# AGENCY OF NATURAL RESOURCES **DEPARTMENT OF ENVIRONMENTAL CONSERVATION** 1 NATIONAL LIFE DRIVE, MAIN 2 **MONTPELIER, VT 05620-3521**

# DRAFT INDIRECT DISCHARGE PERMIT

Permit No.: ID-9-0221

PIN: RU96-0409

#### **SECTION A - "ADMINISTRATION"**

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

> The Housing Foundation, Inc. One Prospect Street Montpelier, VT 05602

is authorized to discharge treated domestic sewage from an existing subsurface disposal system serving the Coburn Mobile Home Park in Clarendon, Vermont, to groundwater and indirectly into Otter Creek.

#### A1. **Permit Summary:**

**Expiration Date** March 31, 2022 Type of Waste Domestic Sewage Treatment System Septic Tank Disposal System Mound System Town Clarendon

**Design Capacity** 15,115 gallons per day (gpd) Receiving Water Unnamed tributary to Otter Creek Drainage Basin Otter Creek

Drainage Basin Area

Approx. 200 sq. mi. Stream Flow:

Low Median Monthly Flow (LMMF) Est. 108.8 c.f.s.

Dilution Ratio (at LMMF) Stream Flow: Effluent 4,650:1

# 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.

	Condition # & Description	Schedule Date	
A3.	Apply for renewal of Indirect Discharge Permit	December 31, 2021	
D2(A)	. Have a Vermont Registered Professional Engineer complete an inspection of sewage collection, treatment, and disposal system	Annually in April	
D2(B). Submit Annual Inspection Report		Annually by July 1st	
D2(C)	Submit Schedule for implementing engineer's recommendations	Annually by August 1st	
D3.	Notify Secretary of pumping of tanks and septage disposal	As specified	
E1.	Sample and analyze septic tank effluent	February and September	
E1.	Submit effluent analysis	By the 15th of second month following sampling	
E1.	Submit flow records	By the 15th of the month following recording	
E2.	Measure depth to groundwater in the monitoring wells	Weekly during March and April	
E2.	Measure depth of ponding in the shallow in-field observation wells	During engineer's annual inspection in April	

### A3. Expiration Date:

This permit, unless revoked, or amended shall be valid until March 31, 2022 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 renewal, including biological standards to determine significant alteration of aquatic biota.

The permittee shall apply for an Indirect Discharge Permit renewal by December 31, 2021 for continued authorization to discharge treated domestic sewage. For the purposes of Title 3, an application for renewal of this indirect discharge permit will be considered timely if a complete application is received by the expiration date.

#### A4. Effective Date:

This permit becomes effective on the date of signature.

#### 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. All application and operating fees must be paid in full prior to transfer of this permit. 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. The transferee shall demonstrate that they have the legal authority to raise revenues for the proper operation, inspection, and maintenance of the system.
- 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 Permit:

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(3) of this permit.

# A8. Indirect Discharge Rules:

This permit authorizes an existing indirect discharge.

This indirect discharge was originally reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-603 (b) of the Indirect Discharge Rules for existing indirect discharges of sewage. No increase in sewage volume is allowed without the written approval of the Secretary.

# A9. Right of the Agency to Inspect:

The permittee shall allow the Secretary or the Secretary's authorized representative upon the presentation of their credentials and at reasonable times:

- 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, groundwater or surface water; and
- e. To inspect any collection, treatment, pollution management and disposal facilities required by this permit.

#### A10. Permit Availability:

A copy of this permit shall remain at the office of the permittee and upon request shall be made available for inspection by 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 Administrative 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 permittees shall submit the operating fees in accordance with procedures provided by the Secretary.

#### SECTION B "INDIRECT DISCHARGE"

#### **B1.** Location of Indirect Discharge:

This indirect discharge is located in the Otter Creek drainage basin in the town of Clarendon, Vermont. The indirect discharge can be located on the Rutland, Vermont 7.5' quadrangle map at Latitude N 43°33' 32" and Longitude W 72° 58' 01".

# **B2.** Nature of Indirect Discharge:

The existing sewage collection, treatment, and disposal system is permitted to serve 47 mobile homes and a 1-bedroom apartment in the Park (although the apartment was demolished in 1995).

