly disposed of;
- (d) A discharge of regulated contaminants that results in the presence of vapors that pose an imminent threat to human health;
- (e) A discharge of regulated contaminants resulting in a violation of the groundwater quality criteria of Env-Or 603.01 in a sample collected from a water supply well; or
- (f) A discharge of regulated contaminants resulting in the detection of NAPL.

Env-Or 604.07 Potential Discharges Requiring Notification Within 60 Days. When a responsible party becomes aware of a potential discharge based on an exceedance of the soil remediation standards of Env-Or 606.19 shall notify the department no more than 60 days after obtaining knowledge of the exceedance.

Env-Or 604.08 Notification Requirements. A person required to notify the department of a discharge of oil or regulated contaminant pursuant to Env-Or 604.06, or a potential discharge pursuant to Env-Or 604.07 based on an exceedance of the soil remediation standards, shall provide notification to the department either orally or in writing, including as much of the following information as is available at the time of notification:

- (a) The name, daytime telephone number, and email address, if any, of the individual notifying the department;
- (b) The location of the discharge site;
- (c) The date and time of the discharge;
- (d) The type and amount of material discharged;
- (e) The name, daytime telephone number, and email address, if any, of each responsible party, and if there is more than one responsible party, the name, daytime telephone number, and email address, if any, of a point of contact;
- (f) The proximity of the discharge to receptors and potential receptors including water supply wells and surface water;
- (g) The name, mailing address, daytime telephone number, and email address, if any, of the contractor hired to clean up the contamination;
- (h) A description of any emergency or initial response actions that have been taken or are proposed to be taken;
- (i) The names of other federal, state, or local government agencies that have been notified or that have responded to the discharge, or both;
- (j) The cause of the incident and the method used that detected the discharge; and
- (k) All available reports and sampling results related to the discharge.

**Adopt Env-Or 604.09 to read as follows:**

Env-Or 604.09 Potential Discharges Impacting Indoor Air Quality. In addition to all other requirements described in this chapter, the responsible party or any other person who becomes aware of a potential discharge of a regulated contaminant to soil or groundwater based on an indoor air quality assessment shall notify the department within 24 hours of obtaining quantitative data identifying indoor air impacts.

**Readopt with amendment Env-Or 606.19, effective 6-1-15 (Document #10831), to read as follows:**

Env-Or 606.19 Soil Remediation Criteria.

- (a) Soil remediation standards shall apply to all contaminated soil resulting from a discharge except as provided for in (c) through (f), below.
- (b) Soil remediation standards shall be as set forth in Table 600-2 below:

Table 600-2  
SOIL REMEDIATION STANDARDS

Chemical Name	CAS No.	Concentration (mg/kg)
Acenaphthene	83-32-9	340
Acenaphthylene	208-96-8	490
Acetone	67-64-1	75
Acrylonitrile	107-13-1	0.5
Alachor	15972-60-8	0.2
Aldicarb	116-06-3	0.1
Aldicarb sulfone	1646-88-4	0.1
Aldicarb sulfoxide	1646-87-3	0.2
Aldrin	309-00-2	0.09
Allyl chloride	107-05-1	1
Anthracene	120-12-7	1,000
Antimony	7440-36-0	9
Arsenic	7440-38-2	11
Atrazine	1912-24-9	0.09
Barium	7440-39-3	1000
Benzene	71-43-2	0.3
Benzidine	92-87-5	0.01
Benzo(a)anthracene	56-55-3	1
Benzo(a)pyrene	50-32-8	0.7
Benzo(b)fluoranthene	205-99-2	1
Benzoic acid	65-85-0	350
Benzo(k)fluoranthene	207-08-9	12
Beryllium	7440-41-7	12
Biphenyl, 1,1-	92-52-4	125
Bis (2Chloroisopropyl) ether	108-60-1	5
Bis (Chloroethyl) ether	111-44-4	0.7
Bisphenol A	80-05-7	1,300
Boron	7440-42-8	1,000
Bromodichloromethane	75-27-4	0.1
Bromoform	75-25-2	0.1
Bromomethane	74-83-9	0.3
Butylbenzene, n-	104-51-8	110
Butylbenzene, sec-	135-98-8	130
Butylbenzene, tert-	98-06-6	100
Cadmium	7440-43-9	33
Carbofuran	1563-66-2	0.6
Carbon disulfide	75-15-0	460
Carbon tetrachloride	56-23-5	12
Chlordane	57-74-9	4
Chloroaniline, p-	106-47-8	1.3
Chloromethane	74-87-3	3
Chlorophenol, 2-	95-57-8	2
Chlorotoluene, 2 (o)	95-49-8	15
Chlorotoluene, 4 (p)	106-43-4	680

