



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

SEP 19 2016

Mr. Mike Franano
Project Manager
AECOM
2380 McGee Street, Suite 200
Kansas City, MO 64108

RE: Berm Restoration-Expert Management Inc., MO-0002453, Construction Permit No. CP0001684, Jasper County, Construction Permit Time Extension

Dear Mr. Franano:

The Department of Natural Resources, Water Protection Program received a construction permit extension request on September 6, 2016, for the Expert Management. The request for additional time for Construction Permit Number CP0001684 has been granted for a period of 13 months and will expire November 1, 2017. This permit extension authorizes construction of the facilities described on the permit dated October 10, 2014. 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 November 1, 2017, the applicant must submit a new construction permit application and fee.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to 10 CSR 20-1.020 and Section 621.250, RSMo. To appeal, you must file a petition with the AHC 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 AHC. Contact information for the AHC is: Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, Missouri 65102, Phone: (573) 751-2422, Fax: (573) 751-5018, and Website: www.oa.mo.gov/ahc.

Mr. Mike Franano
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If you have any questions concerning this matter, please contact Ms. Leasue Meyers, of the Water Protection Program, at (573) 751-7906 or Department of Natural Resources, P.O. Box 176, Jefferson City, Missouri 65102.

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

Sincerely,

WATER PROTECTION PROGRAM



John Madras
Director

JM:lmk

Enclosure

c: Mr. Brett Whittleton, Expert Management Inc.

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

<p>Expert Management, Inc. 3078 County Road 180 Carthage, MO 64836</p>
--

for the construction of (described facilities):

<p>See attached.</p>

Permit Conditions:

<p>See attached.</p>

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.

October 10, 2014
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

October 9, 2016
Expiration Date

John Madras, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

The proposed construction is to restore wetlands berm to enhance the performance of the existing constructed wetlands system. The construction will restore 2,400 linear feet to original design elevations. Construction also includes extension of the berm in the north wetlands. This project includes construction at the Outfall #018 structure to correct the settling and sedimentation that has occurred and to allow accurate flow measurement of discharges.

II. FINDING OF AFFORDABILITY

The Finding of Affordability is not applicable. The permittee is not a combined or separate sanitary sewer system or a publicly owned treatment works.

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 GBMc and Associates on September 17, 2014.
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 Southwest 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."

7. 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.
 - A. 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.
 - B. Manholes should be located at least ten feet horizontally from any existing or proposed water main.
 - C. 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.
8. 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. 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.
9. 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.

10. Upon completion of construction;

- A. Expert Management, Inc. 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); and
- C. Submit an electronic copy of the as builts if the project was not constructed in accordance with previously submitted plans and specifications.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

The proposed construction is to restore a wetlands berm to enhance the performance of the existing constructed wetlands system. The construction will restore 2,400 linear feet to original design elevations. Construction also includes extension of the berm in the north wetlands. The restoration will repair damage created by settlement, animal burrowing. The Outfall #018 structure will be adjusted to correct the settling and sedimentation that has occurred and to allow accurate flow measurement of discharges.

2. FACILITY DESCRIPTION

Former chemical and explosives manufacturing facility, formerly known as Atlas Chemical Company, ICI Explosives and Joplin Manufacturing. The facility previously manufactured industrial grade ammonium nitrate, ammonium nitrate based emulsion explosives, trinitrotoluene (tnt), and other chemicals in the support of the explosives industry. Manufacturing was limited to approximately 583 acres in the core of the facility, with approximately 1,300 more acres used as buffer land. Expert Management retains responsibility for post-closure care, corrective action, site clean-up, and monitoring related to the soil and groundwater. Approximately 231 acres drains to Outfall #018. There are over 40 acres of constructed wetlands onsite.

Flow is dependent on rainfall and retention capability of the Constructed Wetlands, which is constructed to retain a 5.8" rain. The Constructed Wetlands watershed receives stormwater runoff from an area containing multiple Corrective Action Sites. Flow from outfall #018 flows Northeast towards Grove Creek via a series of ditches.

3. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

The earthen berm construction will include approximately 1,300 feet of berm extension on the north wetland, plus the repairing and restoring of the existing berms. The proposed top of the berm for the north wetland extension is to be an elevation of 959.7. The top of the restored upland 1 berm is at an elevation of 961. The top of the berm for upland 3 berm is an elevation of 969.

The borrow areas for berm construction have been identified onsite of the facility. Material will be brought over from the borrow pits, spread over disturbed area in six inch (6") or eight inch (8") lifts and compacted with sheepsfoot roller or other suitable equipment within four inches (4") of the finish grade. Previously removed topsoil and organic matter will be spread on sides of berm four to six inches (4"-6") deep over disturbed area and overseeded. The finished earthen berm will have an approximate 3:1 slope and be above the spillway line.

Construction at the north wetland extension includes the construction of an all-access gravel road, which will be fourteen feet (14') wide at the top of the berm.

Construction on Outfall #018 will include clearing and regarding existing rip rap, removing rock plug and filter fabric, regrading outfall structure to drain to the new inlet, install trash rack grate manufactured by Contech or equal with an anti-vortex baffle. Existing culverts and headwalls will be removed and backfilled in lifts with impermeable material.

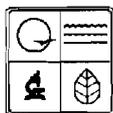
4. OPERATING PERMIT

Operating permit MO-0002453 does not require a modification. The operating permit was issued in 2013. There is no change in flows expected with the construction. The facility's state operating permit includes the land disturbance requirements. The Stormwater Pollution Prevention Plan (SWPPP) needs updated to include these construction activities.

