



DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

SEP 08 2014

The Honorable Chester Hill
Village of Penermon
12179 County Road 775
Essex, MO 63846

RE: CP#0001408 No-Discharge Lagoon Improvements – Penermon Municipal Wastewater Treatment Facility, MO-0091715, Construction Permit Time Extension

Dear Mayor Hill:

The Department of Natural Resources, Water Protection Program, received a construction permit extension request on August 19, 2014, for the city. The request for additional time for Construction Permit Number 0001408 has been granted for a period of six months and will expire February 25, 2015. This permit extension authorizes construction of the facilities described on the permit dated August 26, 2013. This construction permit extension does not supersede any requirements of the operating permit or enforcement actions.

In accordance with 10 CSR 20-6.010(4)(G), the Department can only grant time extensions once. Thus, if the project is not complete by February 25, 2015, the applicant must submit a new construction permit application and fee.

If you were adversely affected by this decision, you may appeal to have the matter heard by the Administrative Hearing Commission. To appeal, you must file a petition with the Administrative Hearing Commission within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission.

If you have any questions concerning this matter, please contact Mr. Keith Forck, of the Water Protection Program, at 573-526-4232 or Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Thank you for your efforts to help ensure clean water in Missouri.

Sincerely,

WATER PROTECTION PROGRAM



John Madras
Director

JM:kfn

Enclosure

c: Waters Engineering, Inc.
Ms. Kristi Savage-Clarke, Water Protection Program Compliance and Enforcement Section
Southeast Regional Office, ATTN: Mr. Mike Hefner
USDA-NRCS, Attn: Ms. Phyllis Minner

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

The Missouri Department of Natural Resources hereby issues a permit to:

Village of Pendermon
ATTN: Chester Hill, Mayor
12179 County Road 775
Essex, MO 63846

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department).

As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the Department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the Department will be contingent on the work substantially adhering to the approved plans and specifications.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

August 26, 2013
Effective Date

August 25, 2014
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

Director of Staff, Clean Water Commission or Designee

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Treatment Facility: Wastewater treatment system modifications to include relocation of inlet with 14 linear feet of eight-inch ductile iron pipe, four foot diameter by 1.5 foot deep inlet manhole, and replacement of the electrical controls in influent pump station; converting existing lagoon system to no-discharge by increasing the depth of the first cell to 6.5 foot depth (5 foot maximum water depth); installation of a depth gauge and rip-rap; closure of the second and third cell; six-foot diameter by 8.67 foot deep effluent pump station with two – 2.4-horsepower irrigation pumps – each designed for 360 gallons per minute at 11 feet of total dynamic head; 1235 linear feet of six-inch PVC pipe; 300 foot of eight-inch poly pipe; 8.5 acres of crop land for row and furrow irrigation; and all the necessary appurtenances to make the facility complete and usable. The wastewater treatment facility to serve the Village of Pendermon with an average daily dry weather flow is 8,200 gallons per day and a population equivalent (PE) of 82. The total flow with 1 in 10 year rainfall-evaporation flow is 12,600 gallons per day. The lagoon is sized for approximately 90 days of storage at the 1 in 10 year rainfall-evaporation flow.

II. FINDING OF AFFORDABILITY

Pursuant to Section 644.145, RSMo, the Department is required to determine whether a permit or decision is affordable and make a finding of affordability for each permit or decision.

The Finding of Affordability is not applicable. This construction permit does not include new environmental requirements beyond what are already required by an existing compliance schedule.

III. CONSTRUCTION PERMIT CONDITIONS

The permittee is authorized to construct subject to the following conditions:

1. This construction permit does not authorize discharge.
2. All construction shall be in accordance with the plans and specifications submitted by Richard Cochran of Waters Engineering, Inc.
3. The Department must be contacted in writing prior to making any changes to the approved plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(8).
4. State and Federal Law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's Southeast Regional Office per 10 CSR 20-7.015(9)(E)2.
5. This Construction Permit is invalid for projects required to comply with the requirements contained in 10 CSR 20-4, "Grants and Loans"

6. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). “There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole.”
 - A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.
 - B. Sewer mains shall be laid at least ten feet horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot separation, the Department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
 - C. Manholes should be located at least ten feet horizontally from any existing or proposed water main.
 - D. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
 - a. The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - b. Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the Department for use in water main construction.
7. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Starting September 1, 2012, land disturbance permits will only be obtained by means of the Department’s ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm. See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.

8. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information. See www.dnr.mo.gov/env/wpp/401/ for more information.
9. A full closure plan shall be submitted to the Department's Southeast Regional Office for review and approval of any permitted wastewater treatment system being replaced. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, Section I, of the Missouri State Operating Permit No. MO-0091715. Closure shall not commence until the submitted closure plan is approved by the Department.
10. Upon completion of construction;
 - A. The City will become the continuing authority for operation, maintenance, and modernization of these facilities;
 - B. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(D);
 - C. Submit an electronic copy of the as-builts if the project was not constructed in accordance with previously submitted plans and specifications;
 - D. Submit a Form B: Application for an Operating Permit for Domestic or Municipal Wastewater (<100,000 gallons per day) along with the modification fee.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Replace existing discharge lagoon with no-discharge system with irrigation.

2. FACILITY DESCRIPTION

Conversion of existing three-cell lagoon to a no-discharge lagoon with a proposed pumpdown storage volume of 1,715,000 gallons. The existing three-cell lagoon currently discharges to a tributary to Ditch #8, which flows to Ditch #8 (WBID 3094).

3. COMPLIANCE PARAMETERS

Lagoon closure plans for cell #2 and 3 shall be submitted to the regional office for approval. The facility is in enforcement and the operating permit has been expired since June 29, 2005. A renewal application was received on June 6, 2013 and is being processed separately.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

Lagoon with row and furrow irrigation. Maximum operating level is proposed as 1.5-foot below top of berm with a six-inch deep spillway.

5. OPERATING PERMIT MODIFICATION

Operating permit MO-0091715 will require a modification to reflect the construction activities. Upon construction completion, submit a modification fee and Form B: Application for an Operating Permit for Domestic or Municipal Wastewater ($\leq 100,000$ gallons per day).

Review Engineer: Keith Forck
Section Chief Approval: Refaat Mefrakis
Date: 08/16/13