The system, constructed in 1993 and upgraded from 1997 through 2000, consists of pre-existing and new gravity collection sewer lines, new septic tanks, a pump station and four stepped mound pressure distribution leachfields.

### **B2.** Nature of Indirect Discharge (continued):

Sewage treatment occurs in two septic tanks in series with a combined capacity of 12,500 gallons. The septic tank effluent is pumped to the mound system consisting of the four disposal fields that have twelve 86' long trenches each. The trench width is 4' resulting in a total application area of 16,512 sq.ft. The application rate is 15,115 gpd/16,512 sq.ft = 0.92 gpd/sq.ft. The system is not designed to be dual alternating due to site constraints.

#### **SECTION C "SYSTEM APPROVALS"**

# C1. Previous Approvals:

The construction of the sewage collection, treatment, and disposal system for the Coburn's Mobile Home Park in Clarendon, Vermont was completed in accordance with the following plans and specifications prepared by Peter Boemig, P.E. of Southern Vermont Engineering:

<u>Description</u>	<u>Date</u>	Last Revised
Site Plan	11/11/91	09/24/92
Site Plan	11/11/91	10/22/92
Pump Station	11/11/91	09/25/92
Sewer Profile	11/11/91	10/13/92
Sewer Profile	11/11/91	10/22/92
Sections	11/11/91	
Leachfield and Details	11/11/91	09/25/92
Sewer Details	11/11/92	10/06/92
Sewer Profile	02/25/92	09/25/92
Septic Tanks	03/22/92	09/25/92
	Site Plan Site Plan Pump Station Sewer Profile Sewer Profile Sections Leachfield and Details Sewer Details Sewer Profile	Site Plan 11/11/91 Site Plan 11/11/91 Pump Station 11/11/91 Sewer Profile 11/11/91 Sewer Profile 11/11/91 Sections 11/11/91 Leachfield and Details 11/11/91 Sewer Details 11/11/92 Sewer Profile 02/25/92

Sewage Disposal Upgrade Design, Sheets 1-3, dated 10/20/98 as signed by Peter R. Boemig, P.E., of Southern Vermont Engineering (SVE) Associates.

# **C2.** Other Approved Plans:

Based on a letter written and signed by John Goodell, E.I.T., and Peter R. Boemig, P.E., of SVE Associates, and dated December 21, 2000, the construction of modifications to the sewage collection system for the Coburn's Mobile Home Park in Clarendon, Vermont was completed in accordance with the following plans and specifications stamped and signed by Peter Boemig, P.E. of SVE Associates:

Sheets 1, 2 of 2 entitled "Sewage Disposal Upgrade Design - Coburn Mobile Home Park, Clarendon, Vermont", dated 8/10/99; and,

### C2. Other Approved Plans (continued):

Sheet 1 of 1 entitled "As-Built, Sewage Disposal Upgrade Design, Coburn Mobile Home Park, Clarendon, Vermont", and dated 10/20/00.

The sewage disposal system improvements serving Unit 119 at the Coburn Mobile Home Park were approved for construction in accordance with the following plan by John Goodell, P.E. of SVE Associates:

Sheet 1, entitled "Building Sewer Plan for Unit 119; Coburn Mobile Home Park", dated 5-4-2004; which has been stamped APPROVED by the Department of Environmental Conservation.

#### SECTION D "SYSTEM OPERATION"

### D1. General Operating Requirements:

The sewage treatment and 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; and (4) not result in a violation of the Vermont Water Quality Standards.

In accordance with accepted design practices, the effluent disposal rate to the disposal fields shall not exceed 15,115 gallons per day except as may occur on an occasional basis during normal operation.