Table 600-2  
SOIL REMEDIATION STANDARDS

Chemical Name	CAS No.	Concentration (mg/kg)
Chromium (III)	16065-83-1	1,000
Chromium (VI)	18540-29-9	130
Chrysene	218-01-9	120
Cyanazine	21725-46-2	0.03
Cyanide	57-12-5	22
2,4-D (Dichlorophenoxy acetic acid, 2,4-)	94-75-7	300
Dalapon	75-99-0	3
DDD (Dichlorodiphenyl dichloroethane, p,p')	72-54-8	6
DDE (Dichlorodiphenyl dichloroethylene, p,p')	72-55-9	4
DDT (Dichlorodiphenyl trichloroethane, p,p')	50-29-3	4
Dibenzo(a,h)anthracene	53-70-3	0.7
Dibromochloromethane	124-48-1	1
Dibromochloropropane	96-12-8	0.1
Dibutylphthalate	84-74-2	2,600
Dichlorobenzene, 1,2- (o-DCB)	95-50-1	88
Dichlorobenzene, 1,3- (m-DCB)	541-73-1	150
Dichlorobenzene, 1,4- (p-DCB)	106-46-7	7
Dichlorobenzidine, 3,3'-	91-94-1	0.7
Dichlorodifluoromethane	75-71-8	1,000
Dichloroethane, 1,1-	75-34-3	3
Dichloroethane, 1,2-	107-06-2	0.1
Dichloroethylene, 1,1-	75-35-4	14
Dichloroethylene, cis-1,2-	156-59-2	2
Dichloroethylene, trans-1,2-	156-60-5	9
Dichloromethane (Methylene chloride)	75-09-2	0.1
Dichlorophenol, 2,4-	120-83-2	0.7
Dichloropropane, 1,2-	78-87-5	0.1
Dichloropropene, 1,3-	542-75-6	0.1
Dieldrin	60-57-1	0.06
Diethyl ether	60-29-7	3900
Diethyl phthalate	84-66-2	1,000
Di-(2-ethylhexyl)phthalate (DEHP)	117-81-7	72
Diisopropyl ether (DIPE)	108-20-3	10
Dimethyl phthalate	131-11-3	700
Dimethylphenol, 2,4-	105-67-9	4
Dinitrophenol, 2,4-	51-28-5	0.7
Dinitrotoluene, 2,4-	121-14-2	0.7
Dinoseb	88-85-7	1
Dioxane, 1,4-	123-91-1	5
Dioxin (2,3,7,8-TCDD equivalents)	1746-01-6	0.001
Diphenylhydrazine, 1,2-	122-66-7	1
Diquat (dibromide)	85-00-7	0.3
Endosulfan	115-29-7	45
Endothall	145-73-3	1

Table 600-2  
SOIL REMEDIATION STANDARDS

Chemical Name	CAS No.	Concentration (mg/kg)
Endrin	72-20-8	8
Ethyl tert butyl ether (ETBE)	637-92-3	0.7
Ethylbenzene	100-41-4	120
Ethylene dibromide	106-93-4	0.1
Ethylene glycol	107-21-1	91
Fluoranthene	206-44-0	960
Fluorene	86-73-7	77
Fluoride	7782-41-4	2200
Formaldehyde	50-00-0	1
Heptachlor	76-44-8	0.2
Heptachlor epoxide	1024-57-3	0.1
Hexachlorobenzene	118-74-1	0.8
Hexachlorobutadiene	87-68-3	17
Hexachlorocyclohexane, alpha	319-84-6	0.06
Hexachlorocyclohexane, beta	319-85-7	0.06
Hexachlorocyclohexane, gamma	58-89-9	0.09
Hexachlorocyclopentadiene	77-47-4	200
Hexachloroethane	67-72-1	0.7
Indeno(1,2,3-cd)pyrene	193-39-5	1
Isophorone	78-59-1	1
Isopropyl benzene	98-82-8	330
Lead	7439-92-1	400
Manganese	7439-96-5	1,000
MCPA (2-Methyl-4-chlorophenoxyacetic acid)	94-74-6	13
MCPP (2-(2- Methyl-4-chlorophenoxy) propionic acid)	93-65-2	26
Mercury (inorganic)	7439-97-6	7
Methanol	67-56-1	50
Methoxychlor	72-43-5	130
Methyl ethyl ketone (MEK)	78-93-3	51
Methyl isobutyl ketone (MIBK)	108-10-1	29
Methyl mercury	22967-92-6	3
Methylnaphthalene, 2-	91-57-6	96
Methyl phenol, 2-	95-48-7	0.9
Methyl phenol, 4-	106-44-5	0.7
Methyl tert butyl ether (MTBE)	1634-04-4	0.2
Metolachlor	51218-45-2	3
Metribuzin	21087-64-9	5
Monochlorobenzene	108-90-7	6
Naphthalene	91-20-3	28
Nickel	7440-02-0	400
Oxamyl	23135-22-0	2
Pentachlorophenol	87-86-5	3
Perfluorooctanoic acid (PFOA), total of all isomers	335-67-1	0.0004



