

BOND CONSULTING ENGINEERS EAST, INC.
3683 STATE HIGHWAY 77 NORTH
MARION, ARKANSAS 72364

PHONE: (870)739-2228

FAX: (870)739-8407

E-mail: bondengineering@hotmail.com

C.H. BOND, JR., P.E.
JEROME B. ALFORD, P.E.
JACK G. BOND, P.E.

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Attn: Alan Anderson – Enforcement Administrator

RE: City of Marion NPDES Permit AR0021971
AFIN # 18-00110

Dear Alan,

The City of Marion has decided to proceed with plans to move their sewage discharge to the Mississippi River. Earlier references were made to the use of chemicals to settle the algae in the third pond to demonstrate ability to reduce suspended solids for continued discharge into 15 Mile Bayou. These efforts were unsuccessful therefore we must exercise the option of changing the point of discharge.

Please consider this letter our first attempt to satisfy the first item in the Consent Administrative Order (CAO). Attached please note a map showing the route of the proposed forcemain. Also attached you will find copy of efforts underway to receive permission from the Corps of Engineers to build a suitable discharge structure at or near the high bank of the Mississippi River. We have also made contact with the St. Francis Levee District for a suitable crossing. We have also contacted Kim Fuller in the permit section concerning some guidance that we need before approaching the land owner between the levee and the discharge point. Please find attached e-mail in this matter.

A new permit application has been prepared with a proposed daily discharge of 1.6 million gallons which is the same as the current permit. Since this forcemain will be 13 miles long, logic dictates that we build some future in to this capacity. As you may be aware, Marion has one of the few certified super-sites for large industry in the state of Arkansas. This 1,750 acre tract was in serious contention several years ago when Toyota was looking for a manufacturing site. If we were to find out tomorrow that a similar industry had picked Marion, it would obviously change our immediate plans to include moving large volume treatment capacity east near the Mississippi River levee. In that instance we want to consider sizing this proposed forcemain along Gammon Road to handle raw sewage in the future. In the event this ideal industry never comes, we still need to provide some growth with Marion keeping their existing treatment site.

The numbers we have crunched the last few days and input from the City Council dictate providing minimum pump capacity in the range of 5.0 mgd. This

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provides capacity for future growth over the life of the pumps. The economics involved in power costs generated by friction loss in this length of forcemain dictates 16" to 18" pipe size. This design point provides future growth, flexibility in the daily pumping scheme and the ability to manage the pond depth to equalize flow. This will create an intermittent discharge and will further require a new chlorine contact chamber to provide the required detention time at the design pumping rate. Controls will simply be established to start chlorination at the front end of a large chlorine contact chamber when the pumps are started and simultaneously start de-chlorination at or near the pump pick-up point. Preliminary design is leaning toward an open concrete tank with baffles to avoid short circuiting that is connected through the levee so the level in the chlorine contact chamber is the same as the level in the third pond. This same concrete basin will have two vertical turbine pumps with variable speed drives located on the tail end. Space will be prepared for a third pump. Entrance to this concrete basin will be screened to remove anything that could harm the vertical turbine pumps and provisions will be made to easily hand clean the face of this screen.

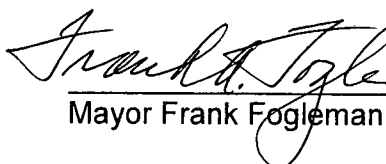
We have already initiated efforts to acquire easements along this forcemain route in those areas where we do not have existing right of way. A copy of the discharge and construction permit application is attached for your information. As soon as we receive Corps of Engineers concurrence and ADEQ permit section approval, we will prepare and submit detailed plans, specifications and contract documents. At the appropriate time, we will work with the City of Marion on securing funds and rate increases commensurate with this project.

At this point in time, we are seventeen months away from the construction deadline dictated by the CAO. This project is rather straight forward as I have outlined herein; therefore we see no reason that Marion cannot meet this agreed to timetable. There are some decisions that have to be made concerning this proposal. Primarily we are proposing to abandon the rock-reed filters since they are 27 years old. By discharging directly from the third pond we will have to be allowed 30 ppm BOD and 90 ppm suspended solids as a discharge quality. This decision will come from the permit section.

This is my attempt to give you design parameters and justification for each. I will keep you informed as we proceed on this end. If you need any additional information, please do not hesitate to call.