# D2. Annual Inspection, Report and Implementation Schedule:

#### A. Annual Inspection:

Annually during the month of April, the permittee shall retain a Vermont Registered Professional Engineer 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:

- 1. inspecting the entire collection system, removing manhole covers to observe the condition of the sewers, septic tanks and manholes, and noting any signs of inflow or excess infiltration;
- 2. evaluating the accumulation of solids and scum in the septic tanks and verifying the pumping of the septic tanks, if necessary;
- 3. verifying the proper operation of the lift station pumps, alarms, and controls;

### D2. Annual Inspection, Report and Implementation Schedule:

# A. Annual Inspection (continued):

- checking the depth of ponding in all shallow in-field observation wells;
- 5. walking the disposal fields checking for evidence of surfacing sewage;
- 6. tabulating the groundwater level measurements for the months of March and April; and
- 7. noting any necessary repairs or maintenance that needs to be performed on the sewage collection, treatment, and disposal system.

# B. Annual Inspection Report:

By July 1st each year, the permittee shall have a professional engineer submit an annual report including the following items:

- 1. a complete list of the items inspected and the results of the inspection;
- 2. the measured depths of sludge and scum in each septic tank;
- 3. an evaluation of the ponding observed in the in-field observation wells;
- 4. an evaluation of the seasonal high groundwater level below the disposal fields;
- 5. an evaluation of the condition of all pre-existing sewer lines; and
- 6. a discussion of the recommended repairs and maintenance required.

# C. Implementation Schedule:

By August 1st each year, the permittee shall notify the Secretary in writing stating how the engineer's recommendations are to be implemented, including a schedule for the required repair and maintenance items which have not yet been completed.

# D3. 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 other wise recommended by the inspecting engineer. The permittee shall notify the Secretary in writing of the name and address of the pumper and the municipal sewage treatment facility or other facility approved by the Secretary where the septage is to be or was disposed.

### **D4.** 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.

### D5. Reporting of Failures:

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

# **D6.** Discharge Restrictions:

The permittee shall not allow any person to discharge or cause to be discharged anything other than sanitary sewage to this collection, treatment and disposal system.

#### **SECTION E "MONITORING"**

# **E1.** Effluent Monitoring:

The septic tank effluent shall be sampled and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type</u>	<u>Frequency</u>
Flow	gal/day	Total Flow	Daily
Biochemical Oxygen Demand (5-day)	mg/L	grab	Twice per year in Feb and Sept
Total Suspended Solids	mg/L	grab	Twice per year in Feb and Sept

Effluent samples shall be taken at the influent to the pump station.

Flow readings shall be submitted to the Secretary by the 15th day of the month following reading.

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

### **E2.** Groundwater and Observation Well Monitoring:

The depth to groundwater (below ground surface) in all monitoring wells shall be measured weekly during the months of March and April of each year.

The depth of ponding in the observation wells shall be measured and recorded during the engineer's annual inspection in April.

The tabulated results of these measurements shall be submitted to the Secretary as part of the engineer's annual inspection report for the sewage collection, treatment, and disposal system as per Condition D(2).

# E3. Monitoring Requirements:

No other water quality monitoring of the system is required under this permit. However, the Secretary reserves the right to require monitoring of the system in accordance with Condition A(7) should operation of the system fail to meet the requirements of Conditions D(1) and D(4).

#### SECTION F "PUBLIC HEALTH PROTECTION"

This indirect discharge is located within a Source Protection Area previous designated by the Commissioner of Health for the following water supply source:

1. Bedrock Well serving Coburn's Mobile Home Park WSID #5347

This does not imply that this water supply is adversely affected by this indirect discharge. If future replacement of this system is required, the potential impact on the public water supply may need to be evaluated.

#### SECTION G "COMPLIANCE REVIEW"

If the results of any inspection or monitoring indicate that a violation of the effluent disposal rate, or a violation of the Vermont Water Quality Standards, 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 permit, ID-9-0221 to The Housing Foundation Inc. by the Secretary relies upon the data, designs, judgment and other information supplied by the applicant, the applicant's consultants and other experts who have participated in the preparation of the application. The Secretary makes no assurance that this system will meet the performance objectives of the applicant and no warranties or guarantees are given or implied.

# **SECTION H "EFFECTIVE DATE"**

This Indirect Discharge Permit, ID-9-0221, issued to The the discharge of treated domestic sewage from the Coblocated in Clarendon, Vermont is effective on this	urn Mobile Home Park
Emily Boedecker, Commissioner Department of Environmental Conservation	
By:DRAFT	