Table 600-2 SOIL REMEDIATION STANDARDS		
Chemical Name	CAS No.	Concentration (mg/kg)
Perfluorooctane sulfonic acid (PFOS), total of all isomers	1763-23-1	0.0005
Perfluorohexane sulfonic acid (PFHxS), total of all isomers	355-46-4	0.0004
Perfluorononanoic acid (PFNA), total of all isomers	375-95-1	0.0013
Phenol	108-95-2	56
Picloram	1918-02-1	6
Polychlorinated Biphenyls (PCBs)	1336-36-3	1
Propyl benzene, n-	103-65-1	85
Pyrene	129-00-0	720
Selenium	7782-49-2	180
Silver	7440-22-4	89
Simazine	122-34-9	0.4
Styrene	100-42-5	17
Tertiary amyl methyl ether (TAME)	994-05-8	3
Tertiary butyl alcohol (TBA)	75-65-0	2
Tetrachloroethane, 1,1,1,2-	630-20-6	0.8
Tetrachloroethane, 1,1,2,2,-	79-34-5	4
Tetrachloroethylene (PCE)	127-18-4	2
Tetrachlorophenol 2,3,4,6	58-90-2	130
Thallium	7440-28-0	10
Toluene	108-88-3	100
Total Petroleum Hydrocarbons		10,000
Toxaphene	8001-35-2	1
2,4,5-TP (Silvex)	93-72-1	60
Trichlorobenzene, 1,2,4-	120-82-1	19
Trichloroethane, 1,1,1-	71-55-6	78
Trichloroethane, 1,1,2-	79-00-5	0.1
Trichloroethylene (TCE)	79-01-6	0.8
Trichlorofluoromethane	75-69-4	1,000
Trichloromethane (Chloroform)	67-66-3	3
Trichlorophenol, 2,4,5-	95-95-4	24
Trichlorophenol, 2,4,6-	88-06-2	0.7
Trichloropropane, 1,2,3-	96-18-4	0.1
Trimethylbenzene, 1,2,4	95-63-6	130
Trimethylbenzene, 1,3,5	108-67-8	96
Vinyl chloride	75-01-4	1
Xylenes (mixed isomers)	1330-20-7	500
Zinc	7440-66-6	1,000

(c) In lieu of the soil standards in Table 600-2, if approved by the department, the responsible party may develop site-specific soil remediation standards by evaluating the risk to human health and the environment using the methods described in ASTM Standard E 1739-95 (2015) entitled “Standard Guide for Risk-Based

Corrective Action Applied at Petroleum Release Sites” (ASTM E 1739-95), or ASTM E 2081, available as noted in Appendix B, as applicable.

(d) Site-specific soil standards developed pursuant to (c), above, shall:

- (1) Demonstrate that leaching of contaminants to groundwater will not result in violations of ambient groundwater quality standards as specified in Env-Or 603.03;
- (2) Demonstrate that no significant risk to human health and the environment exists at the site pursuant to the procedures prescribed in ASTM E 1739-95 or ASTM E 2081, as applicable, as noted in (c), above; and
- (3) In the evaluation of human health in (2), above, use a cumulative risk approach that compares site-specific information to a cumulative risk of an excess lifetime cancer risk of one in 100,000 and a cumulative non-cancer risk that is a hazard index equal to one pursuant to the procedures prescribed in ASTM E 1739-95 or ASTM E 2081, as applicable, as noted in (c), above.

