

Onsite Wastewater Treatment & Private Sewage Disposal System Homeowner & Contractor Rules & Regulations Policy

NOTE

- A percolation (perc) test is required for ANY **soil absorption system** and SHALL be conducted by a certified engineer. This must be submitted prior to the issuance of a construction application.
- For ANY **sand filter or alternative system** (peat, coco, Norweco, Waterloo, etc.) a recommendation letter and/or a soil analysis is required by a certified engineer.
- The Dubuque County Health Department will not issue a Private Sewage Disposal System Construction Application until one of the three is completed – a percolation test, recommendation letter, or soil analysis.

A Private Sewage Disposal System CANNOT be installed until a Private Sewage Disposal System Construction Application has been completed and a site evaluation has been conducted.

1. Homeowner & contractor shall work with the Dubuque County Environmental Specialist to complete the Onsite Wastewater Treatment & Private Sewage Disposal System Construction Application.
 - Once the application is complete, the contractor, homeowner, and Environmental Specialist shall schedule an initial on-site evaluation.
 - The Dubuque County Health Department shall provide the homeowner and contractor with signed copies of the rules and regulations policy, construction application, and septic resources upon application completion.
2. An initial on-site evaluation will be conducted preferably with the homeowner, contractor, and Dubuque County Environmental Specialist present. At this visit, the Environmental Specialist will complete a site evaluation form. This will be done, and consideration shall be given prior to the issuance of a Private Sewage Disposal System Permit.
3. Following the initial on-site evaluation, the Dubuque County Environmental Specialist will determine if the on-site evaluation meets all the requirements per Iowa Administrative Code 567 IAC Chapter 69 – Private Sewage Disposal Systems; 567—69.3(455B) Site Analysis. 69.3(1) Site Evaluation:

“A site evaluation shall be conducted by the administrative authority prior to issuance of a construction permit. Consideration shall be given to, but not be limited to, the impact of the following: topography; drainage ways; terraces; floodplain; percent of land slope; location of property lines; location of easements; buried utilities; existing and proposed tile lines; existing, proposed and abandoned water wells; amount of available area for the installation of the system; evidence of unstable ground; alteration (cutting, filling, compacting) of existing soil profile; and soil characteristics determined from a soil analysis, percolation tests, and soil survey maps if available.”
4. If the initial on-site evaluation meets all requirements, then a Private Sewage Disposal System Construction Application may be issued. Homeowner, contractor, and the Environmental Specialist will work together to complete the Application in full, including the Design Form.



Permit #: _____

Contractors SHALL follow Iowa Administrative Code 567 IAC Chapter 69 – Private Sewage Disposal Systems, throughout the entire installation process.

5. Two site inspections will be completed throughout the installation process. The Dubuque County Health Department highly recommends that the contractor communicate with the environmental specialist leading up to the septic system installation and prefer to be contacted 24 hours prior to installation, it is the contractor’s responsibility to communicate with our office and schedule these according to the evaluation periods. The two evaluation periods include:
 1. When the collection lines are being set.
 2. When the system is complete, and the septic tank is exposed with the top layer (distribution lines being set).
DO NOT BACKFILL UNTIL THE ENVIRONMENTAL SPECIALIST HAS CONDUCTED THE 2nd and FINAL INSPECTION.

The Dubuque County Environmental Specialist will take pictures at all on-site evaluations and inspections. Contractors must continue to take photos throughout the process when the Environmental Specialist is not on-site and provide those photos to the Dubuque County Environmental Specialist.

6. Following the completion of the Private Sewage Disposal System installation, contractors shall send the following to the Dubuque County Environmental Specialist within **5 business days**:
 - Pictures taken throughout installation process
 - Sketch of completed system
 - Receipts for sand if used
 - Receipts for clean rock5 if used
7. Once all site inspections are completed and documentation is received, the Dubuque County Environmental Specialist will review and sign the Construction Application for the installation of the Private Sewage Disposal System and the homeowner will receive a copy of their permit. If not signed the Dubuque County Environmental Specialist shall notify the contractor of the reasoning and provide the contractor with the necessary steps to obtain signature.
8. The Environmental Specialist will send completed documentation to the homeowner and keep a file at the Dubuque County Health Department.

Residential Septic Permit:	\$250.00
Septic Reconstruction and/or Modification:	\$100.00
Residential Well Permit:	\$250.00
Holding Tank Installation:	\$100.00
Septic or Well Abandonment (not applicable if also issued new construction permit):	\$75.00

I have read and agree to all the terms and conditions detailed above.

