HS002499

Application to Alter or Repair an Onsite Wastewater Treatment System

The applicant is applying for a permit to: ☑ **ALTER** ☐ **REPAIR** an existing Onsite Wastewater Treatment System, and agrees to comply with LMC 24.38 or County Resolution 02-0030.

1. **Street Address (No Rural Route):** 13733 S 190th St

   Legal Description of Property: Township: T8 Range: R8 Section: S12

   Block _____ Lot 1 SubDivsion _____ Add: _____

   ***Parcel ID** 21 - 12 - 200 - 005 - 000 (i.e. 99-99-999-999-999)

2. **Property use:** ☑ Residential ☐ Commercial ☐ Other use (Describe: _____)
   Number of bedrooms 3 Does the system have a: ☐ Garbage Grinder ☐ Large Capacity Tub

3. **Type of Present Individual Disposal System** ☑ septic system ☐ lagoon ☐ other

4. **Description of proposed alteration or repair:** Add laterals due to not enough sq ft

5. **Current Type of Lateral** Per. P.Pc with gravel **Current Linear Ft. Of Lateral** - 75 feet or 225 sq ft

   Current Tank Gallonage 1,000

6. Print Name Trevor McDonald Address P.O. Box 85372 Phone: 402-770-9397

   Applicant Signature: Trevor McDonald

Please contact LLCHD for the current permit fee for this application
Fee must be included before the application will be processed. Incomplete information will delay processing.

HEALTH DEPARTMENT USE ONLY

☐ Municipal Code 24.38 ☐ County Resolution Number 02-30

Date received ____/____/____ REVIEW: ☐ Approved ☐ Disapproved By: _____

Comments (if any): _____

Site visits
Date ____/____/____ By _____
Date ____/____/____ By _____

Installation final written approval
Date ____/____/____ By _____

Return application to:

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3131 "N" Street, Lincoln, NE 68510
Phone: (402) 441-8643

Business Office Use Only
Received: Date: 12/16/22 Amount $245 Check No. 1624 Initials

Revised 2/18

Lincoln-Lancaster County Health Department (LLCHD)
Environmental Public Health Division
3131 "O" Street • Lincoln, NE 68510-1514
Phone: 402-441-8643

B

Permit Number:

Onsite Wastewater Treatment System
Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address 13733 S 190th St (no rural route) City Bennet NE, Zip 68317

Owner Mark Ebers Address 13733 S 190th St

Date of Tests 12/15 to 12/16 Weather: Precipitation — Temperature 28°

Percolation Test Data Table

A.	B.	C. D. E. F. Saturation/Swelling Time				G. H. I. J. K. Water Level Drop Last 30 mins of 4 hr or last 10 mins of 1 hr					L. M. N. Results		
		Start		End		Start			End				
Hole No.	Hole Depth(in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Initial Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time Interval	Water Level Drop(in)	Percolation Rates (Min/in = mpi)
1	36	12/15	4:00	12/16	4:00	12/16	4:00	6	12/16	4:30	30	3in	10 mpi
2								6				3in	10 mpi
3								6				2.5	12 mpi
4								6				2.5	12 mpi
								6					
								6					
								6					
								6					

Person Conducting Percolation Test

Name: Trevor McDonald
Phone: 402-770-9397
Address P.O. Box 85372
Lincoln, NE 68501

Soil type (NRCS Maps/Other)
Groundwater Depth over 7 foot

Sum of Percolation Rates: 44
Average of Rates: 11
Rate Used for Calculation: 10-20

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Comments (Soil type, groundwater, floodplain, etc.)

Signature of Reviewing Official Date

CONDUCTING A PERCOLATION TEST

READ THOROUGHLY

DIAGRAM OF PERCOLATION TEST PROCEDURE

Natural Ground Level

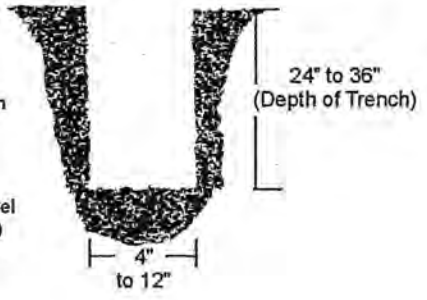
I. Number, Size and Location of Test Holes

