Effective March 21, 2018, Env-Wq 403 reads as follows:

PART Env-Wq 403 LARGE GROUNDWATER WITHDRAWALS

Statutory Authority:

Env-Wq 403.01 Purpose. The purpose of these rules is to establish procedures and standards for development of a large groundwater withdrawal.

Env-Wq 403.02 Applicability.

(a) These rules shall apply to:

(1) The development of a new source of groundwater that constitutes a large groundwater withdrawal;

(2) The renewal of an existing large groundwater withdrawal permit;

(3) The development of a replacement well for an existing large groundwater withdrawal; and

(4) The new extraction or drainage of groundwater from a shaft or hole in the earth that equals or exceeds 57,600 gallons in any 24-hour period.

(b) These rules shall not apply to the removal or diversion of water that is not groundwater from an excavation.

Env-Wq 403.03 Statutory Definitions. When used in these rules, the terms listed in table 403-1, below, shall have the meaning assigned by the statute identified, as reprinted in Appendix B:

Table 403-1: Statutory Definitions

Term	Statute
Community water system	RSA 485:1-a, I
Groundwater	RSA 485-C:2, VIII
Large groundwater withdrawal	RSA 485-C:2, IX-a
Person	RSA 485-C:2, XI
Public water system	RSA 485:1-a, XV
Replacement well	RSA 485-C:2, XIII-a
Short-term use	RSA 485-C:2, XIII-b.
Surface water	RSA 485-A:2, XIV (surface waters of the state)
Well	RSA 485-C:2, XVII
Wetlands	RSA 482-A:2, X

Env-Wq 403.04 Part-Specific Definitions.

(a) "Authorized signer" means an individual officially authorized by an applicant or permittee that is an entity to sign applications and other reports or requests on behalf of the applicant or permittee.

(b) "Bottled water" means "bottled water" as defined in Env-Dw 303.03.

(c) "Conceptual hydrologic model" means a description, incorporating published information, available field data, and conservative assumptions, of geology, aquifer hydraulics, and mechanisms and rate of recharge for the potential impact area.

(d) "Cone of depression" means a depression in the potentiometric surface of a body of groundwater that develops around a well from which water is being withdrawn and corresponds to the zone of influence of the withdrawal.

(e) "Department" means the department of environmental services.

(f) "Downgradient area" means the area described in RSA 485-C:21, V-e (c).

(g) "Hydrologic cycle" means the pathways along which water moves through the environment.

(h) "Hydrology" means the occurrences, movement, and chemical nature of water in the natural environment.

(i) "Permitted withdrawal" means a large groundwater withdrawal for which a permit has been issued under Env-Wq 403 or predecessor rules in Env-Ws 387 or Env-Ws 388.

(j) "Potential impact area" means the area that is required to be assessed for potential impacts under RSA 485-C:21, V-e.

(k) "Potentiometric surface" means the surface where groundwater pressure is equal to atmospheric pressure.

(l) "Qualified professional" means an individual who by education and experience is able to quantitatively analyze and interpret hydrology.

(m) "Recharge area" means the land surface from which water reaching a location or region originates.

(n) "Registered water user" means any water user who is registered and who reports water usage in accordance with RSA 488:3 and Env-Wq 2102.

(o) "Water budget" means a balance of the mass of water entering, leaving, and stored within a hydrologic system.

(p) "Water well board" means the board established under RSA 482-B:3 to license water well contractors and pump installers and otherwise regulate the construction of water wells under We 100-1000.

(q) "Water-related natural resource" means a natural resource that is dependent on water.

(r) "Wellhead" means the constructed opening through which groundwater reaches the land surface, such as a well casing, wellfield collector, or spring collection box.

(s) "Withdrawal" means the extraction of groundwater for any purpose.

Env-Wq 403.05 Process for New Large Groundwater Withdrawal Preliminary Application.

(a) To apply for a permit to develop a new large groundwater withdrawal, the applicant shall:

(1) Submit a large groundwater withdrawal permit preliminary application prepared in accordance with Env-Wq 403.06 to the department;

(2) As required by RSA 485-C:21, II, send a complete copy of the preliminary application via certified mail to each municipality and public water supplier in the potential impact area; and

(3) If a public hearing is held pursuant to RSA 485-C:21, III, attend the public hearing to provide information on the application.

(b) Upon receipt of a preliminary application pursuant to (a)(1), above, the department shall proceed in accordance with RSA 485-C:21, III through V and Env-Wq 403.14.

(c) All information submitted by the applicant that is material to the final decision of the department shall be based on information and data that is available at the time the application is submitted.

(d) If any changes to the applicant's ownership or address occur at any time during the application process, the applicant shall notify the department of the change in writing within 10 days of the change.

Env-Wq 403.06 Large Groundwater Withdrawal Permit Preliminary Application.

(a) Subject to (b), below, the large groundwater withdrawal permit preliminary application required by Env-Wq 403.05(a)(1) shall include:

(1) On a document to facilitate submission of information for a large groundwater withdrwawal permit ppplication obtained from the department, the following information:

a. The name, mailing address, daytime telephone number, and, if available, e-mail address of the applicant;

b. If the applicant is other than an individual, the name, affiliation with the applicant, daytime telephone number and, if available, e-mail address of the individual who will serve as the contact person for purposes of the application;

c. The name of, mailing address, daytime telephone number, and, if available, e-mail address of the company preparing the application, and the name of the primary contact person;

d. The name and title of the authorized signer, and if the authorized signer is not an official of the applicant, a copy of the written authorization;

e. The name of the licensed professional who prepared the application, together with the individual's license type and number; and

f. Project information, including:

1. The name of the owner of the project site;

2. The street address of the project and the tax map lot and block number;

3. The name of each municipality within the potential impact area of the project;

4. The name of each community water system within the potential impact area of the project;

5, Project type;

6. Type of proposed water source;

7. Number of proposed water sources;

8. Proposed cumulative withdrawal volume in gallons per day; and

9. A narrative summary of the project;

(2) The maximum 24-hour withdrawal volume for which the new withdrawal permit is being requested;

(3) A water conservation plan prepared in accordance with Env-Wq 2101;

(4) A description of use prepared in accordance with Env-Wq 403.08;

(5) A conceptual hydrologic model of the withdrawal prepared in accordance with Env-Wq 403.09;

(6) A delineation of the estimated potential impact area and a description of how it was delineated using the conceptual hydrologic model, prepared in accordance with Env-Wq 403.09;

(7) A preliminary inventory of contamination sources completed in accordance with Env-Wq 403.10;

(8) A preliminary inventory of water resources and uses in the potential impact area completed in accordance with Env-Wq 403.11;

(9) A description of withdrawal effects estimated in accordance with Env-Wq 403.12;

(10) A description of the withdrawal testing program design prepared in accordance with Env-Wq 403.13;

(11) For a new groundwater source of bottled water where a pre-testing conference is being requested, the information required by Env-Dw 303.13; and

(12) A list of the names and mailing addresses of the municipalities and public water suppliers being notified as required by RSA 485-C:21, II and, once available, copies of the return receipts.

(b) As provided in RSA 485-C:21, II, for a public water system, a preliminary report prepared in accordance with Env-Dw 302.05 shall be submitted as the application.

(c) The preliminary large groundwater withdrawal permit application shall be stamped and signed by an individual possessing either a professional geologist's license issued in accordance with RSA 310-A:118-139 or a professional engineer's license issued in accordance with RSA 310-A:2-27.

Env-Wq 403.07 Signatures and Certifications.

(a) Each application, report, and request filed pursuant to this part shall be signed and certified as specified in this section.

(b) The document shall be signed by the submitter as follows:

(1) If the submitter is an individual, the individual shall sign and date the document; and

(2) If the submitter is other than an individual, the authorized signer shall sign and date the document and print or type his or her name and title.

(c) All signatures provided under this part, including those provided by the professional of record, shall constitute certification that:

(1) The information for which the signer is responsible that is contained in or otherwise submitted with the application is true, complete, and not misleading to the knowledge and belief of the signer; and

(2) The signer understands that:

a. The submission of false, incomplete, or misleading information is grounds for:

1. Not approving the application, report, or request;

2. Revoking any permit or approval that is granted based on the information;

3. Referring the matter to the appropriate authority for potential action against the professional license held by the signer; and

4. If the signer is acting as or on behalf of a listed engineer as defined in Env-C 502.10, debarring the listed engineer from the roster; and

b. He or she is subject to the penalties specified in New Hampshire law, currently RSA 641:3, for making unsworn false statmentts.