Sincerely,

Jerome Alford, P.E.


Mayor Frank Fogleman

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C.H. Bond, Jr. P.E.
Jerome B. Alford, P.E.
Jack Bond, P.E.

January 28, 2013

Mr. Regie Wuornes
U. S. Army Corps. Of Engineers
Regulatory Functions Branch
167 North Main Street Room 766
Memphis, TN 38103-1894

RE: City of Marion Sewage Treatment Improvements

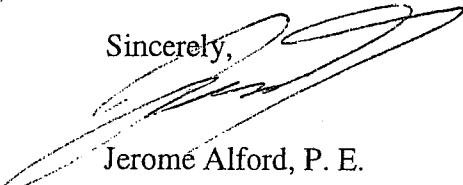
Dear Mr. Wuornos,

The City of Marion is under a consent Administration order from the Arkansas Department of Environmental Quality (ADEQ) to correct violations occurring in the City's sewer discharge. Plans for correcting the violations include placing a sewer force main from the existing treatment ponds to the Mississippi River.

Attached please find an application for constructing an outlet structure on the top bank of the Mississippi River. Once this application is approved project drawings showing the location of the force main will be submitted to your office for review.

As time is very critical for completing preliminary design, please let us know if you have any questions or need any additional information.

Sincerely,



Jerome Alford, P. E.

Cc. Mayor Frank fogleman

**U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT**

33 CFR 325. The proponent agency is CECW-CO-R.

OMB APPROVAL NO. 0710-0003
EXPIRES: 28 FEBRUARY 2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Frank Middle - A Last - Fogleman Company - City of Marion - Mayor E-mail Address - mayormarionar@aol.com	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Jerome Middle - B Last - Alford Company - Bond Consulting Engineers East, Inc. E-mail Address - bondengineering@hotmail.com
6. APPLICANT'S ADDRESS: Address- 14 Military Road City - Marion State - AR Zip - 72364 Country - US	9. AGENT'S ADDRESS: Address- 3683 State Highway 77 North City - Marion State - AR Zip - 72364 Country - US
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax 870-739-4175 870-739-5410 870-739-1200	10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax 901-412-6003 870-739-2228 870-739-8407

STATEMENT OF AUTHORIZATION

11. I hereby authorize, Jerome Alford, P.E. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.


1-28-13
 SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) City of Marion Wastewater Treatment Improvements	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Mississippi River	14. PROJECT STREET ADDRESS (if applicable) Address N/A
15. LOCATION OF PROJECT Latitude: +N 35degrees15'05.5" Longitude: -W 90degrees06'00"	City - State- AR Zip-
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality N/A Section - 2 Township - 7 North Range - 9 East	

17. DIRECTIONS TO THE SITE

Starting at the intersection of State Highway 77 and Gammon Road; thence east along Gammon Road a distance of 5.8 miles to an intersection with a gravel drive to the north. See attached map for directions from levee to discharge point. Said location is approximately 600 feet south of Island Forty Chute.

18. Nature of Activity (Description of project, include all features)

The project involves laying an eighteen inch forcemain to the top bank of the Mississippi River. A 5' x 8' discharge structure will be constructed on the top bank of the River (see attached detail). Rip rap will be placed around the structure and the River bank slope as directed by the Corps of Engineers.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The City of Marion is under a Consent Administration Order (CAO) from the Arkansas Department of Environmental Quality (ADEQ) to correct violations occurring in the City's sewer discharge. The City is currently discharging into the 15 Mile Bayou. The 15 Mile Bayou is a small stream which requires very strict discharge limits from ADEQ. The City is planning to pump treated sewage to the Mississippi River to avoid making improvements to the existing sewage treatment facility. A eighteen inch forcemain will be installed from the treatment facility to the top bank of the Mississippi River. Improvements must begin in 2014 and be completed July 2015.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
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22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres
or
Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- 79 South 2nd Street

