



May 12, 2022

Michelle Lantz
Arapahoe County Public Works and Development
6924 S. Lima St.
Centennial, CO 80122

RE: Special Exception Use
TCHD Case No. 7665

Dear Ms. Lantz,

Thank you for the opportunity to review and comment on the proposed Special Exception Use, Case No. BOA-2022-00002, located at 7425 S. County Road 129 to allow for Kennel Operations. Tri-County Health Department (TCHD) staff has reviewed the proposed use for compliance with applicable environmental and public health regulations and principles of healthy community design. After reviewing the application, TCHD has the following comments.

Water

The applicant has a well permit, #201413, issued by the Colorado Division of Water Resources. The well was originally constructed in 1997 and the current owner has registered the well in their name. Under the "Conditions of Approval" for the well, Condition 4 states: "Water from this well may be used for domestic purposes inside one (1) single family dwelling." Based on this, the kennel would not be considered an allowable use for the well.

TCHD recommends that the owner contact the Colorado Division of Water Resources to determine if the well can be re-permitted for the proposed commercial use and that Arapahoe County require that the applicant obtain approval of the commercial use for the well, prior to approval of the Special Exception Use.

Wastewater

Proper wastewater management promotes effective and responsible water use, protects potable water from contaminants, and provides appropriate collection, treatment, and disposal of waste, which protects public health and the environment.

In addition to the information provided with the referral, TCHD obtained the following additional information from the applicant:

There is a sink and will be a dog wash (ties into the same plumbing line as the sink).

Cleaning will be completed via picking up solid waste and disposing (after bagging) into our dumpster for trash service pickup, disinfecting will be done using Kennel Sol cleaner and a mop and bucket and pressure washing/disinfecting via a Wysiwash system. There is a channel floor drain in the building which pipes outside to the hillside on the south side of the building.

TCHD has several comments regarding the OWTS.

TCHD On-Site Wastewater Treatment Systems Regulation No O-17 prohibits surface discharge of the washdown water from the kennel building.

The use of disinfectant cleaners may be harmful to the OWTS.

Hair from cats and dogs may cause plugging of the building sewer line from the kennel building to the septic tank.

Pea gravel from dog run areas can be difficult to pump once it is in the septic tank.

The two cleaners proposed are not compatible-mixing of the cleaners may generate toxic gas.

Based on the above, TCHD has identified several alternatives regarding the OWTS and cleaners that will address the above concerns.

1. The applicant may abandon the trench drain and only utilize the sink for disposing of washdown water and the dog wash, provided it is connected to the OWTS.
2. If the applicant wishes to continue to utilize the floor drain, it will need to be plumbed:
 - a. into the existing OWTS, or
 - b. discharged into a new OWTS for the kennel building, or
 - c. discharged into a vault
3. A new OWTS or vault will need to be permitted by TCHD.
4. If the applicant wishes to use the existing OWTS, TCHD recommends that the applicant prepare and follow an Operations, Management and Maintenance Plan for the OWTS (OM&M). The OM&M Plan shall include the following elements:
 - a. Waste minimization to control the amount of water used in the kennel (hydraulic loading) and to minimize the amount of cleaners in order to reduce chemical concentrations in the wastewater
 - b. regular inspections by an OWTS professional to verify that the OWTS is functioning adequately.
 - c. Regular pumping of the septic tank to maintain appropriate sludge and scum levels in the tank
5. TCHD recommends an effluent screen be installed on the tank inlet from the kennel building in order to keep pet hair, soil and gravel particles out of the septic tank.
6. TCHD should review and approve the OM&M Plan.

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7. Based on the concern about toxic gas from the two proposed cleaners, TCHD recommends that the applicant only use one type of cleaner.

Please feel free to contact me at 720-200-1568 or wbrown@tchd.org with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Warren S. Brown". The signature is fluid and cursive, with a large initial "W" and "B".

Warren S. Brown, P.E.
Senior Environmental Health Consultant

cc: Kathleen Boyer, Michael Weakley, Dylan Garrison, TCHD