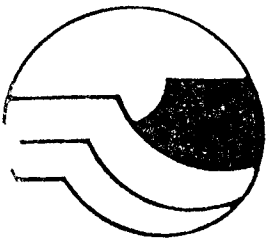


NOVEMBER 24, 1986

THE USE OF INDIVIDUAL SEWAGE DISPOSAL SYSTEMS

VERSUS SEWER IN THE REDLANDS VILLAGE ACRES NUMBER 1

LOCAL IMPROVEMENT DISTRICT



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Purpose

This report has been developed to:

1. Provide information on the status of individual sewage disposal systems in the proposed Redlands Village Acres Number 1 L.I.D.
2. Communicate the Health Department's recommendation as to the preferred means of sewage disposal for this area.

History

Of the one hundred and thirty seven lots included in the proposed L.I.D., the Health Department has records on seventy-nine septic systems, installed when the homes were built. Ninety-two percent of these systems were inspected and approved by the Mesa County Health Department. Since their installation, sixteen of the systems for which we have complete records, have failed and been replaced under permit. The average life for these systems was 10 years. This finding generally supports the belief that a septic system's effective life is from 10 to 20 years. In this particular area we seem to be on the low end of that scale. Twenty-eight percent of all the lots or houses in the L.I.D. have required system replacement due to failures over the years. The Health Department has no septic system records for 30 of the lots in the proposed L.I.D.

Evaluation

The Health Department's position in general and for this proposal is that sewer is the best method of sewage disposal, for the following reasons:

1. Centralized sewage treatment provides a minimum potential for exposing the public to the health hazards, i.e., communicable diseases, associated with the disposal of sewage.
2. Sewer systems have the least impact on surface or ground water in a given area compared to other means of disposal.
3. Sewer systems have a minimal or no impact on structures, foundations, etc.

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The use of individual sewage disposal systems is considered to be a temporary means of sewage disposal. Their use is recommended only when connection to a sewer system is not feasible, suitable soils conditions exist, and where lots are large enough to provide areas for system replacements.

This position is consistent with previous and current state and county guidelines and regulations. Section 1.3 of the current Mesa County Individual Sewage Disposal Systems Regulations states:

"1.3 Policy: The Mesa County Board of Health declares that its general policy is to require the use of public sewer systems where and whenever feasible and to limit the installation of individual sewage disposal systems only to areas that are not feasible for public sewers. These rules and regulations shall meet or exceed the requirements of the guidelines as adopted by the Colorado Board of Health pursuant to Section 25-10-104, CRS 1973."

The problems associated with the individual sewage disposal systems in the Redlands Village Acres, area include:

1. Some lots in the area are within 400 feet of existing sewer lines. When the septic systems for these dwellings fail current regulations require that the homes be connected to the sewer. Because not all of the systems will fail at the same time, this process can lead to a patchwork type of expansion where ultimately all homes will be connected to the system, but at a cost to the individual home owner that could vary greatly.
2. A small potential exists for ground or surface water contamination. Only a comprehensive study of the area could determine if this is the case.
3. Soils evaluations may not have been conducted on 57 of the lots. (Note: Current regulations require soils evaluations on all lots when individual sewage disposal systems are proposed.)
4. There appears to be a need to replace the systems every 10 to 20 years.
5. A third of the systems in the area have already been replaced once.
6. For houses that already have replacement systems, there will be increasing difficulty finding suitable areas to make further repairs or replacements. This is due to the fact that the lots are as small as one quarter of an acre in size. (Note: Current Regulations require minimum lot sizes of 1/2 acre when individual sewage disposal systems are proposed.)
7. Saturation of soils due a heavy concentration of individual sewage disposal systems, can or may already have caused cracking of foundations and damage to structures.
8. Locations of existing sewage systems limit the ability of property owners to make additions to their homes while maintaining required setbacks.