PROGRAM	SITE	PROJECT #	FILE SEQUENCE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

ROUTE TO: RCY
cc/CAJ

November 15, 2023

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VIA ELECTRONIC MAIL

Mr. Roger Petrie
Federal Facility Agreement Manager
Oak Ridge Office for Environmental Management
U.S. Department of Energy
Post Office Box 2001
Oak Ridge, Tennessee 37831

Dear Mr. Petrie:

The U.S. Environmental Protection Agency has reviewed the U.S. Department of Energy's (DOE) Bear Creek Valley Mercury Sources Remedial Site Evaluation Sampling and Analysis Plan Oak Ridge, Tennessee, dated September 2023 (DOE/OR/01-2958&D1) [Mercury Sources SAP]. Three comments on Mercury Sources SAP are enclosed.

If you have any questions, I can be reached at (404) 562-8329 or Dawson.Jana@epa.gov.

Sincerely,

JANA DAWSON

Digitally signed by JANA DAWSON
Date: 2023.11.15 15:44:12 -05'00'

Jana Dawson
Remedial Project Manager
Superfund & Emergency Management Division

cc: Nathan Felosi, DOE
Sam Scheffler, DOE
Jon Richardson, EPA
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EPA Comments on the *Bear Creek Valley Mercury Sources Remedial Site Evaluation Sampling and Analysis Plan* Oak Ridge, Tennessee, dated September 2023 (DOE/OR/01-2958&D1) [Mercury Sources SAP]

1. Section 2.2.2 (Summary of Mercury Source Areas) page 3 states "The baseline risk assessment (BRA) in the BCV RI stated "the sources of mercury and PCBs to the BCV fish are currently unknown." While it was noted in the meeting minutes that DOE does not believe PCB discharge from the EMDF will be an issue with regards to attainment of Ambient Water Quality Criteria (AWQC) in Bear Creek for PCBs, it would seem appropriate and cost effective to also conduct PCB analyses for the surface water and fish tissue samples that will be collected as part of this mercury source investigation in order to identify the source of both mercury and PCBs into Bear Creek. EPA strongly recommends adding the PCB analyses to this sampling effort.

2. Section 2.2.2 (Summary of Mercury Source Areas) page 3 states "The BCV OU2 RI indicated mercury concentrations were elevated at the SY-200 Yard but were generally within an order of magnitude of background; however, free mercury was seen in some of the borings during the BCV OU2 RI. The BCV OU2 ROD identified the SY-200 Yard as the area with mercury." Please describe how much certainty there is that the location of the observed free mercury in soil borings was from soil bores collected at the SY-200 Yard since the SAP indicates there was initially some uncertainty about where the observations of free mercury were identified.

3. Section 4 (Sampling and Analysis Plan – Sample Location Selection) does not propose any soil samples near suspected or known mercury source areas. By only sampling Bear Creek transects and associated bank/floodplain soils immediately next to transect location, how will it be determined which of the potential source areas are contributing mercury to Bear Creek. For example, a transect is proposed at BCT-14, which is stated to be downstream of the SY-200 Yard, Spoil Area 1, and S-3 Ponds Site. If elevated mercury is identified at this transect, how will it be determined which of the areas - SY-200 Yard area, the Soil Area 1, and/or S-3 Ponds are the main contributors of mercury to Bear Creek? The SAP does not appear to include sufficient samples to identify specific source areas of mercury. Please provide a response and/or SAP edits to state how specific source areas will be identified, and further, how such areas may be delineated to identify the extent of mercury migrating to Bear Creek, if elevated mercury is detected at any of the transects/ mercury-source investigation samples.