(e) In lieu of the soil standards in Table 600-2, the responsible party may use an activity and use restriction at a site where a department-approved remedial action relies on the restriction of site activities and uses to eliminate exposure pathways to achieve or maintain protection of human health and the environment pursuant to the procedures outlined in Env-Or 608.

(f) The soil standards in Table 600-2 shall not apply to soil contamination that has been demonstrated to be attributed to background as defined in Env-Or 602.

**Readopt with amendment Env-Or 607.06, effective 6-1-15 (Document #10831), to read as follows:**

Env-Or 607.06 Monitoring and Use of Groundwater Within a GMZ.

(a) Where drinking water supply wells located within the GMZ are contaminated above the groundwater quality criteria of Env-Or 603.01, the permittee shall provide a potable drinking water supply in accordance with Env-Or 603.04 that meets applicable federal and state water quality criteria.

(b) For water supply wells located within the GMZ that are not contaminated above groundwater quality criteria of Env-Or 603.01, the permittee shall:

- (1) Monitor drinking water quality as part of the permit; and
- (2) Establish and implement contingency provisions to provide a potable drinking water supply that meets applicable federal and state water quality criteria in the event a well becomes contaminated above the groundwater quality criteria of Env-Or 603.01.

(c) Use of groundwater within the GMZ for drinking water shall be restricted by recorded easement or other form of ownership interest or restriction, except where potable water is available or is provided to all lots of record by the permittee.

(d) Where an undeveloped lot with no drinking water supply is included in the GMZ, the permittee shall contact the property owner annually to determine if a water supply has been developed.

(e) Within 30 days of discovery of a new drinking water supply well within the GMZ, the permittee shall:

- (1) Provide written notification of such well to the department that includes the drinking water supply well owners name, mailing address, property tax map and lot number and deed reference by county book and page; and

(2) Sample the supply well, with all sampling, analysis and reporting conducted in accordance with Env-Or 610.02 and Env-Or 610.03.

(f) Groundwater extraction within the GMZ shall be restricted by a recorded easement or other form of ownership interest or restriction if required to implement an approved remedial action.

(g) Notwithstanding Env-Hw 100 et seq. or other applicable rules or statutes, use of water that is above an AGQS or MCL from a private well for irrigation or other non-consumptive outdoor water use at a property served by such private well shall be permitted, unless the department determines that such use may be detrimental to human health or the environment. This provision does not protect or immunize the user from claims by any third party.

**Readopt with amendment Env-Or 611.06(d), effective 6-1-15 (Document #10831), to read as follows:**

Env-Or 611.06 Contaminated Soil Disposal and Reuse.

(a) Except as provided for by (b) and (c) below, all NOCS or NCS that exceed the soil remediation standards in Table 600-2 shall be either:

(1) Managed on-site in accordance with a remedial action approved by the department pursuant to Env-Or 606.03; or

(2) Removed from the site to an authorized treatment or disposal facility holding all requisite federal, state, or local permits, licenses, or approvals.

(b) NOCS or NCS that exceeds the soil remediation standards listed in Table 600-2 but meets site-specific standards developed in accordance with Env-Or 606.19 may be managed on the site.

(c) NOCS or NCS that exceeds the soil remediation standards listed in Table 600-2 but is managed in accordance with a department-approved AUR implemented in accordance with Env-Or 608 may be managed on the site.

(d) NOCS or NCS that meets the soil remediation standards listed in Table 600-2 may be left in place or reused on site, reused in accordance with Env-Sw 903, or removed from the site to an authorized treatment or disposal facility holding all requisite federal, state, or local permits, licenses, or approvals.

**Adopt Env-Or 614 to read as follows:**

PART Env-Or 614 PFAS SPECIFIC PROVISIONS

Env-Or 614.01 Sampling and Testing. In addition to requiring sampling and analysis for any PFAS for which there is a state Maximum Contaminant Level (MCL) as defined in Env-Dw 700 or AGQS as defined in Env-Or 603.03, upon written request by the department, a responsible party shall be required to sample and test for PFAS analytes and any PFAS or PFAS precursor, detectable by the following methods:

(a) EPA Method 533, referenced in 40 CFR Part 141 and available as noted in Appendix B;

(b) EPA Method 537 in EPA Document #EPA/600/R-08/092, available as noted in Appendix B;

(c) EPA Method 537.1, referenced in 40 CFR Part 141 and available as noted in Appendix B; and

(d) EPA Method 1633, in EPA Document EPA 821-R-24-001, available as noted in Appendix B.

