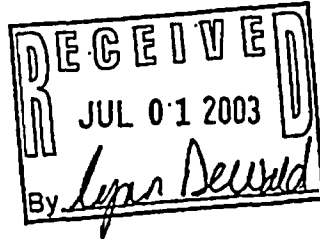




State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICE FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

Jay Thayer
Entergy Site Vice President
Entergy Nuclear Vermont Yankee, LLC
185 Old Ferry Road
Brattleboro VT 05302



AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Wastewater Management Division
103 South Main St. - Sewing Bldg.
Waterbury VT 05671-0405
Telephone: (802) 241-3822
FAX: (802) 241-2596
June 26, 2003

Re: Final ID-9-0036-2
PIN: NS75-0006
Entergy Nuclear Vermont Yankee, LLC
Vernon, Vermont

Dear Mr. Thayer:

Enclosed is the final Indirect Discharge Permit ID-9-0036-2 issued to Entergy Nuclear Vermont Yankee, LLC, which I have signed in behalf of the Commissioner of the Department of Environmental Conservation.

No comments on the draft permit were received during the public notice period. Therefore, the final permit is essentially the same as the draft which we sent to you for your review.

Please read the entire permit carefully and become familiar with all of its terms and conditions.

A set of the approved plans is also enclosed. Please note that no changes shall be made to the plans without prior written approval from the Secretary.

Enclosed please also find a DEC Permit Customer Survey Form. Please complete the form and send it to the Environmental Assistance Division at the address listed on the form. Thank you.

Please feel free to call me at 802-241-3824 if you have any questions.

Sincerely,

John J. Akielaszek, Chief
Indirect Discharge Permit Section

Enclosures: Final ID-9-0036-2; Approved Plans; DEC Customer Survey

cc w/permit:

Lynn DeWald, Environmental Specialist
Elise Zoli, Esq., Goodwin Procter
John Goodell, P.E., SVE Associates
Daniel Wilcox, Regional Engineer
Permit File ID-9-0036

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
103 SOUTH MAIN STREET
WATERBURY, VERMONT 05676

**AMENDED INDIRECT
DISCHARGE PERMIT**

File Code: LCT-9-0036

Permit No.: ID-9-0036-2
PIN : NS75-0006

SECTION A - "ADMINISTRATION"

In compliance with provisions of 10 V.S.A. §1263, and in accordance with the following conditions, the permittee:

Entergy Nuclear Vermont Yankee, LLC
185 Old Ferry Road
Brattleboro, Vermont 05302

Is authorized to indirectly discharge treated domestic sewage and other laboratory wastes defined herein from subsurface and mound disposal systems serving the Vermont Yankee Nuclear Power Plant to the ground water and indirectly into the Connecticut River in the Town of Vernon, Vermont. This permit amendment approves the connection of the Power Uprate Building to the Construction Office Building (C.O.B.) sewage disposal system (a.k.a. South System) and also approves the construction of the replacement disposal field for the C.O.B. sewage disposal system along with modifications to the existing septic tank and pump station for that system. The approved plans for construction are listed in Condition C2. The construction inspection requirements are contained in Condition C3 and certification of construction is required under Condition C4. The permit acknowledges that both primary and alternate disposal fields serving the C.O.B. may be utilized during plant outages (see Condition B2). The permit now requires annual alternation of the primary and alternate disposal fields serving the C.O.B. (see Condition D1). Changes have been made to Condition D2 to add an inspection requirement for all septic tank effluent filters. Condition D3, Operation During Plant Outages, has been modified to include the C.O.B. system. The monitoring requirements for groundwater (E3) have been modified to reflect the requirements contained in the Indirect Discharge Rules, effective April 30, 2003. References to the Vermont Yankee Nuclear Power Corporation have been removed from Conditions A9 and B2. No other substantive changes have been made to the permit.