A. Dig six or more holes spaced evenly over proposed drainfield.

B. Scratch smeared areas on the bottom 12" of hole.

C. Remove loose material from hole.

D. Add 2" layer of clean gravel in hole. Gravel (1/4"-3/4") may be placed in a nylon mesh bag so it can be used again.



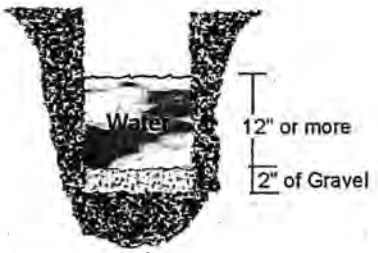
II. Saturation/Swelling of Soil

A. Fill hole with at least 12" of clear water.

B. **MAINTAIN THIS WATER LEVEL FOR 4 HOURS.**

C. Record on Form B, Columns A to F

D. **Must wait 24 hours before beginning Step III.**



24 Hours Later

III. Water Level Drop Measurement (Refer to instructions 4a, b or c)

A. Adjust water level to 6".

B. Measure from fixed reference point (nail) to water, or use a percometer.

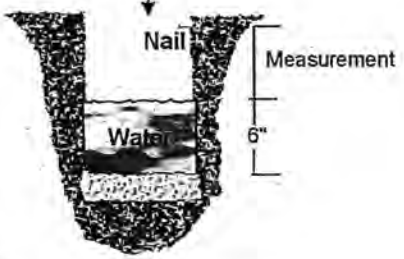
C. Record measurement and time on scratch paper.

D. 30 min. later re-measure and record time.

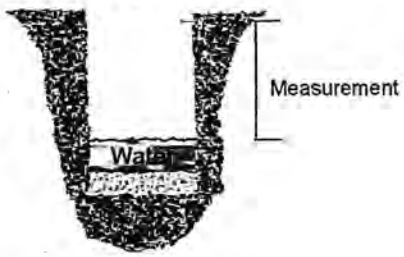
E. After each measurement, refill to 6" above gravel.

F. Continue for 4 hours taking readings evey 30 min. (Refer to 4b for exception)

G. Last 30 min. reading is used in filing out Form B. Record in Column G through M.



½ hour later
(30 minutes)



IV. The Department will calculate Percolation Rates.

Instructions

1. Percolation test holes. Percolation tests should be made in 6 or more separate holes spaced uniformly over proposed drainfield. Dig or bore holes 4 to 12" in diameter to the depth of the bottom of drainfield trench. (If sides of hole collapse, a slotted PVC plastic pipe and gravel pack may be needed to support the sides of the hole.) Do not dig holes in soil that is above the plastic limit or where frost is within 12" from the bottom of hole.
2. Preparation of test hole. Scratch any smeared areas on the bottom 12" of hole with nails driven into a 1x2" board to provide a natural soil interface for water to percolate. Remove all loose soil from bottom of hole. Add 2" of clean gravel to protect the bottom from scouring when water is put into hole.
3. Saturation and swelling of the soil. Fill holes with clear water to a depth fo 12" or more above gravel and maintain this water level at least 4 hours (add water as necessary). Do not remove water from holes. Holes should be covered with boards during the 20 hrs. wait before the test begins. Soils with slow permeability or containing greater than 30% clay will require several days saturation for thorough swelling in a dry season. The accuracy of the percolation test depends on thorough saturation and swelling of soil. Sandy soil containing no clay does not swell. The percolation test may proceed immediately if the 12" of water seeps away in 10 min. or less after filling holes twice. Proceed to Step 4c.
4. Measure percolation rate. Measurements must be made 24 hrs after starting saturation/swelling procedure described above. Record results on the front of this form and the Department will complete the calculations.

   a. If water remains in hole after the saturation/ swelling period, adjust depth to 6" above gravel. From a fixed point, measure the drop in water level over a 30 min. period to nearest 1/8". This drop is used to calculate percolation rate.

   b. If no water remains in hole after the saturation/ swelling period, add 6" of clear water above gravel. From a fixed point, measure the drop in water level to nearest 1/8" at 30 min. intervals for 4 hrs. Refill to the 6" level above gravel after each measurement. The drop that occurs during the last 30 min. of the 4 hrs. is used to calculate the percolation rate (when 3 consecutive percolation rates vary by no more than 10%, the test can stop before the end of 4 hr. period).