Leasue Meyers, EI
Engineering Section
leasue.meyers@dnr.mo.gov

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RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT
WASTEWATER TREATMENT FACILITY

SEP 17 2014

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$150.00	CHECK NO. 2100592656
DATE RECEIVED 9/17/14	

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WATER PROTECTION PROGRAM

APPLICATION OVERVIEW

The Application for Construction Permit – Wastewater Treatment Facility form has been developed in a modular format and consists of Part A and B. **All applicants must complete Part A.** Part B should be completed for applicants who currently land-apply wastewater or propose land application for wastewater treatment. **Please read the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.**

PART A – BASIC INFORMATION

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: _____ Project #: _____
 - 1.2 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
 YES Date of Approval: 8/11/2014
 Attached is the No Degradation Evaluation Conclusion of Antidegradation Review form
 - 1.3 Has the department approved the proposed project's facility plan*?
 YES Date of Approval: 8/11/2014 NO N/A (If Not Applicable, complete No. 1.4.)
 - 1.4 [Complete only if answered Not Applicable on No. 1.3.] Is a copy of the engineering report* for wastewater treatment facilities with a design flow less than 22,500 gpd included with this application?
 YES NO
 - 1.5 Is a copy of the appropriate plans* and specifications* included with this application?
 YES Denote which form is submitted: Hard copy Electronic copy (See instructions.) NO
 - 1.6 Is a summary of design* included with this application? YES NO
 - 1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?
 YES Date of submittal: MSOP No. 00002453 Issued 4/1/2013
 Enclosed is the appropriate operating permit application submittal. Denote which form: A B B2
 N/A Please explain: _____
 - 1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? YES NO
 - 1.9 Is the appropriate fee included with this application? YES NO (See instructions for appropriate fee.)
- * Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT
Wetlands Berm Restoration and Outfall 018 Maintenance

2.2 PROJECT DESCRIPTION
The proposed project is to restore a wetlands berm to enhance the performance of the wetlands system. The project will consist of berm restoration, and maintenance of Outfall 018. The discharge characteristics of the facility will not be changed as a result of this project.

2.3 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION
NA

2.4 DESIGN INFORMATION
A. Current population: NA; Design population: NA
B. Actual Flow: NA gpd; Design Average Flow: NA gpd;
Actual Peak Daily Flow: NA gpd; Design Maximum Daily Flow: NA gpd

2.5 ADDITIONAL INFORMATION
A. Is a topographic map attached? YES NO
B. Is a process flow diagram attached? YES NO

PART B – LAND APPLICATION ONLY

(Submit only if the proposed construction project includes land application of wastewater.)

8.0 FACILITY INFORMATION

8.1 Type of wastewater to be irrigated: Domestic State/National Park Seasonal business
 Municipal Municipal with a pretreatment program or significant industrial users
 Other (explain) _____

8.2 Months when the business or enterprise will operate or generate wastewater:
 12 months per year Part of the year (list months): _____

8.3 This system is designed for:
 No-discharge.
 Partial irrigation when feasible and discharge rest of time.
 Irrigation during recreational season, April – October, and discharge during November – March.
 Other (explain) _____.

9.0 STORAGE BASINS

9.1 Number of storage basins: _____ (Use additional pages if greater than three basins.)

9.2 Type of basins: Steel Concrete Fiberglass Earthen Earthen with membrane liner

9.3 Storage basin dimensions at inside top of berm (feet). Report freeboard as feet from top of berm to emergency spillway or overflow pipe.

Basin #1:	Length _____	Width _____	Depth _____	Freeboard _____	Berm Width _____	% Slope _____
Basin #2:	Length _____	Width _____	Depth _____	Freeboard _____	Berm Width _____	% Slope _____
Basin #3:	Length _____	Width _____	Depth _____	Freeboard _____	Berm Width _____	% Slope _____

9.4 Storage Basin operating levels (report as feet below emergency overflow level).

Basin #1:	Maximum operating water level _____ ft	Minimum operating water level _____ ft
Basin #2:	Maximum operating water level _____ ft	Minimum operating water level _____ ft
Basin #3:	Maximum operating water level _____ ft	Minimum operating water level _____ ft

9.5 Design depth of sludge in storage basins.

Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.6 Existing sludge depth, if the basins are currently in operation.

Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.7 Total design sludge storage: _____ dry tons and _____ cubic feet

10.0 LAND APPLICATION SYSTEM

10.1 Number of irrigation sites _____ Total Acres _____ Maximum % field slopes _____
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
(Use additional pages if greater than three irrigation sites.)

10.2 Type of vegetation: Grass hay Pasture Timber Row crops
 Other (describe) _____

10.3 Wastewater flow (dry weather) gallons per day: Average annual _____ Seasonal _____ Off-season _____

10.4 Land application rate (design flow including 1-in-10 year storm water flows):

Design:	_____ inches/year	_____ inches/hour	_____ inches/day	_____ inches/week
Actual:	_____ inches/year	_____ inches/hour	_____ inches/day	_____ inches/week

10.5 Total irrigation per year (gallons): Design: _____ gal Actual: _____ gal

10.6 Actual months used for irrigation (check all that apply):

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

10.7 Land application rate is based on:

Hydraulic Loading Other (describe) _____
 Nutrient Management Plan (N&P) If N&P is selected, is the plan included? YES NO