

Nancy Koon (adpce.ad)

From: David Carstens <dcarstens@harborenv.com>
Sent: Monday, January 23, 2023 10:31 AM
To: Terry Liu (adpce.ad)
Cc: Bryan Leamons (adpce.ad); Jessica Sears (adpce.ad); Dean Caldwell; Booher, Martin T.; Andrew Rike; Nick Muenks; Wilson, Joshua T.
Subject: Exploratory Ventures - Request to Adopt Higher 7Q10 Flow - NPDES Permit No. AR0053384 (AFIN: 47-01073)
Attachments: EV_NPDES Appl_Addendum_7Q10 Letter_Final_Jan-23-2023.pdf

Hello Mr. Liu:

This email is submitted on behalf of Exploratory Ventures, LLC (EV) in Osceola (AFIN: 47-01073).

An addendum to EV's November 2022 application for an individual NPDES permit (No. AR0053384) for a new steel manufacturing complex is enclosed.

EV has obtained and completed an analysis of more recent and representative flow monitoring data for the Mississippi River which support a 7Q10 flow of 164,780 cubic feet per second. Detailed information is provided in the attached letter.

We respectfully request that the DEQ adopt a higher 7Q10 flow for the Mississippi River in Permit No. AR0053384.

Please contact me if you have any questions, comments and/or instructions. Thank you.

David Carstens

David Carstens, Sr. Project Manager
HARBOR · P 501.663.8800 · C 501.574.1169 · dcarstens@harborenv.com
5800 Evergreen Dr | Little Rock, AR 72205

January 23, 2023

Mr. Terry Liu, P.E.
Engineer
Water Permits Branch
Office of Water Quality
Division of Environmental Quality (DEQ)
Arkansas Department of Energy and Environment
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

RE: Addendum to Application for NPDES Permit No. AR0053384
Use of Higher 7Q10 Flow for Mississippi River
Exploratory Ventures, LLC, Osceola, Mississippi County, Arkansas
AFIN: 47-01073

Dear Mr. Liu:

Harbor Environmental and Safety (Harbor) is pleased to submit the enclosed correspondence on behalf of Exploratory Ventures, LLC (EV) in Osceola, Arkansas. As you know, an application for an individual National Pollutant Discharge Elimination System (NPDES) permit for the wastewater treatment facilities for a new steel manufacturing complex was submitted to the DEQ on November 9, 2022.

EV anticipated that pending NPDES Permit No. AR0053384 would be based on a 7-day, 10-year (7Q10) low-flow value for the Mississippi River of 119,000 cubic feet per second (cfs). The cited 7Q10 value is used in NPDES Permit No. AR0052582 (effective December 1, 2021) for the adjacent steel mill operated by Big River Steel LLC. The DEQ also used the same 7Q10 value in several recent NPDES permits for other Arkansas industrial facilities on the Mississippi River. This 7Q10 value was obtained from a 1983 Arkansas Geological Commission Map. The 7Q10 value was measured at U.S. Geological Survey (USGS) Gage Station No. 07032000 located on the Mississippi River at Memphis, Tennessee. It is based on flow monitoring data collected between 1951 and 1978.

Since submission of the permit application, EV has obtained and completed an analysis of more recent and representative flow monitoring data for the Mississippi River which support a higher 7Q10 flow of 164,780 cfs. The updated 7Q10 value was derived using the USGS's "SWToolbox" program. The flow monitoring data was collected at Gage Station No. 07032000 on the Mississippi River at Memphis. Approximately 12 years of reliable USGS flow data (1990 through 1994 and 2014 through 2022) were utilized. The data reflect the most recent flow conditions and climatic trends in the Mississippi River basin.

Derivation of the updated 7Q10 value was performed in accordance with the DEQ's draft 2020 Continuous Planning Process document and the Environmental Protection Agency's "Low Flow Statistics Tools" handbook for permit writers published in October 2018 (EPA-833-B-18-001).

It is important to note that the Tennessee Department of Environment and Conservation recently issued an NPDES permit that includes a 7Q10 value of 159,270 cfs for the Mississippi River in Memphis. Permit No. TN0000108 was issued for the ExxonMobil Pipeline Company's Memphis Terminal in March 2020. The cited 7Q10 value was derived using the USGS's "SWToolbox" program based on flow data collected between 1990 and 2020.

We respectfully request that the DEQ utilize a 7Q10 flow of 164,870 cfs for the Mississippi River in EV's NPDES permit. We can provide supporting documentation, modeling software, and/or flow monitoring data to the DEQ if needed.

Your timely consideration of our request to adopt a higher 7Q10 flow for the Mississippi River in Permit No. AR0053384 is greatly appreciated. Please contact us at (501) 663-8800 if you have any questions or need further information.

Sincerely,

HARBOR ENVIRONMENTAL AND SAFETY



David Carstens
Sr. Project Manager
dcarstens@harborenv.com



Andrew Rike, P.E.
Principal
arike@harborenv.com

cc: Bryan Leamons, P.E., DEQ
Jessica Sears, P.E., DEQ
Lenore Trammell, EV
Dean Caldwell, EV
Martin Booher, Esq., BakerHostetler
Nick Muenks, Geosyntec