A1. Permit Summary:

Expiration Date	September 30, 2005
Type of Waste	Domestic Sewage/Laboratory Waste
Treatment System	Septic Tanks
Disposal System	Leachfields/Mounds
Town	Vernon
Drainage Basin	Lower Connecticut River
Receiving Stream	Connecticut River
Drainage Area	6266 mi ²
Stream Flow:	
Low Median Monthly (LMM)	1,971,129,600 gpd (est)
7Q10	984,918,500 gpd (est)
Total Disposal Capacity	14,347 gpd (normal operation) 30,904 gpd (during plant outages)
Dilution Ratio (stream flow : effluent)	137,390: 1 at LMM (normal operation) 68,650: 1 at 7Q10 (normal operation) 63,782: 1 at LMM (during plant outages) 31,870: 1 at 7Q10 (during plant outages)

A2. Compliance Schedule:

The following schedule summarizes the actions and requirements necessary for compliance with the conditions of this permit. The permittee shall complete the requirements in accordance with the dates indicated. See the designated section for specific details.

<u>Condition # and Description</u>	<u>Schedule Date</u>
A3. Apply for renewal of Indirect Discharge Permit	By June 30, 2005
C3. Submit a copy of a contract with a Vermont Registered P.E. to provide inspection of system construction	Before the start of any construction on the collection, treatment, and disposal system
C4. Submit Inspecting Engineer's Certification of Construction	Within 30 days following completion of construction

A2. Compliance Schedule (continued):

<u>Condition # and Description</u>	<u>Schedule Date</u>
D2. Have a Vermont Registered Professional engineer complete an inspection of all sewage collection, treatment and disposal systems.	Annually in April
D2. Submit Annual Inspection Report Submit schedule for implementing engineer's recommendations	Annually prior to June 1st Annually by July 15th
D3. Submit tabulation of ponding levels	As specified
D4. Notify Secretary of pumping of tanks	As Specified
E2(A) Collect and analyze effluent samples	As Specified
E2(C) Record water meter readings	As Specified
E3(A) Collect and analyze groundwater monitor samples	As Specified
E3(B) Measure and record the depths to groundwater in the monitor wells	As Specified
E4(A) Collect and analyze receiving stream samples	As Specified
E2(A), E2(C), E3(A), E3(B), E4(A) Submit results of monitoring	By the 15th of the second month following the date of sampling
E5. Submit evaluation by a water quality specialist of all required effluent, ground, and surface water quality data and biological monitoring data.	June 30, 2005

A3. Expiration Date:

This permit, unless revoked or amended, shall be valid until September 30, 2005 despite any intervening change in Water Quality Standards or the classification of receiving waters. Renewal of this Indirect Discharge permit will be subject to all rules applicable at the time of application for renewal, including biological standards to determine significant alteration of aquatic biota.

The permittee shall apply for an Indirect Discharge Permit renewal by June 30, 2005.

A4. Effective Date:

This permit becomes effective on the date of signing.

A5. Revocation:

The Secretary may revoke this permit in accordance with 10 V.S.A. §1267.

A6. Transfer of Permit:

This permit is not transferable without prior written approval of the Secretary. The permittee shall notify the Secretary immediately, in writing, before any sale, lease or other transfer of ownership of the property from which the permitted discharge originates. The proposed transferee shall make application for a permit to be reissued in their name. Failure to apply shall be considered a violation of this permit. Responsibility for compliance with the conditions of this permit shall be the burden of the permittee until such time as transfer of the permit to the transferee is complete. This permit shall be transferred only upon showing by the permittee or proposed transferee of compliance with the following conditions:

- a. The transferee shall be a legal entity, financially and technically competent to operate, inspect, maintain and replace the system;
- b. If the transferee is a corporation or other legal entity, it shall be demonstrated that such legal entity has legal authority to raise revenues for the proper operation, inspection, and maintenance of the system; and
- c. The transferee shall provide a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee(s) to the Secretary.

A7. Minor Modifications of Permits:

The Secretary may modify this permit without requiring a permit application, a public notice, or a public hearing to correct typographical errors, or to increase the monitoring frequency in accordance with Condition E(8) of this permit.

A8. Indirect Discharge Rules:

This indirect discharge was reviewed and originally qualified for an Indirect Discharge Permit in accordance with Section 14-B-201 (F), In Situ, In-Ground Effluent Testing, of the Indirect Discharge Rules.

The New Warehouse sewage treatment and disposal system was approved under Water Supply and Wastewater Disposal Permit WW-2-0339. This indirect discharge permit incorporates by reference all of the terms and conditions of that permit with the exception of Condition #6 of WW-2-0339 which has been superseded by Condition D3 of this permit.