Contractor Name/Signature

Date

Applicant Name/Signature

Date

Onsite Wastewater Treatment & Private Sewage Disposal System Construction Application

CONTACT INFORMATION

Applicant Name: _____ Phone: (____) _____

Applicant Email: _____

Job Site Address: _____ Township: _____

Section: _____ Lot: _____ Subdivision: _____

City: _____ State: _____ Zip Code: _____

Septic Contractor: _____ Phone: (____) _____

Company: _____

Contractor Email: _____

DESCRIPTION OF CONSTRUCTION

Check all that apply.

Class of Work:

- New
- Repair
- Extension
- Modify
- Replacement
- Abandonment

Occupancy:

- Residential
- Commercial
- Industrial
- Multi-Residential
- Recreational

Structure:

- Utilized Year-Round
- Utilized Seasonally
- Residential Dwelling
- Mobile Home
- Commercial/Office Building

Water Supply:

- Private Well
- Shared Well
- Municipal Water
- Common Well

Number of Bedrooms: _____ Number of Employees: _____

I understand that if there are any changes to the proposed plan and information provided, the Dubuque County Health Department will be notified before installation of the onsite wastewater treatment and private sewage disposal system.

I understand work must be completed and inspected within one calendar year from the permit issuance date, or the permit will be null and void.

I understand all work shall be inspected and approved by Dubuque County Health Department prior to concealing any installation.

I hereby acknowledge the above information is correct, and I agree to comply with all ordinances, State, and Federal laws regulating activities covered by this permit.

Contractor Signature

Date



Permit #: _____

Onsite Wastewater Treatment & Private Sewage Disposal System Design Form

Site Address: _____

PROPOSED SYSTEM DESCRIPTION

Septic Tank Size: _____ gallons

Reference the table below to determine septic tank size:

Up to and including 3-bedroom homes	1,250 gal.
4-bedroom homes	1,500 gal.
5-bedroom homes	1,750 gal.
6-bedroom homes	2,000 gal.

Gallons per day: _____

Residential wastewater flows are based on 150 gallons per bedroom per day. For wastewater flow rates for nonresidential and commercial domestic waste applications serving the equivalent of fewer than 16 individuals on a continuing basis.

PRIVATE SEWAGE DISPOSAL SYSTEMS

Check the proposed system being installed for this site address.

- Soil Absorption System (licensed engineer design required)
- Chamber System (licensed engineer design required)
- Mound System (licensed engineer design required)
- Intermittent Sand Filter System (soil analysis or recommendation letter required)
- Coco Filter System, Peat System, or any Alternative System (soil analysis or recommendation letter required as well as a maintenance contract)
- Holding Tank (requires a Holding Tank Agreement with the Dubuque County Health Department)

Additional Comments/Notes:

Onsite Wastewater Treatment & Private Sewage Disposal System Design Resources

Reference the following resources when designing and planning for Private Sewage Disposal System installation:

MINIMUM DISTANCES

All private sewage disposal systems shall be in accordance with the minimum distances shown in Table I.

Table I

Minimum Distance in Feet From	Closed Portion of Treatment System ⁽¹⁾	Open Portion of Treatment System ⁽²⁾
Private water supply well	50	100
Shallow public water supply well ⁽³⁾	200	400
Deep public water supply well ⁽⁴⁾	100	200
Groundwater heat pump borehole	50	100
Lake or reservoir	50	100
Stream or pond	25	25
Edge of drainage ditch	10	10
Dwelling or other structure	10	10
Property lines (unless a mutual easement is signed and recorded)	10	10
Other type of subsurface treatment system	5	10
Water lines continually under pressure	10	10
Suction water lines	50	100
Foundation drains or subsurface tiles	10	10

⁽¹⁾ Includes septic tanks, aerobic treatment units, fully contained media filters and impervious vault toilets.

⁽²⁾ Includes subsurface absorption systems, mound systems, intermittent sand filters, constructed wetlands, open bottom media filters and waste stabilization ponds.

⁽³⁾ "Shallow well" means a well located and constructed in such a manner that there is not a continuous layer of low-permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

⁽⁴⁾ "Deep well" means a well located and constructed in such a manner that there is a continuous layer of low-permeability soil or rock at least 5 feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

[ARC 7569B, IAB 2/11/09, effective 3/18/09; ARC 0208C, IAB 7/11/12, effective 8/15/12]

LATERAL SIZING

Percolation Rate
(Minutes per inch)

Gals/sq. ft.

