



"Healthy environment, healthy people"

**Montana Department of
ENVIRONMENTAL QUALITY**

Steve Bullock, Governor
Tracy Stone-Manning, Director

P. O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • Website: www.deq.mt.gov

August 29, 2013

President Scott Aspenlieder
Ten Mile/Pleasant Valley Sewer District
PO Box 4388
Helena, MT 59604

RE: Ten Mile/Pleasant Valley Sewer District
Wastewater System Improvements
WPCSRF Program #: C301255
STAG # XP988608-01

Scott:

Enclosed are copies of the Notice of Finding of No Significant Impact, the Finding of No Significant Impact (FONSI) and of the Environmental Assessment (EA) for the Ten Mile Estates Sewer District Wastewater System Improvement project. Please print the **Notice of Finding of No Significant Impact** in at least one publication of the local newspaper under legal advertising and return a copy of the proof of advertisement to this office. You do not have to print this letter, the DEQ or EPA FONSI, or the EA. We recommend that you advertise this as soon as possible to allow for a 30-day comment period. Please have both FONSI, the EA and the Preliminary Environmental Report (PER) available to the public at Great West Engineering and Jackson, Murdo & Grant offices during the comment period. We have distributed the Notice to the enclosed list of agencies.

If you have any questions, please do not hesitate to contact me at (406) 444-5323.

Sincerely,

Jerry Paddock, P.E.
Environmental Engineer
Technical and Financial Assistance Bureau
Phone: (406) 444-5323 Fax: (406) 444-6836

Encl.

Cc: Matt Mudd, PE, Great West Engineering – Helena
Robert Murdo, Jackson, Murdo & Grant, PC – Helena



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Notice of Findings of No Significant Impact

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

August 29, 2013

As required by state and federal rules for determining whether an Environmental Impact Statement (EIS) is necessary, an environmental review has been performed on the proposed action below:

PROJECT: Ten Mile Estates County Sewer District

PROJECT NUMBER: WPCSRF #: C301255
U.S EPA STAG #:XP8860801

<u>SRF LOANS:</u>	\$4,842,000
<u>US EPA GRANT:</u>	\$332,725
<u>WRDA GRANT:</u>	\$178,000
<u>LOCAL FUNDS:</u>	\$13,000
<u>RRGL GRANT (DNRC):</u>	\$250,000
<u>L&C COUNTY EPA WATERSHED GRANT</u>	\$18,000
<u>TOTAL COST:</u>	\$5,633,275

The August 2008 Preliminary Engineering Report (PER), December 2012 PER Update for the Ten Mile/Pleasant Valley Wastewater Subdivisions, and PER Amendment July 2013, prepared by Great West Engineering, Inc., have identified the need to replace the existing wastewater treatment facility and repair approximately 4,000 feet of the gravity sewer collection pipe. Although improvements for the entire wastewater system are needed immediately, the improvements will be split into three phases. This allows time for the District to obtain wastewater flow data to design the new treatment system. The first phase of improvements was completed in the spring of 2013 and included numerous spot repairs to the collection system to reduce the amount of inflow/infiltration. The Phase 2 improvements will be completed during the fall of 2013 and will include improvements to the collection system, a new lift station, and a new force main. A liner will be installed in an irrigation canal adjacent to the Pleasant Valley Subdivision to reduce the groundwater level within the subdivision. The Phase 3 improvements, scheduled to begin construction in the spring of 2015, will consist of upgrading the existing wastewater treatment system.

The Ten Mile Estates and Pleasant Valley Subdivisions (Subdivisions) are located about two miles north of Helena, Montana, in Lewis and Clark County. The Subdivisions include approximately 806 residents on 310 services. Constructed in 1978, the total retention wastewater treatment system was designed and approved to include two aerated treatment cells and three storage cells for 314 homes. The two treatment cells were to be lined with a PVC

liner and the three storage cells were to be lined with a natural clay and bentonite soil liner to prevent treated water from rapidly percolating into the ground. However, only one treatment cell and one storage cell were lined and the third and fourth storage cells were never fully completed. The aeration system was never been installed in either treatment cell.

It has been demonstrated by Great West Engineering, Inc. (GWE) and the Montana Department of Environmental Quality (MDEQ) that the treatment cells are leaking excessively and are not retaining water long enough to provide adequate treatment. This means untreated wastewater is leaking to groundwater. Field observations and aerial photos show that raw wastewater has regularly been directed to a storage cell which is also not retaining the wastewater long enough for proper treatment due to excessive leaking; so untreated wastewater is leaking to groundwater from the storage cell as well. The third and fourth storage cells were never fully completed and appear to have never received wastewater. It is estimated that most of the 30 million gallons of wastewater generated yearly in the Subdivision is leaking from the cells before it is properly treated. This discharge is most likely contaminating the groundwater, and may be impacting downstream water users. Approximately one foot of sludge is estimated to have accumulated in the bottom of the two operating cells since the system was placed into operation.