City - Memphis State - TN Zip - 38103

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

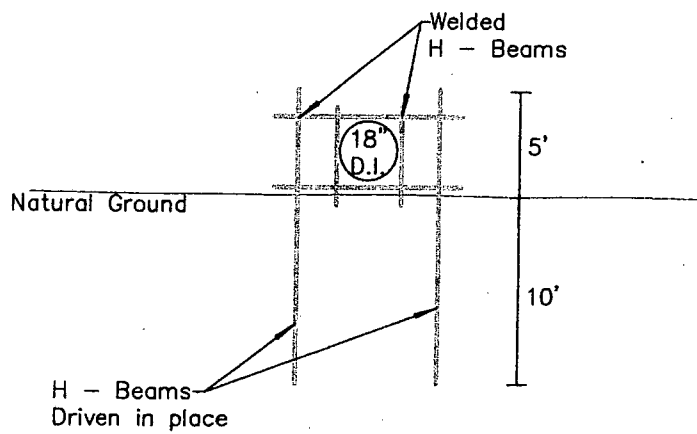
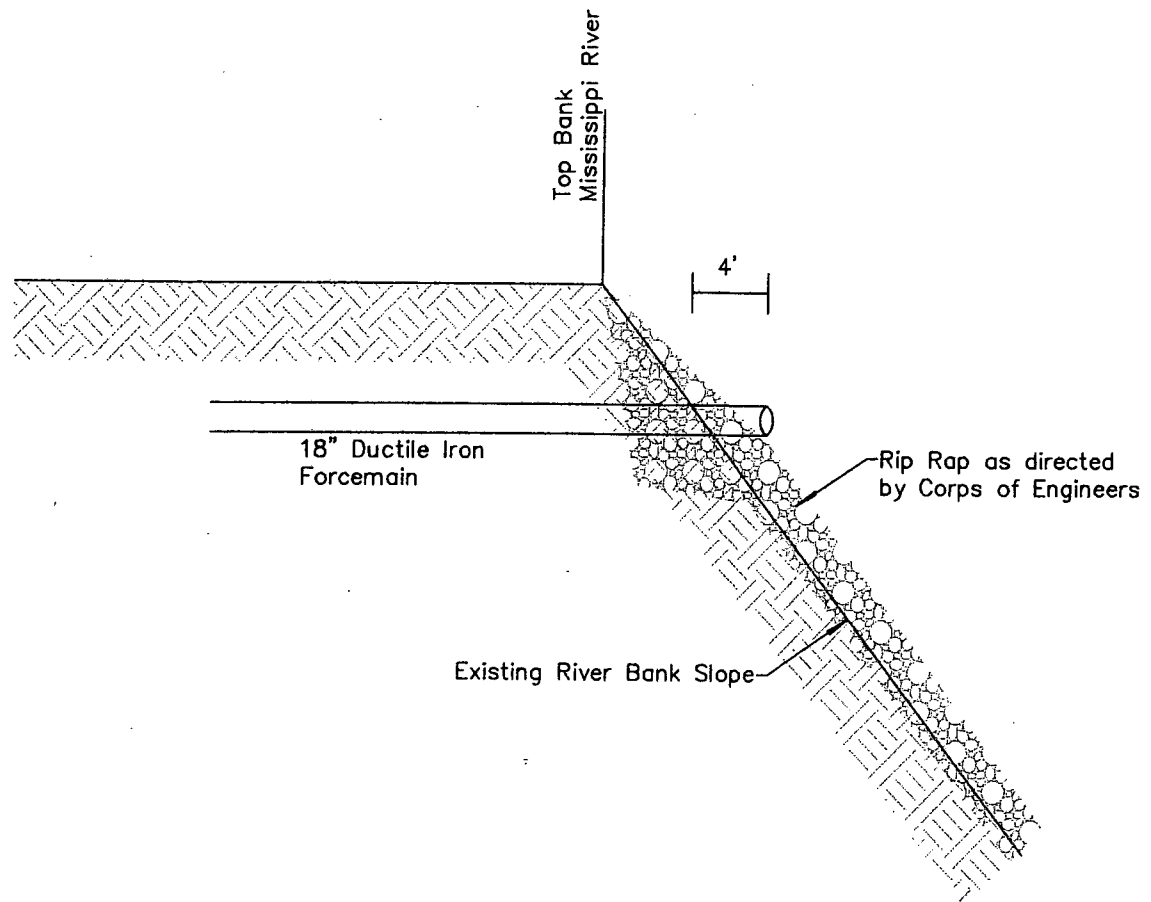
27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Frank E. Tolman 1-28-13
SIGNATURE OF APPLICANT DATE

[Signature]
SIGNATURE OF AGENT DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.



Discharge Structure
Detail
1" = 10'

Mississippi River

Island Forty Chute

Discharge Point

Island Forty

Garrison Road