0 to 5	1.2
6 to 10	0.8 – 0.6
11 to 29	0.6 – 0.5
30 to 45	0.5 – 0.4
46 to 60	0.4 – 0.2

	2-bedroom 300 gal.		3-bedroom 450 gal.		4-bedroom 600 gal.		5-bedroom 750 gal.		6-bedroom 900 gal.	
Width of trench in feet	2'	3'	2'	3'	2'	3'	2'	3'	2'	3'
Soil loading rate gal/ft ²										
0.1	Not suitable for soil absorption trenches									
0.2	750	500	1125*	750	1500*	1000*	1875*	1250*	2250*	1500*
0.3	500	333	750	500	1000*	666	1250*	833*	1500*	1000*
0.4	375	250	562	375	750	500	938*	625	1125*	750
0.5	300	200	450	300	600	400	750	500	900*	600
0.6	250	167	375	250	500	333	625	417	750	500
0.7	214	143	321	214	428	286	536	357	643	429
0.8	188	125	281	188	375	250	469	312	562	375
0.9	167	111	250	167	333	222	417	278	500	333
1.0	150	100	225	150	300	200	375	250	450	300
1.1	136	91	205	136	273	182	341	227	409	273
1.2	125	84	188	125	250	167	313	208	375	250

* Requires pressure distribution (pump)

SAND FILTER SIZING

Siphon Dosed

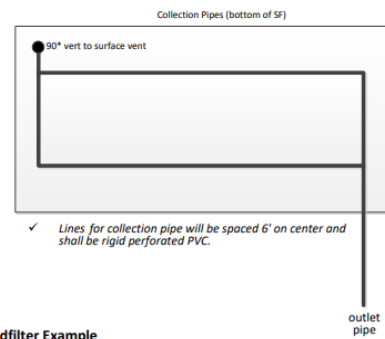
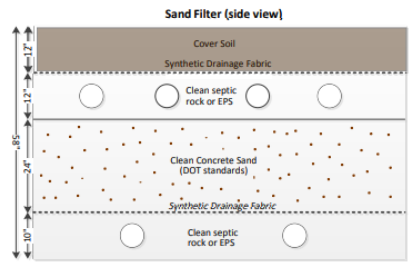
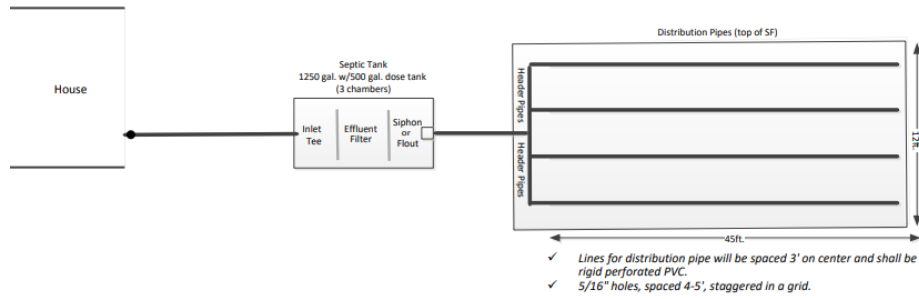
180 sq. ft. per bedroom.

Pressure Dosed

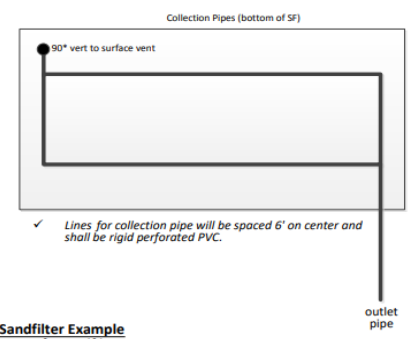
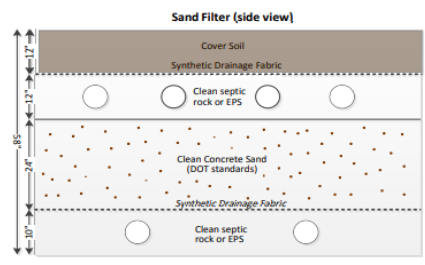
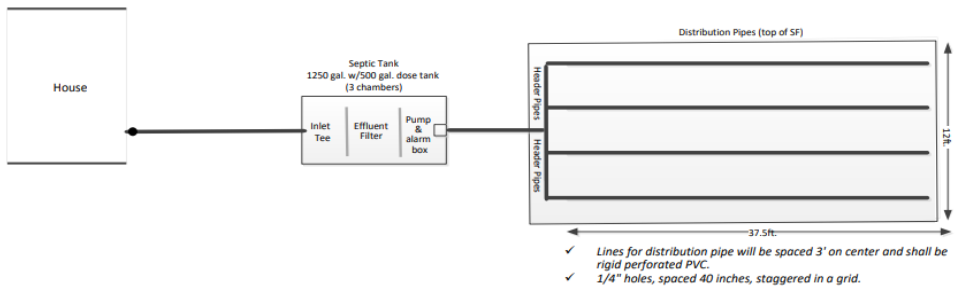
150 sq. ft. per bedroom.