This indirect discharge was reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-403 (C) of the Indirect Discharge Rules for new indirect discharges of sewage. No increase in sewage volume is allowed without the written approval of the Secretary.

A9. Right of Agency To Inspect:

In accordance with the permittee's security requirements and standard protocol for site inspections, the permittee shall permit the Secretary or the Secretary's authorized representative upon the presentation of their credentials:

- a. To enter upon permittee's premises in which any effluent source treatment or disposal system is located or in which any records are required to be kept under the conditions of the permit;
- b. To have access to and copy any records required to be kept under conditions of this permit;
- c. To inspect any monitoring equipment or method required in this permit;
- d. To sample any discharge of waste, or groundwater or surface water; and
- e. To inspect at reasonable times, any collection, treatment, pollution management and disposal facilities required by this permit.

A10. Permit Availability:

A copy of the approved plans and this permit shall remain at the office of the permittee and, upon request, shall be made available for inspection by authorized representatives of the Secretary.

A11. Minor Modifications To System:

Minor modifications of the engineering design which do not reduce the treatment effectiveness or increase the capacity of the system may be approved in writing by the Secretary without permit amendment.

Before making modifications to the treatment and/or disposal system the permittee shall submit plans to the Secretary for review and approval. These plans must be approved before any of the modifications or additions are made.

A12. Correction of Failed Systems:

The Secretary may, upon discretion, issue an Amendment to the Indirect Discharge Permit for the design and reconstruction of a failed wastewater disposal system where the replacement system design was not previously approved.

Before reconstruction of the failed system the permittee shall submit plans to the Secretary for review and approval. These plans must be approved before any reconstruction occurs. Due to the urgency of the need to correct failed disposal systems, the Secretary will process these Amendments as soon as possible.

A13. Operating Fees:

This indirect Discharge is subject to operating fees. The permittee shall submit the operating fees in accordance with procedures provided by the Secretary.

SECTION B "INDIRECT DISCHARGE"

B1. Location of Indirect Discharge:

The indirect discharge is located on the Connecticut River in the Town of Vernon in Windham County, Vermont with a drainage area of 6,266 square miles at the point of compliance. The indirect discharge can be located on the USGS Brattleboro Vermont 15' quadrangle map at Latitude N 42° 46' 54" and Longitude W 72° 30' 49".

B2. Nature of Indirect Discharge:

The discharge consists primarily of treated domestic sewage and may also include small volumes of laboratory waste, primarily pH buffer solutions, acetic acid (5% solution) and potassium iodide (0.3% solution).

The wastewater is discharged from subsurface and mound wastewater disposal systems with the following approved capacities:

<u>Disposal System</u>	<u>Normal Operation Design Capacity (gpd)</u>	<u>"Plant Outage" Design Capacity (gpd)</u>
Main (North) System (1)	4,950	14,900
C.O.B. (South) System (2)	4,607	9,214
New Office Building System	2,160	2,160
New Warehouse System (3)	2,000	4,000
Governor Hunt House System	540	540
Gatehouse #1 System	90	90
=====		
TOTALS	4,347	30,904

(1) During plant outages, the Main (North) system may be loaded to a maximum of 14,900 gallons per day by loading both existing leachfields (combined 9,900 gpd) and the new 5,000 gpd leachfield. The outage lasts approximately one month and occurs every 18 months. During these outages the permittee adds temporary workers to perform maintenance on the plant.

(2) During plant outages, the COB (South) System may be loaded to a maximum of 9,214 gallons per day by loading both leachfields.

(3) During plant outages, the New Warehouse System may be loaded to a maximum of 4,000 gallons per day by loading both existing leachfields.

The low median monthly flow (LMMF) of the Connecticut River is approximately 1,971,129,600 gpd and the 7Q10 flow is approximately 984,918,500 gpd. During normal operation, the stream flow/effluent dilution ratio is 137,390:1 at LMMF and 68,650:1 at 7Q10. During plant outages the stream flow/effluent dilution ratio is 74,956:1 at LMMF and 37,454:1 at 7Q10.

Also, please see the previous Fact Sheet for this permit.

SECTION C "SYSTEM CONSTRUCTION"

C1. Approved Plans - Existing Systems:

A listing of the approved plans for construction of the subsurface sewage disposal systems at Vermont Yankee whose discharges are authorized by this permit can be found in the fact sheet previously issued for this permit.