The collection system pipe in the Subdivisions was recently inspected using closed circuit television (CCTV) by the City of Helena under a contract to Lewis and Clark County and found to be in fair condition. However, some mains were found to be in poor condition, especially in the Pleasant Valley subdivision where cracked pipe, inadequately sloped pipe, and sagging sections were found. Pipe showing signs of age, poor construction methods, and gravel and debris were also found. These poor pipe conditions have likely been the primary cause of numerous sewer main and service line backups reported to have occurred into homes and some resulted in overflows from manholes which surfaced to the ground. Another cause of some backups into homes is because some sewer mains, like the sewer main in Kelly Road, were installed at such a shallow elevation that sewer services do not drain well. The backups may also indicate that the collection system experiences high level of inflow during storm and flood events. Additionally, because of the high groundwater in the area, homes with basements may be using sump pumps to control the water levels, and these sump pumps may be discharging to the sewer system and increasing the flows significantly in the wastewater system. This outfall sewer main and the collection sewer main in Kelly Road may have been installed at a shallow depth to allow gravity feed to the treatment lagoons. Sewer backups into homes and surface overflows from manholes are a health hazard that the Ten Mile Estates County Sewer District (District) wishes to eliminate with this project.

Based on the above reasons, the entire existing wastewater treatment system and the collection pipe in Kelly Road and some portions in the adjacent streets have been recommended for replacement. Replacement of the collection pipe to a lower elevation will allow the connecting services to be reinstalled at a steeper slope, reducing the potential for sewer backups. However, lowering the collection pipe elevation will require that a new lift station be constructed. The new lift station will be located at the east end of Kelly Road. A force main pipe from the new lift station to the new treatment cells will also be required and will be installed in Monger Road. The existing outfall main will be used as an overflow pipe. The proposed wastewater replacement system will be a total retention system so the District can continue operation without a discharge permit. All accumulated sludge in the bottom of the cells will be dewatered (if necessary) and hauled to a local agriculture field for disposal (land application). The Environmental Protection Agency (EPA) regulates the removal, treatment, and disposal of wastewater sludge in Montana

and a 503 sludge permit will be acquired by the District. A nearby landowner has been contacted and expressed interest in accepting the sludge.

Costs for the proposed improvements are estimated to be \$5,633,275. The District obtained two federal grants; one from the U.S. Army Corps of Engineers (Water Resources Development Act) for \$178,000 and one from the State and Tribal Assistance Grants (STAG) for \$332,275, which is being administrated by Lewis and Clark County. The District will also use a \$250,000 grant from the Renewable Resources Grant and Loan Program (Department of Natural Resources and Conservation) and a Lewis and Clark County EPA Targeted Watershed grant for approximately \$18,000. The District will pay approximately \$13,000 in direct costs and obtain two low interest loans (3%) for 30 years, from the Montana Water Pollution Control State Revolving Fund to complete the funding requirements. The current estimate of the two low interest loans are \$1,738,000 for Phase 1 and 2 and \$3,104,000 for Phase 3. The total cost of Phase 1 and 2 is currently estimated at \$2,529,000 and Phase 3 is currently estimated at \$3,104,000.

An environmental assessment (EA), which describes the project and analyzes the environmental impacts, has been prepared by the Montana Department of Environmental Quality (DEQ) and the U.S. Environmental Protection Agency (EPA). The EA indicates that environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species and historical sites are not expected to be adversely impacted as a result of the proposed project. Minor short-term environmental impacts associated with the construction activities will occur. No significant long-term environmental impacts were identified within the EA. Based on the EA, a preliminary decision not to prepare an Environmental Impact Statement (EIS) has been made. A Finding of No Significant Impact (FONSI) statement has been prepared by both the DEQ and the EPA.

The EA and both the EPA and DEQ FONSI's, are available for public examination on the DEQ website: www.deq.mt.gov. The environmental review records, including the EA and FONSI's issued by each agency can be viewed at the following locations:

Jerry Paddock, PE Montana DEQ WPCSFR Program 1520 East 6 th Ave. Helena, MT 59601 (406) 444-5323	Robert Murdo Jackson, Murdo & Grant, P.C. 203 N. Ewing Helena, MT 59601 (406) 442-1309	Matthew Mudd, PE Great West Engineering, Inc. 2501 Belt View Drive Helena, MT 59604 (406) 449-8627
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Comments supporting or disagreeing with the EA or with the FONSI's may be submitted for consideration to any of the above noted locations. Comments must be postmarked no later than 30 days following the date of this publication. After evaluating the comments received, the agencies will make a final decision. However, no administrative action will be taken on the project for at least 30 calendar days after release of this Notice of Finding of No Significant Impact.