(c) Any signature provided on behalf of a submitter also shall constitute certification that:

(1) If a permit is issued, the submitter agrees to comply with all applicable rules and conditions of the permit; and

(2) If the submitter is other than an individual, the individual has been duly authorized by the submitter to sign the application.

Env-Wq 403.08 Description of Use. The description of use required by Env-Wq 403.06(a)(4) shall identify:

(a) The purpose of the proposed large groundwater withdrawal;

(b) Other existing water sources currently used by the applicant, if any;

(c) If applicable, the previously assigned permitted production volumes, established safe yields, or the known capacity of the applicant's other water sources; and

(d) The current and anticipated daily and annual demand for water including maximum, minimum, and average withdrawal rates and volumes.

Env-Wq 403.09 Conceptual Hydrologic Model and Potential Impact Area.

(a) The conceptual hydrologic model of the withdrawal required by Env-Wq 403.06(a)(5) shall:

(1) Be developed by a qualified professional;

(2) Identify the sources of information used to develop the model; and

(3) Be prepared as specified in (b) through (k), below.

(b) The conceptual hydrologic model shall be based on information including but not limited to:

(1) A summary of the results of any hydrogeologic investigations conducted on site to date;

(2) Historical water level data;

(3) Department records for existing water users and resources including testing and production reports, as available;

(4) Published reports and maps;

(5) Natural Resource Conservation Service maps, as applicable;

(6) Hydrogeologic mapping information such as surficial material, lineament, and bedrock or other remote sensing analysis; and

(7) Geophysical data, if available.

(c) Where historical environmental data is used to develop the conceptual hydrologic model, such data shall be adjusted to account for any major land use changes that have occurred.

(d) As required by RSA 485-C:21, V-e (a) and (b), the conceptual hydrologic model pumping conditions shall be based on the assumption of 180 days of continuous operation of the withdrawal at maximum rates without direct recharge to groundwater from rainfall or snowmelt.

(e) The conceptual hydrologic model shall include:

(1) A description of the geology and geomorphologic history of the region including the governing hydrogeologic characteristics of the bedrock and surficial geologic formations, such as the chronology and mechanisms of origin and change, grain size distribution, and bedrock fracture characteristics;

(2) Generalized geologic cross-sections through the region, including at least one through the well or withdrawal site, based on available information such as well logs, geologic reports, maps, and subsurface data; and

(3) Delineated extents of the potential impact area and its components, and a description of how the delineated potential impact area meets the requirements of RSA 485-C:21, V-e.

(f) The conceptual hydrologic model shall identify data needed to refine the model to complete the report required by Env-Wq 403.20.

(g) Where data gaps are identified during the development of the conceptual hydrologic model, the model shall:

(1) Identify the data gaps and their significance to understanding the potential impacts of the proposed withdrawal; and

(2) Estimate the reasonably suspected hydrologic scenario(s) associated with the withdrawal that could occur given the known and unknown model parameters.

(h) The estimated extents of the potential impact area and each of its components shall be presented on a map that:

(1) Is at a scale of 1:24,000 or 1:25,000, or at a scale that gives greater detail;

(2) Has as its base a United States Geologic Survey (USGS) topographic map or an original map depicting equivalent features and information; and

(3) Shows a map legend that includes a map title, date, scale, and north arrow.

(i) A description of the hydrologic cycle and a water budget calculation for the potential impact area shall be prepared that describes:

(1) The amounts and timing of precipitation, runoff, storage, recharge, and discharge;

(2) The distribution and availability of water necessary to maintain natural resources, existing water uses, and the proposed withdrawal; and

(3) The location and amounts of natural and artificial loss of water, consumption, discharge, and recharge of water to and from the potential impact area.

(j) A comprehensive description of the groundwater flow regime for the potential impact area that describes hydraulic boundaries, recharge characteristics, and the interaction of water bodies associated with the withdrawal shall be prepared that includes:

(1) Hydrologic conditions at the water table, in any confining or semi-confining layers of the overburden aquifer, and in the bedrock;

(2) The occurrence of groundwater flow both in horizontal and vertical directions, under average, non-pumping, and conceptual hydrologic model-based operating conditions;

(3) The magnitude and direction of vertical and horizontal hydraulic gradients, under average, non-pumping, and conceptual hydrologic model-based operating conditions;

(4) Hydraulic influences of regional groundwater flow from all aquifers and surface water bodies, or other water resources in hydraulic communication with the proposed withdrawal; and

(5) Preferential groundwater flow pathways caused by the properties of the deposits or bedrock.

(k) The conceptual hydrologic model and the estimated extents of the potential impact area shall be refined in accordance with Env-Wq 403.17 and presented in the report required by Env-Wq 403.20 based on results from withdrawal testing performed in accordance with Env-Wq 403.16.

Env-Wq 403.10 Preliminary Inventory of Contamination Sources.

(a) The preliminary inventory of contamination sources required by Env-Wq 403.06(a)(7) shall be prepared in accordance with this section.

(b) An inventory of known and potential contaminant sources shall be completed for an area that extends a distance of 1,000 feet outside of the estimated limit of the cone of depression, where the cone of depression is developed based on the assumption of 180 days of continuous operation of the withdrawal at maximum rates without direct recharge to groundwater from rainfall or snowmelt, as specified in RSA 485-C:21, V-e (a).

(c) The contaminant source inventory shall be used to estimate withdrawal effects in accordance with Env-Wq 403.12.

(d) The contamination source inventory shall:

(1) Be completed before the withdrawal test performed in accordance with Env-Wq 403.16;

(2) Be compiled from a search of the following information sources:

a. Records at the department;

b. Records at the municipalities; and

c. A windshield survey;

(3) Identify and describe all known and potential contamination sources, by providing the following information for each known and potential source of contamination:

a. The site name and physical address;

b. The name and mailing address of each property owner and operator;

c. For each known source of contamination, a description of the nature and extent of contamination and the status of any site investigation or remedial action; and

d. For each potential source of contamination, the type of potential contamination source using descriptions such as those in RSA 485-C:7, II.

Env-Wq 403.11 Preliminary Inventory of Water Resources and Uses.

(a) The inventory of water resources and uses in the potential impact area required by Env-Wq 403.06(a)(8) shall:

(1) Be prepared in accordance with this section;

(2) Identify information sources and describe efforts to collect information pertaining to water uses and resources within the potential impact area identified pursuant to Env-Wq 403.09; and

(3) Be used to estimate withdrawal effects in accordance with Env-Wq 403.12, and identify the public water suppliers required to be notified of the proposed withdrawal pursuant to RSA 485-C:21, II.

(b) The inventory of water resources and uses shall be based on the following:

(1) Department records of other water uses and resources;

(2) Published reports;

(3) Municipal and public inventories, tax maps, and records; and

(4) A visual survey conducted by a qualified professional.

(c) The water resource component of the inventory shall:

(1) Identify the type and location of each water-related natural resource in the potential impact area, including surface waters, wetlands, springs, vernal pools, and any other water-related natural resources that might be influenced by the withdrawal; and

(2) Include the results of a query of the database of rare species and exemplary natural communities maintained by the NH department of natural and cultural resources, natural heritage bureau.

(d) The water use component of the inventory shall identify the use, the purpose of the use, an estimate of the volume of the use, the tax map and lot number of the site on which the use occurs, and the name and mailing address of each property owner and operator for each of the following water uses:

(1) Public water supply withdrawals and impoundments;

(2) Registered water users including withdrawals, recharges, deliveries, and releases;

(3) Permitted surface water discharges;

(4) Permitted groundwater discharges;

(5) Areas served by public water supply systems and the locations of their withdrawals;

(6) Areas served by public sewer and the locations of the discharge;

(7) Private wells within an area that extends a distance of 1,000 feet outside of the estimated limit of the cone of depression associated with the withdrawal; and

(8) Any other water uses that might be influenced by the withdrawal.

