

**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-9-0086  
PIN: NS95-0198

**SECTION A - "ADMINISTRATION"**

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

"Windy Hill Acres Mobile Home Park"  
Housing Foundation, Inc.  
One Prospect Street  
Montpelier, VT 05602

is authorized to indirectly discharge treated domestic sewage from an existing spray disposal system serving the Windy Hill Acres Mobile Home Park to groundwater and indirectly into an unnamed tributary of the Black River in the Towns of Weathersfield and Springfield, Vermont. **This is a permit renewal.**

A1. Permit Summary:

Expiration Date	September 30, 2022
Type of Waste	Domestic Sewage
Treatment System	Aerated Lagoons
Disposal System	Sprayfield
Drainage Basin	Black River
Treatment Capacity	16,200 gallons per day
Disposal Limits	119,000 gallons/7 days
Receiving Stream	Unnamed tributary of the Black River
Drainage Area	Approx. 300 acres
Low Median Monthly Stream Flow	56,900 gpd (est.)
Dilution Ratio (at LMMF)	
Stream Flow : Effluent	3.3 : 1

A2. Compliance Schedule Summary:

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 # &amp; Description</u>	<u>Schedule Date</u>
A3. Apply for renewal of indirect discharge permit	June 30, 2022
D4(A). Have a Vermont Registered Professional Engineer complete an inspection of sewage collection, treatment and disposal system	Annually in April
D4(B). Submit Annual Inspection Report	Annually by July 1st
D4(C). Submit Schedule for Implementing engineer's recommendations	Annually by August 1st
D10. Submit disposal report	Monthly
E1. Collect and analyze spray effluent samples	As Specified
Submit results of effluent monitoring and analyses	By the 15th of the second month following the date of sampling
E2. Measure and record the depths to groundwater in the monitor wells	Weekly
Submit groundwater measurements	By the 15th of the following month

A3. Expiration Date:

This permit, unless revoked, or amended shall be valid until September 30, 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 should apply for an Indirect Discharge Permit renewal by June 30, 2017 for continued authorization to discharge treated 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 systems.
- 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 permittees 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(5) of this permit.

A8. Indirect Discharge Rules:

This permit authorizes an existing indirect discharge.

This indirect discharge was reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-403(A) 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 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 facility 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 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. Uncommitted Reserve Connection Capacity:

The sewage treatment and disposal system has no reserve capacity for any increase in sewage flows.

A14. Operating Fees:

The 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 Discharges:

The indirect discharge is located on an unnamed tributary of the Black River in the Towns of Weathersfield and Springfield, Vermont. This indirect discharge can be located on the USGS Claremont NH-VT 15' quadrangle map at Latitude N 43° 20' 31" and Longitude W 72° 27' 44".

B2. Nature of Indirect Discharge:

The domestic sewage is treated and stored in a two-cell aerated lagoon system. The treated effluent is chlorinated prior to disposal in a sprayfield.

The aerated lagoons have a treatment capacity of 16,200 gallons per day and a storage capacity of 972,000 gallons, adequate for 60 days of storage.

There is a 7.3 acre area utilized for sprayfield disposal. Within that area are two sprayfield zones; Zone A has a wetted area of approximately 1.3 acres and Zone B has a wetted area of approximately 0.8 acres. The maximum allowable 7-consecutive day disposal volume is 119,000 gallons.

## SECTION C "SYSTEM CONSTRUCTION"

### C1. Previous Approvals:

The aerated lagoon treatment and spray disposal system was originally approved in Land Use Permit PB-2-0741, issued September 17, 1984 to replace a failed sewage disposal system.

### C2. Approved Plans:

The plans for Cyr's Mobile Home Park, Springfield, Vt. were approved to be constructed in accordance with plans and specifications prepared by John F. Kennedy, P.E. of Soils Engineering, Inc.:

<u>Sheet</u>	<u>Title</u>	<u>Last Revised</u>
1	Sewage Disposal System	12/19/83
2	Cyr's Mobile Home Park Layout	3/8/84
3	Aeration System	7/25/84
4	Spray Disposal Area	2/24/84
5	Lagoon Piping	9/4/84
6	Typical Cross Sections	9/11/84
7	Details Spray Irrigation System	2/27/84

and Technical Specifications entitled "Secondary Wastewater Treatment Facility, North Springfield, Vermont, Cyr Mobile Home Park" dated September 1984.