Sand Filter Size	1 BEDROOM	2 BEDROOM	3 BEDROOM	4 BEDROOM	5 BEDROOM	6 BEDROOM
SIPHON-DOSED	<i>180 sq. feet</i>	<i>360 sq. feet</i>	<i>540 sq. feet</i>	<i>720 sq. feet</i>	<i>900 sq. feet</i>	<i>1080 sq. feet</i>
PRESSURE-DOSED	<i>150 sq. feet</i>	<i>300 sq. feet</i>	<i>450 sq. feet</i>	<i>600 sq. feet</i>	<i>750 sq. feet</i>	<i>900 sq. feet</i>

SYSTEM EXAMPLES



Siphon/Flout Dosed Sandfilter Example
3 bd rms x 180 sq.ft. = 540 sq.ft. sandfilter



Pressure/Pump Dosed Sandfilter Example
3 bd rms x 150 sq.ft. = 450 sq.ft. sandfilter

NO Distribution Box Shall be Installed on a Siphon/Flout Dosed Sand Filter System

FOR DISCHARGING SYSTEMS

A completed copy of the Notice of Intent Application for the NPDES Permit SHALL be submitted. (See attached).

567—69.4(455B) Requirements when effluent is discharged into surface water. All discharges from private sewage disposal systems which are discharged into, or have the potential to reach, any designated waters of the state or subsurface drainage tile shall be treated in a manner that will conform with the requirements of NPDES General Permit No. 4 issued by the department of natural resources, as referenced in 567—Chapter 64. Prior to the use of any system discharging to designated waters of the state or a subsurface drainage tile, a Notice of Intent to be covered by NPDES General Permit No. 4 shall be submitted to the department. Systems covered by this permit must meet all applicable requirements listed in the permit, including effluent sampling and monitoring. [ARC 7569B, IAB 2/11/09, effective 3/18/09]

567—69.5(455B) Requirements when effluent is discharged above the ground surface.

69.5(1) all private sewage disposal systems that discharge above the ground surface shall be annually inspected to ensure proper operation.

69.5(2) Private sewage disposal systems that require a maintenance contract shall be inspected by a manufacturer’s certified technician.

69.5(3) Private sewage disposal systems that do not require a maintenance contract shall be visually inspected by a person with knowledge of the system for any malfunction and shall have the septic tank opened, inspected, and pumped if needed. A record of the inspection and any tank pumping shall be maintained and be made available to the administrative authority upon request.

69.5(4) No private sewage disposal system shall discharge to a state-owned natural or artificial lake, an outstanding Iowa water or an outstanding national water as defined in 567—subrule 61.2(2) unless authorized by an individual NPDES permit. [ARC 7569B, IAB 2/11/09, effective 3/18/09; ARC 0208C, IAB 7/11/12, effective 8/15/12]

567—69.6(455B) Requirements when effluent is discharged into the soil. No septage or wastewater shall be discharged into the soil except in compliance with the requirements contained in this chapter.

[ARC 7569B, IAB 2/11/09, effective 3/18/09]

Check all that apply:

- Distance is LESS THAN 1 mile to a Class A Waterway (bacterial water testing is required)
- Distance is GREATER THAN 1 mile to a Class A Waterway
- System DOES discharges over another’s property (a copy of the recorded easement is required)
- System DOES NOT discharge over another’s property.