(e) To the extent the information is available in records of the department, provided by the well owner, or otherwise known, the inventory of private wells compiled pursuant to (d)(7), above, shall include the following information:

(1) The installation date of the well and the name and license number of the well installer;

(2) The type of well and its specifications, including overall depth, casing depth, depth to water in the well, depth to bedrock, well diameter, and well yield;

(3) Well pump size, depth, and age;

(4) The total number of wells on the property;

(5) The number of individuals served by the well;

(6) A description of water treatment equipment installed, if any;

(7) A description of water quantity or water quality problems with the well; and

(8) A description of the most recent maintenance of the well or pump, including the date(s) the maintenance was performed.

(f) The complete inventory of water resources and uses in the potential impact area shall be presented so as to depict the data on each of the following maps, or on a single map that combines the features of each of the following maps:

(1) A map that meets the requirements of Env-Wq 403.09(h); and

(2) A current tax map.

Env-Wq 403.12 Estimation of Withdrawal Effects.

(a) The estimated effects of the proposed withdrawal on water resources and uses in the inventory of the potential impact area required by Env-Wq 403.06(a)(8) shall be completed in accordance with this section.

(b) The estimate of withdrawal effects shall:

(1) Be based on the conceptual hydrologic model and the potential impact area estimate identified pursuant to Env-Wq 403.09;

(2) Be prepared by a qualified professional;

(3) Account for current land use patterns;

(4) Evaluate the likelihood of affecting the extent of known or potential groundwater contamination identified in the inventory prepared pursuant to Env-Wq 403.10; and

(5) Quantify impacts on water resources and uses identified in the inventory prepared pursuant to Env-Wq 403.11.

(c) The applicant shall describe any limitations to the estimate of the withdrawal effects, including but not limited to those arising from data gaps or the complexity of the geology.

Env-Wq 403.13 Withdrawal Testing Program Design.

(a) The withdrawal testing program required by Env-Wq 403.06(a)(10) shall be designed to:

(1) Estimate the effects of the withdrawal under conceptual hydrologic model pumping conditions, that is, 180 days of continuous operation of the withdrawal at maximum rates without direct recharge to groundwater from rainfall or snowmelt;

(2) Address critical data gaps, limitations, or insufficiencies identified in Env-Wq 403.09 and Env-Wq 403.11 that are necessary to complete the impact assessment required by RSA 485-C:21 and this part; and

(3) Provide the data specified in (e), below.

(b) The program shall be designed by a qualified professional and performed by or under the direction of a qualified professional.

(c) The proposed withdrawal testing program shall include the measurement and observation of a representative number and variety of water resources and uses such that the data can be used to estimate effects on all water resources and users that might be adversely impacted.

(d) For all wellheads, the withdrawal testing production rate shall equal or exceed the rate requested in the permit application.

(e) The withdrawal testing program shall be designed to provide data to:

(1) Demonstrate production of the maximum withdrawal volume requested for each proposed withdrawal or well;

(2) Identify the response of the aquifer(s) and other hydrologically related water resources to pumping at the withdrawal or wellhead;

(3) Refine the conceptual hydrologic model and potential impact area delineation in accordance with Env-Wq 403.17;

(4) Quantify the impacts of the withdrawal and conclude if the impacts meet the criteria for adverse impacts as specified by Env-Wq 403.24;

(5) Develop an impact monitoring and reporting program, if necessary, in accordance with Env-Wq 403.26;

(6) Develop an impact mitigation program, if necessary, in accordance with Env-Wq 403.31;

(7) Establish values or ranges of values for environmental factors that will, during the period of the permit, be used to assess whether withdrawal effects are consistent with original estimates and indicate whether adverse impacts are or may be occurring; and

(8) Determine a revised permitted production volume for the withdrawal, if necessary, to ensure that adverse impacts as identified in RSA 485-C:21, V-c do not occur.

(f) For a bottled water withdrawal, the withdrawal testing program shall comply with pumping test requirements for new groundwater sources of bottled water specified in Env-Dw 303.

(g) For all other withdrawals, the withdrawal testing program shall comply with pumping test requirements for large production wells for large community water systems specified in Env-Dw 302.

(h) Withdrawal testing and evaluation methods, procedures, data, laboratory reports, and other supporting documentation shall be presented in the final report required by Env-Wq 403.20.

(i) As part of the withdrawal testing, the applicant shall submit a written request for permission to access the property and monitor water levels to:

(1) All water users located within 1,000 feet of the proposed withdrawal; and

(2) Representative water users located within an area that extends a distance of 1,000 feet outside of the estimated limit of the cone of depression that is developed based on 180 days of continuous operation of the withdrawal at maximum rates without direct recharge to groundwater from rainfall or snowmelt.

(j) For any water user targeted for water level monitoring in accordance with (i), above, that is a public water supply or a registered water user under RSA 488:3, the request to monitor water levels shall include a request to monitor extraction rates.

(k) If the inventory performed in accordance with Env-Wq 403.10 identifies the potential to influence the extent of known or potential groundwater contamination, the applicant shall collect water quality samples from representative locations both prior to and during the withdrawal testing program in accordance with the following:

(1) When water quality sampling is required prior to the withdrawal test, the results of the pre-withdrawal testing water quality samples shall be submitted to the department at least 30 days prior to the start of the withdrawal test; and

(2) When water quality sampling is required during the withdrawal test, the results of the water quality samples collected during the withdrawal test shall be submitted to the department with the final report prepared in accordance with Env-Wq 403.20.

Env-Wq 403.14 Approval of a Large Groundwater Withdrawal Permit Preliminary Application.

(a) Upon receiving a large groundwater withdrawal application under Env-Wq 403.05(a)(1), the department shall determine whether the application is administratively complete, namely that the applicant has submitted everything required by Env-Wq 403.06.

(b) If the application does not contain everything required by Env-Wq 403.06, the department shall notify the applicant of what is missing by sending a written notice which:

(1) Identifies what information is needed and the deadline for submitting the information, established based on the type and volume of the information needed; and

(2) Informs the applicant that the application will be deemed to have been withdrawn if the information requested is not provided by the deadline, unless an extension is requested and granted pursuant to Env-Wq 403.38.

(c) If the application does contain everything required by Env-Wq 403.06 or upon receipt of all information requested pursuant to (b), above, the department shall, within 10 business days, notify the applicant in writing, with a copy to the local governing body as required by RSA 485-C:21, II, that the application is administratively complete.

(d) The department's determination that an application is administratively complete shall not be construed as a determination that the application is approvable as submitted.

(e) Upon determining that an application is administratively complete, the department shall:

(1) Conduct a public hearing in accordance with RSA 485-C:21, IV, if one is requested in accordance with RSA 485-C:21, III; and

(2) Review the application to determine whether the criteria in (j), below, are met.

(f) After proceeding in accordance with (e), above, the department shall:

(1) Approve the application, if the criteria specified in (j), below, are met;

(2) Notify the applicant as specified in (i), below, of the area(s) in which the application is deficient, if the application is deficient in any of the criteria in (j), below; or

(3) Deny the application, if either or both of the following are true:

a. The criteria specified in (j), below, are not met; or

b. The information submitted demonstrates that the project is not likely to meet the criteria for issuance of a permit specified in Env-Wq 403.21(d).

(g) The department shall notify the applicant in writing of its decision to approve or deny the preliminary groundwater withdrawal application within 45 days of the close of the written public comment period required by RSA 485-C:21, V.

(h) If the preliminary application is approved, the notice sent pursuant to (g), above, shall advise the applicant whether, based on the information provided in the preliminary application, a waiver will be required for a specific requirement under these rules.

(i) A notice sent pursuant to (f)(2), above, shall:

(1) Be sent within 45 days of the close of the written public comment period required by RSA 485-C:21, V;

(2) Identify all areas in which the application is deficient and the deadline for submitting an addendum to the application to correct the deficiencies, established based on the type and volume of the deficiencies needing to be corrected; and

(3) Inform the applicant that the application will be deemed to have been withdrawn if the information requested is not provided by the deadline, unless an extension is requested and granted pursuant to Env-Wq 403.38.

(j) The department shall approve a large groundwater withdrawal preliminary application only if all of the following criteria are met:

(1) The application contains everything required by Env-Wq 403.06;

(2) The information contained in the application is complete and correct;

(3) The department concludes that the withdrawal testing program submitted pursuant to Env-Wq 403.13 is likely to accurately depict actual operating conditions and related influences on affected water resources and uses;

(4) The water conservation plan required by Env-Wq 2101 has been submitted to the department; and

(5) All public notification requirements specified in RSA 485-C:21 have been completed.