## 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.

The spray disposal fields shall be operated at all times in accordance with the following limits:

- a. The groundwater table shall not rise closer than one foot to the ground surface in the disposal area as a result of spraying.
- b. No spraying shall be conducted when the air temperature is below 10°F or when groundwater is within one foot of the ground surface, or when surface runoff is occurring.

D1. General Operating Requirements (continued):

- c. The total wastewater applied to the sprayfield shall not exceed 2.0 inches in any consecutive seven (7) day period. In any consecutive seven (7) day period, the permittee shall not dispose of more than 119,000 gallons in the sprayfield.
- d. The actual maximum hourly rate of wastewater application shall not exceed 0.25 inches per hour.
- e. There shall be a minimum of a 12-hour rest period between spray applications for any spray line.
- f. Spraying in winter shall be conducted during daylight hours only.
- g. The effluent shall have a minimum of 4.0 mg/L total chlorine residual (or 1 mg/L free chlorine residual) at the spray nozzle at all times.

D2. Influent and Effluent Limitations:

The treatment and spray disposal system shall be operated at all times in accordance with the following limits:

<u>Parameter</u>	<u>30-Day Average</u>	<u>Maximum in any 7-Day Period</u>	<u>Daily Maximum</u>
Influent Flow	16,200 gpd	N/A	N/A
Spray Effluent Flow		119,000 gallons	N/A
Biochemical Oxygen Demand (5-day)	N/A	N/A	30 mg/L
Total Suspended Solids	N/A	N/A	30 mg/L
Escherichia coli	N/A	N/A	77 colonies/100 mL
Chlorine Residual <sup>(1)</sup>			
Total, or	N/A	N/A	4 mg/L (minimum)
Free	N/A	N/A	1 mg/L (minimum)

Notes:

- (1) The permittee may maintain a minimum of 1.0 mg/L free chlorine residual instead of 4 mg/L total chlorine residual. In either case, measurement must be made at the spray nozzle. The permittee may choose to utilize disinfection prior to effluent storage as allowed under §14-1705(a)(2) of the Indirect Discharge Rules.

D3. Lagoon Freeboard Requirements:

A minimum three feet of freeboard shall be maintained in the 2-cell treatment/storage lagoon at all times.

D4. Annual Inspection, Report and Implementation Schedule:

A. Annual Inspection:

Annually during the month of April, the permittee shall retain a Professional Engineer Registered in the State of Vermont to perform a thorough inspection, evaluation and report of the complete treatment and spray 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 and manholes;
2. Verification of the proper operation of the blowers and aeration systems;
3. Walking each spray lateral in the spray fields and checking for the proper operation of the spray system, noting any repairs needed and any areas of erosion or concentrated surface runoff;
4. Verifying the proper operation of the chlorinator;
5. Evaluation of the accumulation of sludge in the 2-cell treatment/storage lagoons and the need to remove the sludge; and
6. Noting any additional repairs, or maintenance that needs to be performed.

B. Annual Inspection Report:

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

1. a complete list of the items inspected and the results of the inspection;
2. a discussion of the recommended repairs and maintenance required; and
3. an evaluation of the past year's water meter readings, effluent quality, spray disposal records and the groundwater levels in the spray fields to verify compliance with the permit requirements.



D4. Annual Inspection, Report and Implementation Schedule (continued):

C. Implementation Schedule:

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

D5. Wastewater Treatment Plant Operator Qualifications:

The permittee is required at all times to employ a wastewater treatment plant operator with a minimum Grade I operator certificate in accordance with the Department of Environmental Conservation's Wastewater Treatment Facility Operator Certification Rule dated September 25, 2014. The permittee shall notify the Agency in writing of any change in the operator employed to operate the treatment and disposal facility.

