



STATE OF NEBRASKA

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Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY
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NOV 23 2015

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Lorna Puntillo
ACTSAFE, LLC

RE: Onsite Wastewater Treatment Systems evaluation at Medicine Creek State Recreation Area mobile home park, near Trail 1 and Medicine Creek Lodge SW ¼, Section 24, Township 05N, Range 26W, Frontier County

NDEQ ID: 22875
Program ID: OWT TS22805

Dear Ms. Puntillo:

The Nebraska Department of Environmental Quality (NDEQ) has reviewed the available information on the existing onsite wastewater treatment systems in place at the mobile home park location at Trail 1, located within the Medicine Creek State Recreation Area. The Department's evaluation of these systems is based on the photographs and information submitted by you, in addition to other records provided by DHHS and existing correspondence in the NDEQ facility files. The available information was evaluated against requirements in *Title 124 – Rules and Regulations for the Design, Operation and Maintenance of Onsite Wastewater Treatment Systems*.

A summary of the Department's evaluation of this area includes the following items:

1. Currently, the NDEQ Onsite Wastewater Treatment (OWT) Program has one registration record on file for any septic systems at this location. Since January 1, 2004, any onsite wastewater treatment system in Nebraska is required to be registered with NDEQ whenever the system is constructed or modified. The system currently on record is for Dan Bainter, Trailer #17, submitted in October 2011, for a 1,250 gallon holding tank. There are no other registered systems at this location.
2. Since January 1, 2004, all onsite wastewater treatment systems in Nebraska are required to be installed, modified, repaired, pumped, or closed by a certified professional. The registration for the Bainter property was submitted by a certified installer. No other certified professional records for this area are on file with NDEQ.
3. Per the photographs and information you submitted to Mary Wilson via e-mail on October 20, 2015, there are a number of violations of Title 124 requirements:
 - a. Scenario 1 – unsecured caps, clean-outs, and access ports on septic systems are not acceptable. For specific requirements of sanitary sewer hook-ups at mobile home parks, please refer to DHHS requirements under Title 178.
 - b. Scenario 2 – all onsite wastewater systems should be inspected by a certified professional to determine if they are in compliance with Title 124. It appears that many of the pad sites have unknown locations, sizes, and materials of construction for their holding tanks or septic systems.
 - c. Scenario 3 – any discharge of untreated wastewater to the ground surface is a violation of Title 124. Title 124 does not differentiate between gray water sources (such as clothes washers) and black water sources (such as toilets), and all wastewater must be properly treated and disposed of in a compliant onsite wastewater treatment system.

- d. Scenario 4 – sanitary sewer venting requirements must meet Nebraska Plumbing Code requirements. No direct venting from septic tanks or holding tanks is allowed.
- e. Scenario 5 – installation of a new septic system in 2012 without proper registration submitted to NDEQ is a violation of Title 124. The system must also have been installed by a certified installer.
- f. Scenario 6 – 30 and 55 gallon drums are not acceptable for use as septic tanks or holding tanks for onsite wastewater systems. The minimum size for a septic tank or holding tank is 1,000 gallons. The tank must be constructed of a material approved in Title 124.
- g. Scenario 7 – an existing onsite wastewater system must be brought into compliance with Title 124 requirements whenever it endangers public health, discharges to the ground surface, or fails, and under a number of other conditions, which are listed in Chapter 2, Section 004 of Title 124.

Based on the available information, it appears that there are likely to be a number of violations of Title 124 at the mobile home park at Medicine Creek SRA. These potential violations include:

1. Onsite wastewater systems not properly registered with NDEQ.
2. Onsite wastewater systems not installed, modified, or maintained by certified professionals.
3. Onsite wastewater systems that are failing, and/or do not meet the design, sizing, and construction requirements of Title 124, including:
 - a. Inadequate septic and holding tank sizes and construction materials.
 - b. No information on lateral fields/soil absorption systems for septic systems. If lateral fields are used with some systems, there are setback requirements for adjoining properties, and requirements for adequate separation from groundwater that must be maintained.
 - c. Inadequate setback distances between septic and holding tanks, and adjacent structures and dwellings.
 - d. Evidence of gray water discharges to the ground surface, which is prohibited under Title 124. All wastewater must be treated and disposed in a compliant onsite wastewater system.

The Department recommends that the Bureau of Reclamation (property owner), the Nebraska Game & Parks Commission (site manager) and any other private parties involved in the leasing or rental of these pad sites at the mobile home park at Medicine Creek SRA have a NDEQ certified Onsite Wastewater Inspector conduct an inspection of each pad site and each individual onsite wastewater treatment system. Each system that meets the conditions of Section 4, Chapter 2 of Title 124, will be required to be modified or replaced. If a significant number of these systems are non-compliant, and cannot meet setback requirements, the interested parties may wish to consider replacing all systems with a single, large cluster system that can treat the wastewater of all the pad sites at the mobile home park at a single location.

Further information on the Title 124 regulations and the NDEQ Onsite Wastewater Program can be found on the Department web site at: <http://deq.ne.gov/NDEQProg.nsf/OnWeb/Onsite>.

If you have any other questions or comments, you can reach me at 402-471-8283. Thank you.

Sincerely,



Mark Bauer, P.E.

Onsite Wastewater Unit

Nebraska Department of Environmental Quality