   c. In sandy soils, or other soils in which t he first 6" of water seeps away in less than 30 min., allow 10 min. between measurements and run the test for 1 hr. The drop that occurs during the last 10 min. of 1 hour is used to calculate the percolation rate. If 6" of water seeps away in less than 10 min., use a stopwatch.
5. Record test results on the front of this form. The average of the percolation rates calculated for all holes in 30 (10) min. will usually be the rate used to size the drainfield. Exceptions are the use of the slowest percolation rate when rates vary more than 20 mpi between holes or when other soil evaluation indicates a problem.

LLCHD reserves the right to witness or perform percolation tests and to required additional soil or groundwater information.

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3131 O Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
ALTERATION PERMIT
No. HS002499

System Type: Standard

Situs: No Site Address Specified

Issued: 12/20/2022

Expires: 12/20/2023

Description: S12, T8, R8, 6th Principal Meridian, LOT 1 NE

Owner: EBERS, MARK & CATHERINE
13733 S 190 ST
BENNET, NE 68317

Patricia D. Lopez

Patricia D. Lopez, RN, MSN, Health Director

Dear Applicant:

The above document is your permit to alter an existing On-site Waste Water System at the location listed. Please contact this office once the alteration is complete to obtain final approval before use.

Patricia D. Lopez

Patricia D. Lopez, RN, MSN
Health Director

TREVOR MCDONALD
PO BOX 85372
LINCOLN, NE 68501

SCANNED

H5002499

Application to Alter or Repair an Onsite Wastewater Treatment System

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3. **Type of Present Individual Disposal System** ☑ septic system ☐ lagoon ☐ other

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5. **Current Type of Lateral** Per. Pipe with gravel **Current Linear Ft. Of Lateral** - 75 feet or 225 sq ft

   Current Tank Gallonage 1,000

6. Print Name Trevor McDonald Address P.O. Box 85372 Phone: 402-770-9397

   Applicant Signature: Trevor McDonald

Please contact LLCHD for the current permit fee for this application

Fee must be included before the application will be processed. Incomplete information will delay processing.

HEALTH DEPARTMENT USE ONLY

☐ Municipal Code 24.38 ☒ County Resolution Number 02-30

Date received 12/20/22 REVIEW: ☑ Approved ☐ Disapproved By: _____

Comments (if any): _____

Site visits
Date ___/___/___ By _____
Date 3/30/23 By DV

Installation final written approval
Date 03/30/23 By Doug Jones

Return application to:

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3131 "N" Street, Lincoln, NE 68510
Phone: (402) 441-8643

Business Office Use Only

Received: Date: 12/16/22 Amount $245 Check No. 1624 Initials

Revised 2/18

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

Exhibit 5

Permit Number: HS002499

Onsite Wastewater Treatment System

Inspection Sheet

Date 3/31/23 Legal Description _____ ¼ ¼ Section/Township/Range

Onsite System Location

Address (no rural route) 13733 S. 190th City _____

Owner _____ Address _____

Mark One: ☒ Dwelling ☐ Non-dwelling

☐ New System ☒ Alteration [☐ Tank Only ☐ Trench Only] ☒ Lateral Only

☐ Temporary modification (Describe problem causing discharge and reason for temporary modification): _____

Drainfield Absorption System:

☒ Lateral ☐ Bed ☐ Non-standard (engineer-designed and NDEQ approved) ☐ Holding Tank ☐ Trench

Total square feet of drainfield existing 225 added 405 Sq. Ft. 630 total Tank Size 1,000 existing gals

Total length of laterals 75' existing 90' added Type of Distribution: ☐ Chamber ☐ Perforated Pipe ☐ Other (describe) _____

No. of Absorption Laterals 2 Width 4.5 + 3.625 facets No. of Drop Boxes _____ Distribution Box 1

Leveling Method Used Laser

Setbacks (Check the Boxes Below if the Required Setback has been Satisfied):