(k) The preliminary application approval shall expire 4 years from the date of approval if the final report required by Env-Wq 403.20 has not been received by the department.

(*l*) No large groundwater withdrawal shall be developed after expiration of the corresponding preliminary application approval. If the applicant wishes to develop the large groundwater withdrawal after expiration, the applicant shall submit a new application in accordance with this part. If there have been no changes in the applicable requirements or the relevant information, the applicant may submit the same application as was previously approved provided the applicant submits updated inventories of contaminant sources and water resources and uses.

Env-Wq 403.15 Proceedings Subsequent to Approval of Preliminary Application.

(a) After the applicant receives approval pursuant to Env-Wq 403.14, the applicant shall:

(1) Complete withdrawal testing in accordance with Env-Wq 403.16;

(2) Refine the conceptual hydrologic model and potential impact area for the withdrawal in accordance with Env-Wq 403.17;

(3) Update and revise the contamination source inventory and the inventory of water resources and uses based on testing results, in accordance with Env-Wq 403.18;

(4) Describe impacts to water resources and uses in accordance with Env-Wq 403.19;

(5) When observations under operating conditions are necessary to validate test results and verify that adverse impacts will not occur, develop and obtain approval of an impact monitoring and reporting program in accordance with Env-Wq 403.26;

(6) When an adverse impact as identified in Env-Wq 403.24 is anticipated to occur as a result of the withdrawal, the applicant or permittee shall complete the following:

a. Reduce the proposed production volume of the withdrawal in accordance with Env-Wq 403.17(b) to a level where no adverse impacts are anticipated; or

b. Design and implement mitigation measures in accordance with Env-Wq 403.31;

(7) Submit a final report completed in accordance with Env-Wq 403.20 to the department;

(8) Send a complete copy of the final report via certified mail to each municipality and public water supplier in the potential impact area; and

(9) If a public hearing is held pursuant to RSA 485-C:21, V-a, attend the public hearing to provide information on the application.

(b) Upon receipt of a final report pursuant to (a)(7), the department shall proceed in accordance with RSA 485-C:21, V-a and Env-Wq 403.21.

Env-Wq 403.16 Withdrawal Testing.

(a) Withdrawal testing performed to meet the requirements of this part shall not be undertaken unless and until the department approves the preliminary application in accordance with Env-Wq 403.14.

(b) Withdrawal testing shall be completed as specified in the plan prepared in accordance with Env-Wq 403.13.

(c) Withdrawal testing observations, results, and interpretations shall be presented in the report completed in accordance with Env-Wq 403.20.

(d) When the withdrawal testing program developed in accordance with Env-Wq 403.13 includes the monitoring of water levels of any existing sources identified in the inventory of water users and resources, permission to access these locations shall be obtained by the applicant by sending a written notice of the forthcoming test to each owner and each user of such sources as specified in (e), below.

(e) The notice sent pursuant to (d), above, shall:

(1) Explain the reason for requesting information about and access to the source, including that state law requires the applicant to assess whether the proposed withdrawal could adversely impact existing water users and that the source's owner is not requried to provide the requested information or access;

(2) Request monitoring permission and a written response;

(3) Define responsibility to prepare the source for monitoring;

(4) State the monitoring requirements;

(5) Inform the source user and owner that the applicant will collect a water sample for bacteria from the source both prior to and following the installation or use of monitoring equipment in the source;

(6) If the source is a well, include an offer for the applicant to disinfect and reseal the well when the monitoring ends;

(7) Inform the source user and owner that the applicant will supply potable water or cease the withdrawal test should their water supply needs not be met during the monitoring test;

(8) Identify the name and telephone number of:

a. The individual point of contact for the applicant who should be contacted in the event of a water outage during testing; and

b. The department staff member who can be contacted for more general information about the state's large groundwater withdrawal requirements, as identified by the department upon request of the applicant; and

(9) Be sent via certified mail with return receipt requested, or by another method that demonstrates receipt of the notice, at least 14 days prior to commencing the withdrawal testing program.

(f) If the applicant is unable to monitor a source of water of a potentially impacted user, the estimate of the effect of the withdrawal on the source shall:

(1) Be based upon data collected from other nearby wells that represent the sources that could not be monitored; or

(2) Be based on an estimate using data collected during the withdrawal testing and analytical techniques.

(g) Bacteria samples taken pursuant to (e)(5), above, shall be submitted for analyses for coliform bacteria and analyzed at a laboratory accredited pursuant to Env-C 300 using a method that enumerates the number of bacteria colonies present in the samples collected.

Env-Wq 403.17 Conceptual Hydrologic Model Refinement.

(a) The applicant shall refine the conceptual hydrologic model developed in accordance with Env-Wq 403.09 based on results of the withdrawal testing completed in accordance with Env-Wq 403.16.

(b) If, after the withdrawal testing, the applicant elects to reduce the withdrawal volume proposed pursuant to Env-Wq 403.06(a)(2), the applicant shall refine the conceptual hydrologic model to reflect the revised proposed withdrawal rate.

(c) Conceptual hydrologic model refinement shall include a refinement of the potential impact area estimated in accordance with Env-Wq 403.09.

(d) The refined conceptual hydrologic model and potential impact area delineation shall be presented with supporting documentation in the final report prepared in accordance with Env-Wq 403.20.

Env-Wq 403.18 Contamination Source and Water Resource and Use Inventory Updates and Revisions.

(a) The applicant shall update the preliminary contamination source inventory completed in accordance with Env-Wq 403.10 if the inventory is more than 90 days old.

(b) The applicant shall update the preliminary water resource and use inventory completed in accordance with Env-Wq 403.11 if the inventory is more than 90 days old.

(c) The applicant shall revise the preliminary contamination source inventory and water resource and use inventory to reflect any expansion or decrease in the estimated limits of the cone of depression and potential impact area after the conceptual hydrologic model is refined in accordance with Env-Wq 403.17.

(d) The applicant shall present the updated and revised inventories in the final report prepared in accordance with Env-Wq 403.20.

Env-Wq 403.19 Impact Description.

(a) The anticipated impacts from the withdrawal shall be described in the final report prepared in accordance with Env-Wq 403.20.

(b) The description shall be completed by a qualified professional.

(c) Impacts shall be defined using the refined conceptual hydrologic model withdrawal conditions specified in Env-Wq 403.17 and the contamination source inventory prepared in accordance with Env-Wq 403.10 and the water use and resource inventory prepared in accordance with Env-Wq 403.11, as updated and revised in accordance with and Env-Wq 403.18.

(d) The description shall be based on results from the withdrawal testing program and refined conceptual hydrologic model.

(e) Impacts shall be quantified to the extent necessary to determine whether adverse impacts might occur, and, if adverse impacts might occur, to:

(1) Develop a monitoring and reporting program to accompany the operation of the proposed withdrawal to provide data that assesses whether adverse impacts are occurring or will occur;

(2) Develop mitigation measures as required by Env-Wq 403.31 for adverse impacts that might occur; or

(3) Determine a revised permitted production volume for the withdrawal, if necessary to ensure that adverse impacts as specified by Env-Wq 403.24 do not occur.

Env-Wq 403.20 Final Report.

(a) After withdrawal testing pursuant to Env-Wq 403.16 is completed, the applicant shall submit a final report to the department that includes the following:

(1) All information and materials required in Env-Wq 403.06 through Env-Wq 403.19, including any updates necessary to reflect changes occurring after submission of the application;

(2) Where operating information is necessary to ensure adverse impacts do not occur, the impact monitoring and reporting program prepared in accordance with Env-Wq 403.26; and

(3) When adverse impacts are anticipated, an impact mitigation program prepared in accordance with Env-Wq 403.26.

(b) The final report submitted in accordance with this section shall be stamped and signed by a person possessing one of the following licenses:

(1) Professional geologists license issued in accordance with RSA 310-A:130; or

(2) Professional engineers license issued in accordance with RSA 310-A:18.

Env-Wq 403.21 Final Decisions on Large Groundwater Withdrawal Permit Applications.

