

From: Hynum, Tammie

Sent: Tuesday, November 19, 2013 3:56 PM

To: Bunce, Jeff

Cc: karen.s.tyrone@exxonmobil.com; Benefield, Ryan; Benenati, Katherine; VanDerhoff, Dean; Rich, Jay; Wilson, Penny; Gutting, Lorielle; Harrelson, Tammy; Goodhart, Jim; Chastain, Ricky (rchastain@agfc.state.ar.us); brescia.nicolas@epa.gov; Allen Dodson; Shirley Louie

Subject: ExxonMobil Revision #2 Downstream Area Remedial Sampling Report

Jeff,

Below are comments on the Revision 2 of the Downstream Area Remedial Sampling Report.

- 1) Toxic Unit Calculations – The ADEQ calculated a toxic unit (TU) of 1.18 for sediment sample SED-DA-045, which exceeds the target TU of 1.0.
In addition, two sediment samples collected from depths 0.5-1.0 feet below ground surface exceed a TU of 1.0 (SED-DA-006 TU-1.26 and SED-DA-017 TU-1.29). These exceedances were not discussed or evaluated in the text. Please provide justification that a TU exceedance of 1.0 is protective of environmental health. Evaluation using the two-carbon model may be applicable.
- 2) Ecological Screening Level (ESV) Issues:
 - a. The Sampling Plan recommended an ADEQ approved hierarchy for ecological screening of soil, sediment, and surface water data. Based on this hierarchy, please revise the current screening tables to represent the following approved ESVs for the corresponding constituents:

Constituent	Medium	Screening Level	Source
Barium	Sediment	20 mg/kg	SQUIRTS
Vanadium	Sediment	57 mg/kg	SQUIRTS
1-Methylnaphthalene	Sediment	21 ug/kg	SQUIRTS
Benzo(g,h,i)perylene	Sediment	170 ug/kg	Region 3
Indeno[1,2,3-cd]pyrene	Sediment	17 ug/kg	Region 3
Trichloroethylene	Soil	1 ug/kg	Region 4
Xylene	Soil	50 ug/kg	Region 4

- b. Please review all ESVs presented in the DADAR to ensure that they are correct and available for public access from a referenced source.
 - c. Page 5-4 states that the USEPA does not provide soil ESVs for individual PAHs. This statement is incorrect; ESVs are available from USEPA Regions 4 and 5 for individual PAHs in soil. Please clarify or correct.

- d. Table 5-2: The source of soil ESVs for metals is given as "USEPA." Please clarify how these ESVs were derived.
 - e. The USEPA Region 4 soil ESVs used in the DADAR have not yet been published. Please screen soil values using the publicly available USEPA Region 4 ESVs.
- 3) Page 10-3: The web address provided as a source for Arkansas Background Soil and Sediment Data does not appear to be a link to the referenced background soil values. Please provide a direct link to the Arkansas Background Soil and Sediment Data used to screen sampling results.

Please note that ADEQ will consider ExxonMobil's crude oil analysis (along with other factors) in the remedial action process; however, the crude oil analysis cannot be used as a screening tool or to provide the basis of support for No Further Action (NFA) determinations.

In addition, attached are additional comments from the Arkansas Game and Fish Commission regarding their review of the ExxonMobil responses and the Revision 2 report. Please prepare responses to each comment and submit a revised report to my attention at ADEQ no later than December 2, 2013. Please address responses to the AGFC comments to Mr. Rick Chastain and cc: Tammie J. Hynum.

If you have any questions, please feel free to contact me.
Thanks,

Tammie J. Hynum
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