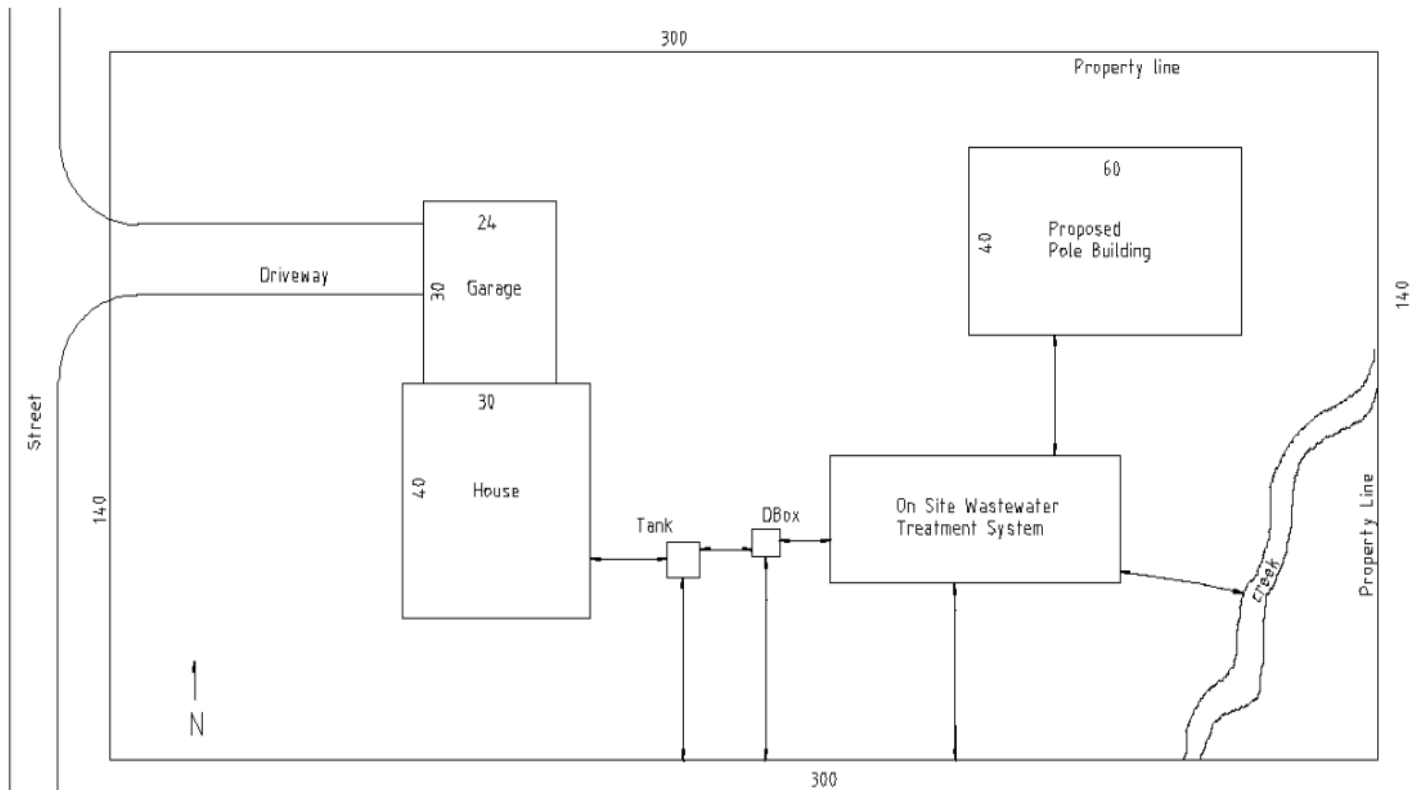
Additional Comments/Notes:

Onsite Wastewater Treatment & Private Sewage Disposal System Design Form: Sketch

Please include the following information when completing the design sketch. This shall be submitted to the Dubuque County Health Department along with photos of the installation process within 3 business days of project completion.

- Identify location of residential dwelling from the septic system on the design sketch
- Identify two points of reference on the map (i.e., house, deck, shed, etc.)
- Identify and label all existing and proposed structures with dimensions
- Identify property entrance and private driveways
- Identify distances to nearest lot line and all structures from existing and/or proposed components of system. Structures include dwellings, buildings, detached buildings, sheds, decks, pools, etc.
- Identify location of water wells, public/private water lines, ponds, streams, drainage ways, ravines, public/private easements
- Identify distances to each component of the onsite wastewater system

EXAMPLE SKETCH





Permit #: _____

Onsite Wastewater Treatment & Private Sewage Disposal System Design Form: Sketch

Site Address: _____

Individual/ Contractor Completing Sketch:

Phone: _____ Email: _____

A large rectangular area filled with a light blue grid, intended for drawing a sketch of the onsite wastewater treatment and private sewage disposal system.



Permit #: _____

DUBUQUE COUNTY HEALTH DEPARTMENT

Onsite Wastewater Treatment & Private Sewage Disposal System

PERMIT

This Permit Expires 1 year from the date of permitting _____

Permit No. _____

This permit certifies that _____ has completed an onsite wastewater Private Sewage Disposal System Construction Application with the Dubuque County Health Department for the construction, reconstruction, or alterations to a private sewage disposal system.

Private Sewage Disposal System Location: _____

Legal Description: _____

Section: _____

Township: _____

Applicants Signature: _____

Contractors Signature: _____

Environmental Specialist Signature: _____

Date of Inspections: _____

Date Photos, sketch and receipts were received: _____