Env-Or 614.02 Request for Records. As part of a site investigation, the responsible party shall supply all Safety Data Sheets (SDS) or other information related to PFAS use at the responsible party's facility that

are in the possession of the responsible party if requested by the department. The responsible party shall certify that a response to such a request is complete and accurate to the best of its knowledge.

Env-Or 614.03 Disposal of Investigation and Remediation Wastes. Except for PFAS determined to be hazardous waste pursuant to RSA 147-A, PFAS waste generated from the investigation or remediation of a site undertaken pursuant to this chapter may be disposed at a facility authorized to accept solid waste rather than a facility authorized to receive hazardous waste. This provision does not protect or immunize the disposing party from any liability to third parties that would otherwise attach or from any subsequent application of this chapter, Env-Or 600, Env-Hw 100 et seq., or other applicable laws and rules to such disposal.

### Appendix A: State Statutes Implemented

Rule Section(s)	State Statute Implemented
Env-Or 600 (see below for additional statutes)	RSA 146-A:3-a; RSA 146-C:11; RSA 147-A:9; RSA 147-F:11-13 & 15; RSA 485-C:1, 6, 6-a, & 6-b
Env-Or 601	RSA 146-A:11-c; RSA 146-C:9; RSA 147-A:3; RSA 147-F:18; RSA 485-C:4
Env-Or 602.03, 602.04, 602.05, 602.10, 602.14, 602.20, 602.24, 602.26, 602.27, 602.29, 602.38	RSA 146-A:11-c; RSA 146-C:9; RSA 147-A:3; RSA 147-F:18; RSA 485-C:4
Env-Or 603.04	RSA 485-C:4, III & VIII (c)
Env-Or 604.02	RSA 485-C:4, IX; RSA 485-C:14-b
Env-Or 604.05 - 604.09	RSA 146-A:5; RSA 146-C:11, I-a; RSA 485-C:4, VIII
Env-Or 606.19	RSA 146-A:11-c, V-a; RSA 146-C:9, X; RSA 147-A:3, IV; RSA 485-C:4, VIII; RSA 485-H:13; RSA 147-F:11; RSA 147-F:12; RSA 147-F:13
Env-Or 607.06	RSA 485-C:4, VIII; RSA 485-C:4, X; RSA 485-C:4, XI
Env-Or 614	RSA 485-H:13

### Appendix B: Incorporated References

Rule	Reference	Obtain At:
		ASTM International 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA 19428-2959 1-877-909-2786 (USA & Canada) <a href="http://www.astm.org/">http://www.astm.org/</a>
Env-Or 606.19(c) Env-Or 606.19(d)(2)&(3)	“Standard Guide for Risk Based Corrective Action” ASTM E 2081-22(2022)	PDF \$125; Hardcopy \$125 + S/H
606.19(c) 606.19(d)(2)&(3)	“Standard Guide for Risk Based Corrective Action at Petroleum Release Sites” ASTM E 1739-95(Reapproved 2015)	Available for review at the New Hampshire Department of Environmental Services.
		Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Rule	Reference	Obtain At:
		(202) 272-0167
Env-Or 614.01(a)	EPA Method 533 (2019). EPA Document ID Number: 815-B-19-020. Determination of Per- and Polyfluoroalkyl Substances in Drinking Water by Isotope Dilution Anion Exchange Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry. U.S. Environmental Protection Agency, Washington, DC.	No cost to download from: <a href="https://www.epa.gov/sites/default/files/2019-12/documents/method-533-815b19020.pdf">https://www.epa.gov/sites/default/files/2019-12/documents/method-533-815b19020.pdf</a>
Env-Or 614.01(b)	EPA Method 537 Revision 1 (2015). EPA Document ID Number EPA/600/R-08/092. Shoemaker, J. A., P. Grimmett, and B. Boutin. Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). U.S. Environmental Protection Agency, Washington, DC.	No cost to download from: <a href="https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=525468&amp;Lab=NERL">https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=525468&amp;Lab=NERL</a>
Env-Or 614.01(c)	EPA Method 537.1 Revision 2.0 (2020). EPA Document ID Number: EPA/600/R-20/006. Shoemaker, J. and Dan Tettenhorst. Method 537.1 Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). U.S. Environmental Protection Agency, Washington, DC.	No cost to download from: <a href="https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=539984&amp;Lab=CESER">https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=539984&amp;Lab=CESER</a>
Env-Or 614.01(d)	EPA Method 1633 (2024). EPA Document ID Number: 821-D-24-001. 4th Draft Method 1633* Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS *Finalized for the Aqueous Matrices: Wastewater, Surface Water, and Groundwater. U.S. Environmental Protection Agency, Washington, DC.	No cost to download from: <a href="https://www.epa.gov/system/files/documents/2022-12/3rd%20Draft%20Method%201633%20December%202022%2012-20-22_508.pdf">https://www.epa.gov/system/files/documents/2022-12/3rd%20Draft%20Method%201633%20December%202022%2012-20-22_508.pdf</a>