Distance From	Private Well	Public Well	Surface Water	Ground water	Pressure Water Lines	Property Lines
Tank (ft)	50 ☐	500 ☐	50 ☐	NA ☐	10 ☐	5 ☐
Field (ft)	100 ☐	500 ☐	50 ☐	4 ☐	25 ☐	5 ☐

Geographical Coordinates to 6 Decimals:

Tank _____ NA

Lateral #1 _____ Lateral #3 _____

Lateral #2 _____ Lateral #4 _____

Comments:

Inspections prior to Final Approval
Initial _____ Date Covered prior to inspection

Follow-Up _____ Date _____

Follow-Up _____ Date _____

Installation Final Written Approval
By Doug Ams
Date 3/30/23

Field Note Drawing (See Reverse Side):

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3131 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

REC'D JAN 23 2023 **D**

Permit Number: HS 002499

Onsite Wastewater Treatment System
As-Built Description and Drawing

Type of Onsite Wastewater System: ☐ Lagoon (Skip to Back Page) ☑ Subsurface Septic ☐ Mound

Onsite Wastewater System Location

Address or Legal Description or Parcel Identification Number (PID) 13733 S 190th St Bennet, Ne 68317

Owner: Mark & Catherine Ebbers Address

A. Wastewater Piping

1. Material: Plastic Diameter: 4 in.
2. Distance between dwelling and septic tank: 125 ft.

B. Septic Tank

1. Material Concrete
2. Capacity: 1000 Gallon
3. Depth to top of tank, below unfinished grade: 24 in.
4. Distance to:
   Well no well ft. meter pit over 300
   Pressure line over 100 ft
   Property Line over 100 ft.
   Foundation over 100 ft.

C Distribution Box or Drop Box

Distance **and** Direction from septic tank: 3 ft. N

D. Drainfield/Absorption Field

☑ Trench ☐ Bed

1. Type: ☐ Perforated Pipe ☐ Chamberless ☐ Other
   Material brand and inside width of Chamberless:
   1203 EZ Flow
   Existing 75 ft Per. pipe 225 sq ft
2. Number of Laterals: 1
3. Length of each lataral (linear): ft. 90 ft. ____ ft. ____ ft. ____
4. Drainfield size: 405 sq. ft.
5. Distance to:
   Well over 300 from meter pit ft.
   Pressure line over 100 ft.
   Property line over 100 ft.
   Depth of Groundwater over 7 ft

Was the Onsite Wastewater System covered prior to LLCHD inspection? ☑ Yes ☐ No

If Yes, the Certified Professional must sign below for final approval:

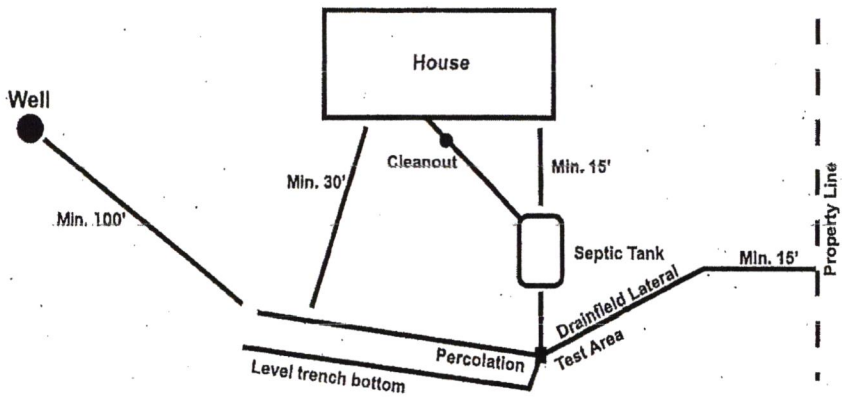
I swear and affirm that the system complies with Lincoln Municipal Code (LMC) 24.38 and/or County Resolution R-13-0062 requirements and that the information and documentation submitted are true and accurate.

Certified Professional Signature: [signature] Date: 11/9/23

Complete As-Built drawing on the back of this form.

Indicate North
w/ Arrow Here:

Onsite Wastewater System Design (Example)



*Note-If Lagoon, show all applicable dimensions

House
1000 Gallon
75± ft PVC-PR 3/4 wide
90± ft EZ-Flow
DRIVEWAY
Water Line
Water Pit
S. 190th St