(a) Subject to (b), below, the department shall approve the application for a large groundwater withdrawal permit and issue the permit, or deny the application, within 45 days of the close of the written public comment period required pursuant to RSA 485-C:21.

(b) If the report is not complete or correct, the department shall request revisions to the final report unless the information submitted indicates that the criteria in (d)(2), below, cannot be met.

(c) A request sent pursuant to (b), above, shall:

(1) Identify what revisions are needed and the deadline for submitting a revised final report, established based on the type and volume of needed revisions; and

(2) Inform the applicant that the application will be deemed to have been withdrawn if the information requested is not provided by the deadline, unless an extension is requested and granted pursuant to Env-Wq 403.38.

(d) The department shall issue a large groundwater withdrawal permit only if:

(1) The information provided in the application and final report is complete and correct;

(2) The information provided in the application and final report demonstrates that the withdrawal:

a. Will not produce adverse impacts; or

b. Will result in impacts that can and will be mitigated, provided:

1. There is sufficient information to verify that any adverse impacts that occur as a result of the withdrawal will not be:

(i) An adverse impact that may occur immediately; or

(ii) An irreversible impact; and

2. A monitoring and reporting program is implemented in accordance with Env-Wq 403.26;

(3) All public notifications required by RSA 485-C:21 have been completed; and

(4) The water conservation plan submitted by the applicant in accordance with Env-Wq 2101 has been approved.

(e) The department shall not issue a new large groundwater withdrawal permit if the department determines, after a thorough review of the application, final report, and all public comments received, that the proposed withdrawal will result in adverse impacts which cannot or will not be mitigated.

(f) Appeals of the department's decision to issue or deny a large groundwater withdrawal permit shall be as specified in RSA 485-C:21, VI.

Env-Wq 403.22 Withdrawal Permit. Each permit issued by the department for a large groundwater withdrawal pursuant to Env-Wq 403.21 shall specify the following information:

(a) The name, mailing address, and daytime telephone number of the permittee;

(b) The permit expiration date, which shall be as specified in Env-Wq 403.34;

(c) The permit number;

(d) The maximum permissible water withdrawal volume, for the purpose of mitigating impacts from the withdrawal;

(e) The stated purpose of the withdrawal provided pursuant to Env-Wq 403.08;

(f) Requirements, including a schedule, for monitoring and reporting production from the withdrawal or wells; and

(g) Other conditions, as needed, to ensure that the requirements and intent of this part are met.

Env-Wq 403.23 Permittee Obligations. Upon receipt of a permit issued pursuant to Env-Wq 403.21, the permittee shall:

(a) Maintain current information at the department relative to the permittee's address and contact information;

(b) Implement the impact monitoring and reporting program in accordance with Env-Wq 403.26;

(c) When a verified adverse impact occurs as a result of the withdrawal, design and implement mitigation measures in accordance with Env-Wq 403.31;

(d) Report to the department as specified in Env-Wq 403.25 whenever an unmitigated adverse impact has occurred or is occurring; and

(e) Comply with all conditions of the permit.

Env-Wq 403.24 Adverse Impact Criteria.

(a) For all large groundwater withdrawals, adverse impacts shall be as described in RSA 485-C:21, V-c.

(b) For all large groundwater withdrawals, adverse impacts shall not include impacts due to:

(1) Poor operation or maintenance;

(2) Infrastructure failure; or

(3) Alteration of the environment beyond the control of the permittee.

Env-Wq 403.25 Adverse Impact Reporting and Response.

(a) The permittee shall report to the department within 5 calendar days after discovering an unmitigated adverse impact that is occurring or has occurred.

(b) The department shall notify the permittee within 5 calendar days of the time when the department observes, or another entity reports, an unmitigated adverse or unanticipated impact.

(c) At the written request of any entity, the department shall review any reports of adverse impacts including hydrologic data supporting the occurrence or potential occurrence of an adverse impact, and determine whether a claim of adverse impact is valid.

(d) Within 21 calendar days of the date a report meeting the criteria specified in (c), above, is received, the department shall notify the permittee and the entity reporting an adverse impact whether an unanticipated or adverse impact has occurred.

(e) Where the status of an unanticipated impact is not clear, the applicant shall gather information needed to quantify the impact and determine its status relative to the adverse impact criteria specified in Env-Wq 403.21, and provide this information to the department.

(f) The permittee shall mitigate a verified adverse impact in accordance with Env-Wq 403.31.

Env-Wq 403.26 Impact Monitoring and Reporting Program.

(a) A permittee shall conduct an impact monitoring and reporting program when:

(1) Available information, including work completed in accordance with these rules, is not sufficient to verify that adverse impacts from the large withdrawal will not occur, provided the available information does not suggest that an impact:

a. Is irreversible; or

b. Will occur immediately; and

(2) Such a program is necessary to ensure that impact mitigation identified in Env-Wq 403.31 is effective in preventing adverse impacts from the withdrawal.

(b) The monitoring and reporting program shall monitor representative sites where the data collected can be used to ensure adverse impacts do not occur to water resources or users identified pursuant to Env-Wq 403.11 and Env-Wq 403.18.

(c) The monitoring and reporting program shall include wetlands monitoring in accordance with Env-Wq 403.27, groundwater monitoring in accordance with Env-Wq 403.28, surface water monitoring in accordance with Env-Wq 403.29, or water level monitoring in accordance with Env-Wq 403.30, or any combination thereof as needed based on the criteria in (a), above.

(d) The proposed impact monitoring and reporting program shall:

(1) Be presented in the final report; and

(2) Include a proposed implementation schedule in relation to the issuance date of the withdrawal permit or initiation of the withdrawal.

(e) Monitoring shall be adjusted during the permit period in accordance with permit modification procedures and criteria specified in Env-Wq 403.33.

(f) Monitoring results shall be presented in a tabular and graphic format and interpreted by a qualified professional.

(g) The impact monitoring and reporting program shall be a condition of the withdrawal permit.

(h) Monitoring results shall be reported as specified by permit conditions.

Env-Wq 403.27 Wetlands Monitoring.

(a) Any wetlands monitoring required pursuant to Env-Wq 403.26(c) shall be conducted in accordance with (b) through (e), below.

(b) An initial survey shall be conducted by an individual who by education and experience is able to qualitatively and quantitatively assess wetland ecosystems and who is a certified wetland scientist pursuant to RSA 310-A:75-96.

(c) The initial survey of wetlands shall be performed during the growing season and include the following:

(1) An inventory and map of wetland flora species;

(2) An inventory and map of soil types;

(3) A general description of the stratigraphy of geologic deposits;

(4) A general description of soil moisture, its source, and mechanisms of change;

(5) A general description of indicators of wetland hydrology, including but not limited to drainage patterns, watermarks, and visual observation of saturated soils or inundation; and

(6) A general description of the function of the wetland as part of the natural ecosystem, including:

a. Removal of sediment from runoff;

b. Improvement or stabilization of water quality;

c. Reduction in peak flow; and

d. Maintenance of wildlife habitat.

(d) Monitoring of the characteristics of the wetlands identified in the initial survey shall be performed during the growing season.

(e) When wetlands monitoring includes water level monitoring, the monitoring point locations and reference point elevations shall be established in accordance with Env-Wq 403.30.

Env-Wq 403.28 Groundwater Monitoring.

(a) Any groundwater monitoring required pursuant to Env-Wq 403.26(c) shall be conducted in accordance with (b) through (f), below.

(b) Water levels at the wellhead and at such other observation points as were identified pursuant to Env-Wq 403.26 shall be monitored at a frequency sufficient to complete an evaluation of potential impacts associated with the withdrawal.

(c) Volumes withdrawn from the permitted withdrawal shall be monitored at a frequency appropriate to assess the potential impacts associated with a withdrawal.

(d) The operating parameters of other water uses that might be contributing to impacts to water resources within the potential impact area shall be monitored, including:

(1) Water levels at wellheads;

(2) Operating schedules; and

(3) Withdrawal amount.

(e) Water quality of other water uses that might be influenced by the withdrawal shall be monitored at a frequency appropriate to assess the potential for impacts to occur as a result of the withdrawal.

(f) When groundwater monitoring includes water level monitoring, the monitoring point locations and reference point elevations shall be established in accordance with Env-Wq 403.30.

Env-Wq 403.29 Surface Water Monitoring.