C2. Approved Plans – Construction Office Building (South System) Septic Tankage and Pump Station Modifications, Force Main and Northwest Leachfield Construction:

The sewage treatment, and disposal system shall be constructed in accordance with the following plans and specifications for Vermont Yankee prepared by SVE Associates and stamped by John Goodell, P.E., and which have been stamped "APPROVED" by the Department of Environmental Conservation. No changes shall be made to the sewage treatment and disposal system as shown on these plans without prior written approval from the Secretary.

Sheet	Title	Date	Last Revised
1 of 5	Site Plan For Northwest Leachfield & Force Main From (COB) South Sewage Disposal System -Entergy Nuclear Vermont Yankee, LLC	2/11/03	4/30/03
2 of 5	Site Plan For Northwest Leachfield (COB) South Sewage Disposal System - Entergy Nuclear Vermont Yankee, LLC	2/11/03	5/12/03
3 of 5	Site Plan For South Leachfield Pump Station & Septic Tank (COB) South Sewage Disposal System - Entergy Nuclear Vermont Yankee, LLC	2/11/03	
4 of 5	Profile, Cross-Section Details & Notes for (COB) South Sewage Disposal System - Entergy Nuclear Vermont Yankee, LLC	2/11/03	5/12/03

C2. Approved Plans – Construction Office Building (South System) Septic Tankage, Pump Station, Force Main and Northwest Leachfield (continued):

Sheet	Title	Date	Last Revised
1 of 1	Temporary Building - Entergy Nuclear Vermont Yankee, LLC	1/22/03	1/31/03

C3. Construction Inspection:

Before the start of any construction on any portion of the sewage treatment and disposal system, the permittee shall submit a copy of a signed contract with a Vermont Registered Professional Engineer to provide inspection of the approved construction to the Secretary. The contract, at a minimum, shall provide for the following items:

- a. The names and qualifications of personnel providing inspection.
- b. The location of the force mains and the leachfield shall be staked out by a Vermont Registered Professional Engineer or surveyor in accordance with the approved plans.
- c. The engineer or designated representative shall be present for the pressure and leakage testing of all force mains.
- d. The engineer or designated representative shall verify that the fill material meets one of the mound sand sieve analyses specifications listed on the approved plan. Sieve analyses shall be performed once per 500 cubic yards of manufactured sand or once per 50 cubic yards of bank run sand.
- e. The engineer or designated representative shall inspect the preparation of the infiltration surface of the disposal fields before the crushed stone and distribution piping is installed.

C3. Construction Inspection (continued):

- f. The engineer or designated representative shall, prior to backfilling the distribution piping in the disposal field, supervise the testing of the distribution network with clean water to assure that there is complete and even distribution. The minimum pressure at the end of each distribution line shall be one (1) psi (or 2.3 feet of head). The difference in discharge rate between any two orifices in the same disposal field shall not exceed 15%. Differences in discharge rates greater than 15% and/or pressures less than one psi will require corrective action. Squirt heights for all distally located orifices must be measured during the testing procedure.
- g. The engineer shall provide general inspection of the work at reasonable intervals to assure that construction is in accordance with the approved plans and specifications.
- h. The engineer shall maintain written reports of all inspections performed including dates, items inspected and comments. Copies of all inspection reports shall be submitted to the Secretary a minimum of once every two weeks.
- i. When the system construction is complete and before the inspecting engineer has issued their certification, the permittee shall arrange an inspection of the system with the engineer and the representatives of the Secretary.

C4. Construction Certification:

Within 30 days following completion of construction of the wastewater collection, treatment and disposal system, the engineer shall certify in writing to the Secretary that the construction is complete and in accordance with approved plans and specifications, and shall submit As-Built drawings for the system. The numerical results of the pressure and leakage testing of the force mains and the results of the distribution testing of the mound leachfield shall be included in the inspecting engineer's certification of construction. The engineer's certification of construction shall be subject to the review and acceptance of the Secretary.