D6. Sludge Disposal:

If any sludge is removed from the treatment/storage lagoons, the permittee shall report to the Secretary the amount of sludge removed and where the sludge was taken for disposal.

D7. 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.

D8. 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.

D9. Discharge Restrictions:

The permittee shall not discharge or allow any person to discharge anything other than sanitary (domestic) wastewater to this treatment and disposal system.

D10. Monthly Report:

On a monthly basis, the permittee shall submit a disposal report to the Secretary summarizing all information required for the previous month. The report shall be submitted to the Secretary by the 15th of each month for all disposal activities for the previous month. The report shall be signed by an official of the permittee, under the following statement:

“I certify under penalty of law that I have personally examined, and am familiar with, the information submitted herein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.”

**SECTION E "MONITORING"**

E1. Treatment and Disposal System Monitoring:

The influent to and the effluent from the treatment system shall be sampled and analyzed as follows:

PARAMETER	MEASUREMENT LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE
Flow Volume	influent and spray effluent	Continuous	Daily total, maximum, minimum
Biochemical Oxygen Demand (BOD <sub>5</sub> )	spray effluent	Monthly	8-hour composite <sup>(1)</sup>
Total Suspended Solids	spray effluent	Monthly	8-hour composite <sup>(1)</sup>
Escherichia coli	spray nozzle	Monthly	Grab <sup>(2)(3)</sup>
Total or Free Chlorine Residual	spray nozzle	2 x daily when spraying	Grab <sup>(2)</sup>
Dissolved Oxygen	lagoons	Daily	Grab
Lagoon Level	staff gauges	Daily	Gage reading
Air Temperature	in spray field	At start and end of spray period	Temperature reading

E1. Treatment and Disposal System Monitoring (continued):

Notes:

- (1) Composite samples shall be taken between the hours of 6:00 A.M. and 6:00 P.M., unless otherwise specified.
- (2) On the day that the E. coli grab sample is collected, the daily residual chlorine sample for that day shall be collected at the same time and location as the E. coli sample. Both shall be collected after the spray system has been operating that day for a minimum of 30 minutes.
- (3) If the E. coli effluent limit of 77 col/100 mL is exceeded, the permittee shall re-sample the spray effluent during the next spray disposal event and submit the results of that sampling to the Secretary.

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 Levels:

The depth to groundwater (below ground surface) in all monitoring wells shall be measured and recorded weekly. Dry wells may be recorded as "no water to depth of well".

The results of these measurements shall be submitted to the Secretary by the 15th day of the following month.

E3. 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.

The laboratory utilized for analyzing the samples shall demonstrate successful participation in third party proficiency testing recognized by ISO or NELAP for all parameters and shall analyze any check sample provided by the Secretary. Failure to obtain an acceptable result for either the Secretary's check sample or successful third party proficiency testing may be a basis for requiring an alternate analytical laboratory.

E4. Miscellaneous:

If the permittee monitors any required parameter set forth in this permit for this treatment and disposal system more frequently or at additional locations outside the treatment facility than required by this permit, the results of such monitoring shall also be provided in the appropriate monthly reports, and analyzed in the engineer's annual inspection report.

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.

E5. Other Monitoring Requirements:

No other water quality monitoring of the system is required under this permit. However, the Secretary reserves the right to require additional effluent, groundwater and/or surface water monitoring in accordance with Condition A(7) should operation of the system fail to meet the requirements of Sections D(1) and D(2).

## **SECTION F - "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-9-0086, to The Housing Foundation, Inc. by the Secretary relies upon the data, designs, judgement and other information supplied by the applicant, their 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 G - "EFFECTIVE DATE"**

This Indirect Discharge Permit, ID-9-0086, issued to The Housing Foundation Inc. for the discharge of treated domestic sewage from the sewage treatment and spray disposal system serving the Windy Hill Acres Mobile Home Park in the Towns of Springfield and Weathersfield, Vermont, is effective on this \_\_\_\_ day of October 2017.

Emily Boedecker, Commissioner  
Department of Environmental Conservation

By: \_\_\_\_\_ **DRAFT** \_\_\_\_\_  
Bryan Redmond, Director  
Drinking Water and Groundwater Protection Division