(a) Any surface water monitoring required pursuant to Env-Wq 403.26(c) shall be conducted in accordance with (b) through (d), below.

(b) The monitoring shall include an initial survey that incorporates the following:

(1) An initial inventory and mapping of aquatic flora and fauna species and habitat;

(2) Identification of the factors that control the elevation of water levels; and

(3) A general description of anticipated seasonal fluctuations in temperature profiles and nutrient balances.

(c) Long-term monitoring of surface waters shall include:

(1) Monitoring of water levels in lakes or ponds at a frequency that is adequate to assess the potential occurrence of impacts to these water bodies as a result of the withdrawal;

(2) Measurement of changes in stream flow along a representative section of each water course, or stream reach, that might be influenced by the withdrawal, at a frequency that is adequate to assess the potential occurrence of impacts to the water resource as a result of the withdrawal, using methods that are accurate and technically defensible; and

(3) Monitoring of instream or other submerged habitat to identify the health of aquatic ecosystems.

(d) When surface water monitoring includes water level monitoring, the monitoring point locations and reference point elevations shall be established in accordance with Env-Wq 403.30.

Env-Wq 403.30 Water Level Monitoring.

(a) Any water level monitoring required pursuant to Env-Wq 403.26(c) shall be completed in accordance with (b) through (i), below.

(b) For monitoring wells or test wells installed as part of the well site or permit monitoring program, the location and reference elevation for each well shall be established as follows:

(1) The coordinate system for the horizontal location shall be referenced to the North American Datum of 1983 (NAD83) with an accuracy of no less than 0.1 foot;

(2) The vertical reference point elevation shall be referenced to the North American Vertical Datum of 1988 (NAVD88) with an accuracy of no less than 0.1 foot; and

(3) The location and elevation assigned pursuant to (1) and (2), above, shall be established by land survey conducted by a land surveyor licensed in accordance with RSA 310-A:51-74.

(c) For groundwater withdrawals at private or other water supply wells, the location and reference elevation for each well shall be established as follows:

(1) The horizontal location shall be established using global positioning system (GPS) technology referenced to NAD83 and reported in units of degrees and decimal minutes of latitude and longitude with at least 3 decimal places of precision, or an alternative map or method that provides a higher degree of accuracy; and

(2) The vertical reference point elevation shall be established by estimation from a 1:24,000-scale USGS topographic map or an alternative map or method that provides a higher degree of accuracy.

(d) For piezometers or staff gages installed as part of the well site or permit monitoring program, the location and reference elevation shall be established as follows:

(1) The horizontal location shall be established using global positioning system (GPS) technology referenced to NAD83 and reported in units of degrees and decimal minutes of latitude and longitude with at least 3 decimal places of precision, or an alternative map or method that provides a higher degree of accuracy; and

(2) The vertical reference point elevation shall be established by:

a. Reference to a surveyed vertical reference point when one is available at the well site or monitoring well network;

b. Estimation from a 1:24,000-scale USGS topographic map, if no surveyed elevation is available; or

c. An alternative map or method that provides a higher degree of accuracy.

(e) The horizontal coordinates and reference point elevations established in accordance with (b) through (d), above, shall be provided in a table that specifies the coordinate system used and the associated units of measure.

(f) The table created pursuant to (e), above, shall be provided to the department:

(1) In the final report required by Env-Wq 403.20; or

(2) Prior to initiation of the withdrawal when installation of an observation point is a condition of the permit issued in accordance with Env-Wq 403.22.

(g) The vertical reference point for piezometers and staff gages established in accordance with (d), above, shall be checked annually against a surveyed reference point or other permanent reference mark, when available, and corrected to ensure that the reference point elevation has not changed over time.

(h) Water level measurements collected from all monitoring points shall be recorded in feet or meters relative to the reference point elevation established in (b) through (d), above.

(i) Recording of water levels in water supply wells that are included in the monitoring program shall be conducted in accordance with Env-Wq 403.16(d).

Env-Wq 403.31 Impact Mitigation.

(a) The permittee shall immediately implement an impact mitigation program for withdrawals when:

(1) A withdrawal permit requires mitigation from the start of operation to prevent adverse impacts anticipated during the permit application process;

(2) An impact monitoring and reporting program conducted in accordance with Env-Wq 403.26 reveals the potential occurrence of an adverse impact; or

(3) The department determines that a report of unanticipated or adverse impact is valid as defined by Env-Wq 403.24 and reported in accordance with Env-Wq 403.25.

(b) Once an adverse impact is verified in accordance with Env-Wq 403.25, the permittee shall:

(1) Submit a description of the impact based on observations to the department within 14 calendar days of adverse impact notification under Env-Wq 403.25;

(2) Submit an impact mitigation program description in accordance with (c), below, for department approval within 60 calendar days of adverse impact notification under Env-Wq 403.25; and

(3) Where the impact mitigation program is a condition of the permit and meets adverse impact thresholds identified in the permit, immediately begin the impact mitigation program designed for permit approval pursuant to Env-Wq 403.(26).

(c) A mitigation program shall include one or more of the following measures, as necessary to mitigate adverse impacts:

(1) Implementation of additional water conservation measures;

(2) Reduction in withdrawal volumes, including cessation of the withdrawal except where necessary for fire protection or residential drinking water;

(3) Replacement of sources for adversely impacted users in accordance with Env-Wq 403.32; and

(4) Other action(s) necessary to address the specific adverse impacts.

(d) The mitigation program also shall include:

(1) Periodic monitoring and reporting at a frequency necessary to substantiate the effectiveness of the mitigation activities; and

(2) A schedule for the implementation of the activities listed in (c), above.

(e) Adherence to a mitigation program, where required, shall be a condition of the permit or become a condition of the withdrawal permit in accordance with permit modification procedures under Env-Wq 403.33.

Env-Wq 403.32 Replacement of Sources Adversely Impacted by Withdrawal.

(a) Where a water supply source is adversely impacted as identified in Env-Wq 403.25, the permittee shall develop a program for providing an alternative water supply to each user of the source in accordance with (b) through (i), below.

(b) The permittee shall supply, to each user of the adversely-impacted source, a quantity of water equivalent to that which was available prior to the withdrawal.

(c) The user of the adversely-impacted source shall not be charged for any of the initial capital costs of being provided with an alternative water supply, including but not limited to the following:

(1) Water source development, including:

a. Hydrogeologic investigation, including test well drilling as appropriate; and

b. Source construction;

(2) Water treatment equipment;

(3) Control building;

(4) Water storage facility;

(5) Water distribution system;

(6) Customer connection to the system;

(7) All costs associated with engineering in developing the water system, including but not limited to:

a. Design engineering; and

b. Field engineering including the verification of quality workmanship;

(8) All legal costs associated with the establishment of the water system; and

(9) All other costs relating to developing a new water supply not otherwise categorized and identified above.

(d) The source replacement program shall:

(1) Identify other withdrawals in the recharge area for the adversely impacted source;

(2) Define the performance standards at which alternative supply will be provided to the user, including the following:

a. Location and type of source;

b. Method of delivery;

c. Minimum and maximum volumes and rates of delivery;

d. Water chemistry; and

e. Any water quality treatment or testing practices;

(3) Provide a schedule by which alternative supply will be provided;

(4) Estimate the initial capital costs associated with establishing the alternative supply; and

(5) Estimate the costs to the user of the alternative supply after it is established by the permittee, including the per-unit cost and projected annual costs.

(e) The need for installation of drinking water treatment equipment associated with the source replacement plan performance standard required by (d)(2), above, shall be based on results of water quality sampling prior to and following source replacement activities for the following parameters:

(1) Regulated inorganic chemical contaminants listed in Env-Dw 704;

(2) Regulated volatile organic chemical contaminants listed in Env-Dw 705;

(3) Regulated contaminants with secondary maximum contaminant levels listed in Env-Dw 706;

(4) Uranium;

(5) Radon; and

(6) Other compounds based on the assessment of potential contaminant sources in the vicinity of the withdrawal.