SECTION D "SYSTEM OPERATION"

D1. General Operating Requirements:

The wastewater disposal system shall be operated at all times in a manner that will (1) not permit the discharge of sewage onto the surface of the ground; (2) not result in the surfacing of sewage; (3) not result in the direct discharge of sewage into the waters of the State; (4) not result in a violation of Water Quality Standards; and (5) not cause a significant alteration of the aquatic biota in the receiving waters.

The disposal fields for the Main, New Warehouse, Construction Office Building (South) and New Office Building sewage disposal systems shall be alternated on an annual basis. The effluent disposal rate to sewage disposal system shall not exceed the values listed in Condition B(2).

D2. Annual Inspection:

Annually during the month of April, the permittee shall engage a professional engineer registered in the State of Vermont to make a thorough inspection, evaluation, and report of the complete sewage collection, treatment and disposal system. The engineer's inspection shall include, but not be limited to the following:

- a. verification of the use of alternate disposal fields (Main, New Warehouse Construction Office Building (South System) and New Office disposal systems);
- b. verification of the proper operation of the lift station pumps and alarms;
- c. inspecting the entire collection system, removing manhole covers to observe the condition of the sewers and manholes, and noting any signs of inflow or excess infiltration;
- d. evaluating the accumulation of solids and scum in the septic tanks and verifying the date of pumping of the tanks;
- e. checking the proper distribution of flow and the levelness of all distribution boxes in the disposal fields;
- f. checking the depth of ponding in observation wells for those fields in use during the inspection;

D2. Annual Inspection (continued):

- g. checking the calibration of the effluent flow meter (if applicable); and
- h. noting any necessary repairs, or maintenance that needs to be performed.

Before June 1st each year the permittee shall have a professional engineer submit an annual report that includes the following items:

- a. a complete list of the items inspected and the results of the inspection;
- b. a discussion of the recommended repairs and maintenance required;
- c. the measured depth of sludge and scum in all septic tanks; and
- d. an evaluation of metered water use, depth of ponding and groundwater table levels in the vicinity of the disposal fields (if groundwater depth measurement is required).

Before July 15th each year the permittee shall notify the Secretary in writing stating how the engineer's recommendations are to be implemented and including a schedule for the required repairs and maintenance.

D3. Operation During Plant Outages:

The permittee shall verify that the Main (North) system pump station is properly alternating among all three fields during plant outages. At least every two weeks during outages, the permittee shall measure the depth of ponding in the observation wells in the Main (North) system. The permittee shall verify that the New Warehouse system pump station is properly alternating between both fields during plant outages. At least every two weeks during outages, the permittee shall measure the depth of ponding in the observation wells in the New Warehouse system. The permittee shall verify that the Construction Office Building (South System) pump station is properly alternating between both fields during plant outages. At least every two weeks during outages, the permittee shall measure the depth of ponding in the observation wells in the Construction Office Building (South System) mound leachfield. The permittee shall submit a tabulation of the recorded measurements at the end of each outage period, along with the required flow records.

D4. Septage Disposal:

During the system's annual inspection the depth of sludge and scum shall be measured in all septic tanks. The septic tanks shall be pumped if: 1) the sludge is closer than twelve (12) inches to the outlet baffle or; 2) the scum layer is closer than three (3) inches to the septic tank outlet baffle or; 3) if otherwise

D4. Septage Disposal (continued):

recommended by the inspecting engineer.

Sampling of the septic tank effluent for radioactivity in accordance with the procedures listed in the approved Quality Assurance/Quality Control Plan must be done each time pumping occurs, prior to pumping the tanks.

Before pumping the septage for land application, the permittee shall notify the Secretary in writing, of the name and address of the pumper and verify that the sludge has been tested for radioactivity and will be disposed of in accordance with the Solid Waste Management Facility Certification.

D5. System Operation and Maintenance:

The sewage collection, treatment, and disposal system shall be operated and maintained at all times in a manner satisfactory to the Secretary and in a manner that will not pose a risk to the public health and safety, or cause contamination of drinking water supplies, groundwater and/or surface water.

D6. Reporting of Failures:

The permittee shall immediately report any failure of the wastewater collection, treatment, or disposal system to the Secretary, first by telephone on the first working day within 24 hours of the failure and then in writing within 5 business days of the failure. The written notice shall include a discussion of the actions taken or to be taken to correct the failure.

Notification shall be to the Indirect Discharge Permit Section of the Department of Environmental Conservation at (802) 241-3822.