### Appendix C: Statutory Definitions

#### RSA 310-A:2:

V. “Engineer of record” means a professional engineer who seals drawings, reports, or documents for a project. The seal shall acknowledge that the professional engineer prepared, coordinated, or had subordinates

prepare under the direct supervision of the professional engineer, drawings, reports, or documents for a project. The engineer of record shall not be responsible for engineering work performed and sealed by other professional engineers, including independent consulting engineers who work under the coordination of the engineer of record.

RSA 485-C:2:

I. "Ambient groundwater quality standards" means maximum concentration levels for regulated contaminants in groundwater which result from human operations or activities, as delineated in RSA 485-C:6.

VIII. "Groundwater" means subsurface water that occurs beneath the water table in soils and geologic formations.

RSA 146-A:2:

III. "Oil" means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquified petroleum gas or synthetic natural gas regardless of derivation or source;

VI-b. "Surface water" means perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, watercourses, and other bodies of water, natural or artificial;

RSA 146-C:1:

VII-a. "Hazardous substance" means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a.

RSA 147-A:2:

VII. "Hazardous waste" means a solid, semi-solid, liquid or contained gaseous waste, or any combination of these wastes:

(a) Which, because of either quantity, concentration, or physical, chemical, or infectious characteristics may:

(1) Cause or contribute to an increase in mortality or an increase in irreversible or incapacitating reversible illness; or

(2) Pose a present or potential threat to human health or the environment when improperly treated, stored, transported, disposed of or otherwise mismanaged.

(b) Or which has been identified as a hazardous waste by the department using the criteria established under RSA 147-A:3, I or as listed under RSA 147-A:3, II. Such wastes include, but are not limited to, those which are reactive, toxic, corrosive, ignitable, irritants, strong sensitizers or which generate pressure through decomposition, heat or other means. Such wastes do not include radioactive substances that are regulated by the Atomic Energy Act of 1954, as amended, or household pharmaceutical wastes collected pursuant to RSA 318-E.

RSA 147-B:2:

VII. "Hazardous waste" means a solid, semi-solid, liquid or contained gaseous waste, or any combination of these wastes:

(a) Which, because of either quantity, concentration, or physical, chemical, or infectious characteristics may:

(1) Cause or contribute to an increase in mortality or an increase in irreversible or incapacitating reversible illness; or

- (2) Pose a present or potential threat to human health or the environment when improperly treated, stored, transported, disposed of or otherwise mismanaged.
- (b) Or which has been identified as a hazardous waste by the department using the criteria established under RSA 147-A:3, I or as listed under RSA 147-A:3, II. Such wastes include, but are not limited to, those which are reactive, toxic, corrosive, ignitable, irritants, strong sensitizers or which generate pressure through decomposition, heat or other means. Such wastes do not include radioactive substances that are regulated by the Atomic Energy Act of 1954, as amended.

VIII. "Hazardous materials" means those substances or materials in such quantity and form which may pose an unreasonable risk to health and safety or property when transported in commerce, by all modes which may include, but are not limited to, explosives, radioactive materials, etiologic agents, flammable liquids or solids, combustible liquids or solids, poisons, oxidizing or corrosive materials, and compressed gases which are listed by the Materials Transportation Bureau of the United States Department of Transportation in Title 49 of the Code of Feder