(f) Subject to (g), below, water quality treatment equipment shall be provided for the following situations, as applicable:

(1) A contaminant is detected in the post-source replacement water quality sample at a concentration in excess of a maximum contaminant level established in Env-Dw 702 through Env-Dw 705, in which case the water quality treatment equipment shall be designed to reduce the contaminant's concentration to below the maximum contaminant level;

(2) A contaminant is detected in the post-source replacement water quality sample at a concentration in excess of a secondary maximum contaminant level established in Env-Dw 706, in which case the water quality treatment equipment shall be designed to reduce the contaminant's concentration to no more than the concentration observed in the pre-source replacement water quality sample; or

(3) Radon is detected in the post-source replacement water quality sample at a concentration above 2,000 picocuries per liter when the radon concentration in the pre-source replacement water quality sample was less than 2,000 picocuries per liter, in which case the water quality

treatment equipment shall be designed to reduce the contaminant's concentration to less than 2,000 picocuries per liter.

(g) Water quality treatment equipment shall not be required if the adversely affected water source is used solely for irrigation for landscaping.

(h) The permittee shall not be responsible for implementing source replacement, including water treatment, for a particular water user if that water user does not authorize the implementation of the source replacement program.

(i) A list of the water treatment equipment alternatives that are proposed to meet the requirements of (f), above, shall be provided to the department prior to installation. The equipment that has the lowest operation and maintenance cost over a 10-year period shall be selected unless the owner of the adversely-impacted source and the permittee mutually agree to an alternative technology.

Env-Wq 403.33 Permit Modifications.

(a) The procedures specified in (c) through (h), below, shall apply to any of the following potential permit modifications:

(1) An increase in production monitoring;

(2) An increase in monitoring and reporting of ground water or surface water levels;

(3) A reduction in permitted withdrawal volumes;

(4) The implementation of an impact mitigation program;

(5) A change in the name or ownership of the permittee; or

(6) Any other change that has no potential to create adverse impacts.

(b) The permit modification procedures specified in (c) through (h), below, shall not apply to any requested permanent increase in the withdrawal rate or volume. A permittee seeking a permanent increase in the withdrawal rate or volume shall apply for a new large groundwater withdrawal permit pursuant to Env-Wq 403.05.

(c) A permittee seeking a modification as specified in (a), above, to a large groundwater withdrawal permit shall submit a written request to the department to modify the permit.

(d) The request submitted pursuant to (c), above, shall explain in detail the following:

(1) The specific modification requested;

(2) The reason(s) for the requested modification; and

(3) How the permit as modified complies with the criteria for issuance of a permit specified in Env-Wq 403.21.

(e) The department shall modify a permit in response to a request from the permittee only if it determines that the modified permit complies with the criteria for issuance of a permit specified in Env-Wq 403.21.

(f) A permit modification request that proposes a change in purpose or use of the withdrawal shall require the submittal of an application for a new permit in accordance with Env-Wq 403.05.

(g) If the department determines that a permit modification is needed to eliminate or prevent adverse impacts, the department shall initiate a proceeding in accordance with RSA 541-A:30, II, RSA 541-A:31, and the provisions of Env-C 200 relative to adjudicative proceedings.

(h) The written notice provided to the permittee pursuant to RSA 541-A:31 shall:

(1) Identify the facility by name, location, and permit number;

(2) Explain the modification(s) the department proposes to take and the reasons for the proposed modification(s);

(3) Identify the department's authority for taking such action; and

(4) Identify, by name, title, mailing address, and telephone number, the department representative who may be contacted regarding the notice.

(i) As specified in RSA 485-C:21, V-d, the grounds for permit modification shall include that changes are needed to accommodate drought conditions or new withdrawals.

Env-Wq 403.34 Expiration and Renewal of Large Groundwater Withdrawal Permits.

(a) A large groundwater withdrawal permit shall expire 5 years after the date of issuance if the withdrawal is not activated within that time, unless a shorter time is specified in other applicable rules.

(b) If a permitted withdrawal is activated within 5 years of the date of issuance of the large groundwater withdrawal permit, the large groundwater withdrawal permit shall be valid for 10 years from the date of issuance.

(c) Any permittee wishing to renew a large groundwater withdrawal permit shall submit an application for a permit renewal prior to its expiration date, but not more than 6 months prior to its expiration date.

(d) If no change to the approved withdrawal volume is proposed at the time of permit renewal, the renewal application shall include:

(1) The name, mailing address, and daytime phone number of the permittee;

(2) The permittee's written certification that no change to the previously-approved withdrawal volume is being sought;

(3) An updated inventory of contaminant sources within an area that extends a distance of 1,000 feet outside of the estimated limit of the cone of depression of the withdrawal;

(4) An updated water user and resource inventory within an area that extends a distance of 1,000 feet outside of the estimated limit of the cone of depression of the withdrawal;

(5) An updated tax map identifying any new lots within the estimated cone of depression of the withdrawal that have been formed since original issuance of the permit, and a description of the water source(s) for the new lots; and

(6) Where monitoring has been performed as part of the permit:

a. A written summary of observations of impacts and any modifications to the impact monitoring program since issuance of the permit; and

b. A written summary of the volume of groundwater produced by the withdrawal since issuance of the permit, together with a description of factors that control production.

(e) The renewal application may reference information already contained in the department files if the information has not changed since the last application package submitted and meets the current criteria outlined in these rules.

(f) The permit renewal provisions of this section shall not apply if an increase to the approved withdrawal volume is proposed. A permittee seeking an increase in the withdrawal rate or volume shall apply for a new permit in accordance with Env-Wq 403.05.

(g) Any permit that has been renewed shall be subject to the suspension and revocation provisions specified in Env-Wq 403.35.

(h) A permit shall be renewed for a period of no more than 10 years, provided, however, that there shall be no limit on the number of renewals that a permittee may request.

Env-Wq 403.35 Suspension or Revocation of Large Groundwater Withdrawal Permits.

(a) The department shall initiate an adjudicative proceeding to suspend or revoke a large groundwater withdrawal permit when:

(1) The withdrawal is resulting in adverse impacts which cannot or will not be mitigated;

(2) The department receives information indicating that the information upon which the permit was based was not true and complete or was misleading; or

(3) The permittee does not comply with the conditions of the permit issued pursuant to Env-Wq 403.22.

(b) Subject to (d), below, to commence a proceeding the department shall proceed in accordance with RSA 541-A:31 and the provisions of Env-C 200 applicable to adjudicative proceedings.

(c) As a result of a proceeding initiated pursuant to (b), above, the department shall suspend the permit if it is verified that that one or more of the criteria listed in (a), above, has been met, and:

(1) The permittee was not acting in bad faith; and

(2) The reason(s) for the criteria being met can be corrected so that no criteria are met.

(d) If the department determines that public health, safety or welfare requires emergency action, the department shall proceed in accordance with RSA 541-A:30, III.

(e) As a result of the proceeding initiated pursuant to (d), above, the department shall continue the suspension of the permit if it is verified that one or more of the criteria listed in (a), above, has been met, and:

(1) The permittee was not acting in bad faith; and

(2) The reason(s) for the criteria being met can be corrected so that no criteria are met.

(f) The department shall reinstate a suspended permit after it determines, based on information received from the permittee, that the criteria listed in (a), above, are no longer present.

(g) As a result of the proceeding initiated pursuant to (b) or (d), above, the department shall revoke the permit if it is verified that one or more of the criteria listed in (a), above, has been met and:

(1) The permittee was acting in bad faith; or

(2) The reason(s) for the criteria being met cannot be corrected.

(h) For purposes of (c)(1), (e)(1), and (g)(1), above, the permittee shall be found to have acted in bad faith, if:

(1) For (a)(1), above, the permittee knows or has reason to know that the withdrawal is resulting in adverse impacts and fails or refuses to mitigate the impacts;

(2) For (a)(2), above, the permittee knew or should have known that the information upon which the permit was based was not true and complete or was misleading; or

(3) For (a)(3), above, the permittee knew or should have known that the activities being conducted did not comply with one or more conditions of the permit.

Env-Wq 403.36 Replacing an Existing Large Groundwater Withdrawal.

(a) As specified in RSA 485-C:22, I, large groundwater withdrawals from new wells that replace a well or wells installed prior to August 1, 1998 shall not be subject to the requirements of RSA 485-C:14-a and RSA 485-C:21, but rather shall require approval of the department under RSA 485-C:22, III-IV.

(b) As specified in RSA 485-C:22, II, no person shall withdraw 57,600 gallons or more of groundwater from a replacement well or wells over any 24-hour period without the prior approval of the department.