Reporting of instances when daily average flow exceeds design flow will be initiated only when:

- (a) a flow exceedence is associated with a physical or mechanical condition which compromises the performance of the sewage disposal system; or
- (b) a flow exceedence occurs for three or more consecutive days during an outage period; or
- (c) a flow exceedence occurs for two or more consecutive days during a non-outage operating period.

Any design flow exceedence shall be investigated to determine if it was associated with a problem in the system's performance.

D7. Discharge Restrictions:

The permittee shall not allow any person to discharge or cause to be discharged anything other than sanitary wastewater and the laboratory wastes authorized herein to this treatment and disposal facility.

SECTION E "MONITORING"

E1. Quality Assurance/Quality Control Plan:

Within 90 days of the completion of construction of the replacement mound disposal field serving the Construction Office Building (South System), the permittee shall submit an amendment to the Quality Assurance/Quality Control Plan showing the As-Built locations of groundwater monitoring wells for that field and their numerical designations.

The laboratory identified in the Quality Assurance/Quality Control Plan shall demonstrate successful performance for U.S. EPA check samples for all parameters and shall analyze any check samples provided by the Secretary. Failure to obtain an acceptable result for either samples provided by the Secretary or EPA check samples may be a basis for requiring an alternate analytical laboratory.

E2. Effluent Monitoring:

A. Chemical

The effluent to the disposal fields for the Main, C.O.B., New Warehouse and New Office Building sewage disposal systems shall be sampled and analyzed as follows:

<u>Parameter</u>	<u>Measurement Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Flow (1)	gpd	Daily Total	Continuous
Biochemical Oxygen Demand (5-day)	mg/L	Grab	April and October
Total Suspended Solids	mg/L	Grab	April and October
pH	S.U.	Grab	April and October

E2. Effluent Monitoring:

A. Chemical (continued):

<u>Parameter</u>	<u>Measurement Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Total Kjeldahl Nitrogen	mg/L	Grab	April and October
Ammonia (as N)	mg/L	Grab	April and October
Nitrate/Nitrite Nitrogen (NO ₃ / NO ₂ as N)	mg/L	Grab	April and October
Total Phosphorus	mg/L	Grab	April and October
Total Dissolved Phosphorus	mg/L	Grab	April and October
Chloride (Cl-)	mg/L	Grab	April and October

=====

(1) The permittee may record daily water use as an alternative to this monitoring requirement (See E(2)(B) below).

The results of the effluent analysis shall be submitted to the Secretary prior to the 15th day of the second month following the date of sampling.

B. Sewage Volume:

The permittee shall install sewage flow meters on the Main Sewage Disposal system, the C.O.B. sewage disposal system, New Warehouse sewage disposal system and New Office Building system in order to monitor the daily sewage flow to each of these disposal fields. Alternatively, the permittee may record the daily water meter readings for all units connected to these sewage disposal systems, along with any bottled water utilized, to determine the total volume of water used each day. The volume of water used and individual meter readings shall be submitted to the Secretary by the 15th of the month following the recording period.

E3. Groundwater Monitoring:

A. Chemical and Bacteriological Monitoring:

The groundwater in the monitoring wells upgradient and downgradient of the Main, Construction Office Building (South System), New Warehouse and New Office Building sewage disposal fields, both primary and alternate, as identified in the Quality Assurance/ Quality Control plan, shall be sampled and analyzed for the following parameters:

<u>Parameter</u>	<u>Measurement Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Nitrate (as N)	mg/L	Grab	April and October
Total Dissolved Phosphorus (as P)	mg/L	Grab	April and October
Chloride (Cl-)	mg/L	Grab	April and October
pH	S.U.	Grab	April and October
<u>Escherichia coli</u>	colonies/100 ml	Grab	April and October
Depth to Groundwater (below ground surface)	inches—		At time of sampling
=====			

Because of changing water table conditions, the samples from the groundwater monitors might not be collected on the same day or in the same week if water is not available. If a monitor has water at any time during the month then a sample is required to be collected and analyzed.

For the purpose of this section, therefore, weekly groundwater measurements are required in April and October. Once a well is sampled, no further groundwater level measurements will be required for that well for that month.