(c) As specified in RSA 485-C:22, III, before the department issues an approval for a large groundwater withdrawal from a replacement well or wells, the person seeking the replacement well(s) shall submit an application to the department to demonstrate that withdrawal from the replacement well or wells will operate and impact water users and resources in substantially the same manner as the well or wells that are being replaced.

(d) As specified in RSA 485-C:22, IV, an application for approval of a replacement well shall contain the following information:

(1) The name and mailing address of the well owner replacing the well or wells;

(2) The address and a map identifying the location of each well being replaced and the location of each replacement well;

(3) The construction details for each well being replaced and for each new replacement well, including:

a. The depth of each well;

b. The length and diameter of well casing and screen in each well; and

c. A description of overburden and bedrock lithology for each well being replaced and each new well; and

(4) Hydrogeologic information demonstrating that the effects of the replacement well or wells on water users and water resources identified by RSA 485-C:21, V-c will be substantially the same as the well that is being replaced.

(e) The hydrogeologic information required by (d)(4), above, shall include:

(1) All available historical data on the hydraulic influence of the existing well on water users and water resources within an area estimated to correspond to the zone of influence of the withdrawal being replaced, including but not limited to water levels and flows in surface waters and water levels in aquifers;

(2) Current data showing existing conditions for water users and in water resources within an area estimated to correspond to the zone of influence of the withdrawal being replaced, including but not limited to water levels and flows in surface waters and water levels in aquifers; and

(3) Any additional data or other information that a prudent qualified professional would use, if available, in determining the effects of the existing and replacement wells on water users and water resources.

(f) The application for approval also shall contain the following information:

(1) An explanation of why the withdrawal is being replaced and a description of its production history and use;

(2) A USGS topographic map at a scale of 1:24,000 showing the location of each proposed replacement well and each well being replaced, which may be used in lieu of the map required by (d)(2), above;

(3) A site plan at a scale of 1 inch equals 500 feet showing the location of:

a. Each replacement well;

b. Each well being replaced; and

c. All other observation points used in support of the demonstration of replacement well effects required by RSA 485-C:22;

(4) An explanation of how the hydrogeologic information submitted pursuant to (d)(4), above, shows that the effects of the withdrawal from the replacement well(s) on water users and resources will be substantially the same as the effects of the withdrawal from the existing well(s); and

(5) A plan to decommission or maintain each well being replaced in accordance with We 600.

(g) For any replacement well used as a water supply source for a community water system, the applicant shall meet all of the requirements of Env-Dw 302.35 in addition to (b), above.

(h) The department shall approve the replacement well provided the information submitted by the applicant demonstrates that the withdrawal from the replacement well or wells will operate and impact water users and resources in substantially the same manner as the well or wells that are being replaced.

(i) The replacement well shall be approved for the permitted withdrawal volume or established capacity of the well being replaced.

(j) The department shall include such conditions in the replacement well approval as are necessary to ensure compliance with applicable requirements of RSA 485-C and these rules.

(k) For purposes of this section, the replacement well or wells shall be deemed to operate and impact water users and resources in substantially the same manner as the well or wells that are being replaced if any differences in the hydraulic influence of the replacement well(s) and the existing well(s) are de minimis or improvements.

Env-Wq 403.37 Waivers.

(a) Any applicant or permit holder who seeks a waiver of any requirement established by a rule in this part shall request the waiver in accordance with (b), below.

(b) To request a waiver, the person seeking the waiver shall submit the following information in writing to the department:

(1) The name, mailing address, and daytime telephone number of the person requesting the waiver and, if the person is other than an individual, the name and daytime telephone number of an individual who can be contacted regarding the request;

(2) Identification of the site to which the waiver request relates by applicant name and municipality and, if a permit has already been issued, the permit number;

(3) Identification of the specific rule for which the waiver is being sought;

(4) A full explanation of why a waiver is necessary, including the operational and economic consequences if the waiver is not granted;

(5) A full explanation of the alternative(s) that will be implemented in lieu of the stated rule requirement, if any, with a full explanation of how the alternative(s) will be as protective of public health and the environment, including groundwater quality and quantity, as adhering to the rule;

(6) Whether the waiver is needed for a limited time and, if so, what that time period is; and

(7) A full explanation of how the benefits of granting a waiver are consistent with the intent of RSA 485:3 and RSA 485-C and outweigh the risks or detriments of granting a waiver.

(c) The department shall grant a waiver if it finds that:

(1) The alternative(s) proposed, if any, will be as protective of public health and the environment, including groundwater quality and quantity, as adhering to the rule; and

(2) The benefits of granting a waiver are consistent with the intent of RSA 485:3 and RSA 485-C and outweigh the risks or detriments of granting a waiver.

(d) In granting a waiver, the department shall impose such conditions, including time limitations, as the department deems necessary to ensure that the criteria specified in (c), above, will be met.

(e) No waiver shall be granted if the effect of the waiver would be to waive or modify a statutory requirement, unless the statute expressly provides that the requirement may be waived or modified.

(f) If a waiver is granted, the waiver shall be made part of the permit.

(g) The department shall issue a written decision on a request for a waiver within the response timeframes established in Env-Wq 403.14 if the request is associated with a preliminary application or Env-Wq 403.21 if the request is associated with a final report. If the waiver is denied, the denial shall specifically set forth the reason(s) for the denial.

Env-Wq 403.38 Extensions of Time.

(a) To request an extension of a deadline established pursuant to Env-Wq 403.14(b)(2) or (i)(3) or Env-Wq 403.21(c)(2), the applicant shall submit the following information in writing to the department:

(1) Identification of the application to which the extension request relates by applicant name and municipality;

(2) The length of the extension being requested; and

(3) A full explanation of why an extension is necessary.

(b) The department shall extend the deadline if:

(1) The applicant demonstrates that good cause to extend the deadline exists; and

(2) A complete request for deadline extension was submitted prior to the established deadline.

(c) Good cause to extend a deadline shall be deemed to exist if:

(1) In order to submit the missing component(s), the applicant requires information from a third party not under the applicant's control, and the applicant has not received the information despite making diligent efforts to obtain it; or

(2) The applicant has otherwise been prevented by circumstances beyond the applicant's control from obtaining or preparing the missing component(s).

(d) The inability to obtain requisite information from a third party based on the applicant's failure to pay the third party for services rendered shall not constitute good cause to extend a deadline.

(e) The department shall issue a written decision on a request for an extension within 10 working days of receiving a complete request. If the extension is denied, the denial shall specifically set forth the reason(s) for the denial.

(f) Denial of an extension shall not preclude an applicant from submitting a new application.

APPENDIX A: STATE STATUTES IMPLEMENTED

Rule Section(s)	State Statute(s) Implemented
Env-Wq 403 (see also specific sections below)	RSA 485:3, XIII; RSA 485-C:21; RSA 485-C:22
Env-Wq 403.37	RSA 541-A:22, IV
Env-Wq 403.38	RSA 541-A:16, I(b)

APPENDIX B: STATUTORY DEFINITIONS

482-A:2

X. "Wetlands" means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

485:1-a

I. "Community water system" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

XV. "Public water system" means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Any water system which meets all of the following conditions is not a public water system:

(a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);

(b) Obtains all of its water from, but is not owned or operated by, a public water system; and

(c) Does not sell water to any person.

485-A:2

XIV. "Surface waters of the state" 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, water courses, and other bodies of water, natural or artificial.

485-C:2

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

IX-a. "Large groundwater withdrawal" means any withdrawal from groundwater of 57,600 gallons or more of water in any 24-hour period at a single property or place of business except withdrawals associated with short-term use.

XI. "Person" means any individual, partnership, company, public or private corporation, political subdivision or agency of the state, department, agency or instrumentality of the United States, or any other legal entity.

XIII-a. "Replacement well" means a new well installed to replace or back-up an existing well that operates and impacts water users and water resources in substantially the same manner as the well that is being replaced.

XIII-b. "Short-term use" means the temporary, non-routine withdrawal of groundwater at a specific geographical location over a period of one year or less, and withdrawal of groundwater for contaminated site remediation where the duration of the withdrawal may exceed one year and corresponds with the objectives of the remediation.

XVII. "Well" means a hole or shaft sunk into the earth to observe, sample, or withdraw groundwater.