The results of these analyses shall be submitted to the Secretary prior to the 15th day of the second month following the date of sampling.

B. Groundwater Levels:

The Quality Control/Quality Assurance plan includes the location of a minimum of six groundwater monitors installed around the Main, C.O.B. and New Warehouse disposal systems each, three groundwater monitors installed around the New Office Building disposal fields, two groundwater monitors located downgradient of the C.O.B. mound (Northwest) leachfield, and two groundwater monitors installed around the Governor Hunt and Gatehouse #1 disposal systems each, to monitor the level of the ground water table. Upon request by the Secretary, the depth to groundwater (below ground surface) shall be measured and recorded at a frequency determined by the Secretary above that required in E3(A) above. Any such request would be in the form of a letter to the permittee.

E4. Receiving Stream Monitoring:

Indirect Discharge Permits normally require regular chemical and biological monitoring of the receiving waters. Due to the extremely large stream flow to effluent flow ratio at low median monthly flow (approx. 161,740:1), and the size of the Connecticut River at the point of compliance, stream water quality monitoring is not required for this system. However, if the Secretary determines stream monitoring to be necessary, the permittee shall submit, upon written notice from the Secretary, sampling procedures for chemical and biological sampling of the receiving waters within 90 days of receiving such notice. The requirement for sampling and the frequency of such sampling will be upon written notice from the Secretary.

E5. Summary Water Quality Evaluation:

By June 30, 2005 the permittee shall have a qualified water quality specialist submit an evaluation to the Secretary of all past effluent and groundwater quality data and determine what, if any, short or long term impacts there have been on groundwater quality. If chemical and biological monitoring of the receiving waters was conducted, the results of that monitoring shall also be evaluated.

E6. Sampling and Testing Procedures:

All wastewater, groundwater and surface water sampling, preservation, handling and test procedures used to comply with the monitoring requirements herein shall conform to procedures specified in the most current edition of Standard Methods for the Examination of Water and Wastewater APHA - AWWA - WPCF, and the Vermont Water Quality Standards unless written approval of an alternate method is received from the Agency.

E7. Miscellaneous:

If the permittee monitors any required parameter set forth in this permit for this treatment and disposal system more frequently than required by this permit, the results of such monitoring shall be included on the Discharge Monitoring Report Form.

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Secretary. Records shall include laboratory bench sheets showing exact location, time and composites of sample as well as analytical procedures used, interim results obtained and all calculations supporting the reported test results.

E8. Additional Monitoring:

The Secretary reserves the right to require additional monitoring of the system, in accordance with Condition A(7) of this permit, should operation of the system fail to meet the requirements of Conditions D(1) and D(5).

SECTION F - "COMPLIANCE REVIEW"

If the results of monitoring the effluent and groundwater (Section E) show there is a possibility that the aquatic permitting criteria of the Indirect Discharge Rules may be exceeded at the designated stream flow conditions, the Secretary may increase the frequency of, or change the location of monitoring of the ground and surface water. If continued monitoring and analysis indicates that a violation of the effluent disposal rate, or a violation of the Vermont Water Quality Standards, or a significant alteration of the aquatic biota has occurred, is occurring, or is likely to occur the Secretary may require the permittee to take appropriate corrective actions to eliminate or reduce the possibility of a violation.

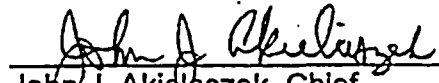
The issuance of this amended Indirect Discharge Permit ID-9-0036-2, to Entergy Nuclear Vermont Yankee, LLC., by the Secretary relies upon the data, designs, judgement and other information supplied by the applicant, his consultants and other experts who have participated in the preparation of the application. The Secretary makes no assurance that the systems will meet the performance objectives of the applicant and no warranties or guarantees are given or implied.

SECTION G - "EFFECTIVE DATE"

This Indirect Discharge Permit Amendment, ID-9-0036-2, issued to Entergy Nuclear Vermont Yankee LLC., for the discharge of wastewater from the sewage treatment and disposal systems at the Entergy Nuclear Vermont Yankee LLC., facility in Vernon, Vermont is effective this 26th day of June, 2003.

Jeffrey Wennberg, Commissioner
Department of Environmental Conservation

By


John J. Akielaszek, Chief
Indirect Discharge Permit Section