January 21, 2018

Special Master Susan Calkins 2112 Promontory Point Lane Gold River, CA 95670 amec foster wheeler

Subject: Monthly Status Report 24 for December 2017
Penobscot River Estuary Phase III - Engineering Study

Dear Ms. Calkins:

Amec Foster Wheeler Environment and Infrastructure, Inc. (Amec Foster Wheeler) is pleased to submit this monthly Status Report for the Penobscot River Estuary Phase III - Engineering Study. This report covers the period from December 1, 2017 through December 31, 2017. A cash flow projection through June 2018 is also attached.

ACTIVITIES AND EVENTS DURING THE REPORTING PERIOD

<u>Task 2A - Technologies and Remedial Approaches for Consideration</u>

- Work Order 2A-040A Permitting Support for Alternatives Evaluation:
 - Permits research in support of AER
- Work Order 2A-051 Leachability/Toxicity Testing:
 - Monitored subcontractors performing Leachability/Toxicity testing
- Work Order 2A-053 Dewatering / Flocculant Testing / Water Treatment:
 - Reviewed results of subcontractor Dewatering / Flocculant Testing / Water Treatment testing
- Work Order 2A-054 Sediment Erosion and Transport Testing:
 - Reviewed US Army's Environmental Research and Development Center report summarizing the Sedflume testing conducted in late September 2017
- Work Order 2A-055 Amendment Test Plot Re-sampling:
 - Corresponded with Dr. Cindy Gilmour of the Smithsonian Environmental Research Center regarding the status of her sample analyses associated with the Amendment Test Plot Re-sampling
- Work Order 2A-080 Alternatives Evaluation Report:
 - Development of Alternatives Analysis Report continued in December 2017
- Work Order 2A-100 Hydrodynamic Evaluation
 - December 22, 2017: Amec Foster Wheeler submitted the Draft 2-D Hydrodynamic Simulation Report to the Special Master/Litigants

Tasks 3/3A - Risk Reduction Evaluation

- Work Order 3A-010 BAFs/BSAFs, Biota Trending Analysis:
 - Continued evaluation of the impact of 2017 sediment data (for the data received thus far) on BSAFs

- Work Order 3A-020 Baseline Risk Assessments:
 - Work on baseline risk assessments continued in December 2017

Tasks 4/4A - Potential Data Needs and Additional Field Work

- Work Order 4A-010 Analytical Methods Evaluation and OC Study (formerly Work Order 012):
 - Awaiting methyl mercury analytical results to be incorporated into the Analytical Methods Comparison Technical Memorandum
 - Analysis of Lignin Oxidation Products in Sediments technical memorandum drafted and submitted for peer review
 - Continued development and refinement of the Conceptual Site Model for the project
- Work Order 4A-020 Analyses/Evaluation of WO 003A Samples:
 - No further activities are anticipated under this Work Order
- Work Order 4A-030 2017 Marsh Platform Sediment Characterization:
 - December 11, 2017: Draft 2017 Marsh Platform and Intertidal Sediment Characterization Technical Memorandum submitted to the Special Master/Litigants
- Work Order 4A-040 2017 Sediment and Water Quality Monitoring:
 - December 15, 2017: Draft 2017 Sediment and Water Quality Monitoring Report submitted to the Special Master/Litigants
- Work Order 4A-050 2017 Biota Monitoring:
 - Development of Draft 2017 Biota Monitoring Report ongoing
- Work Order 4A-060 2017 Additional Mobile Pool Characterization:
 - Development of the Draft 2017 Additional Mobile Sediment Characterization Technical Memorandum continued
- Work Order 4A-070 2017 Intertidal and Subtidal Sediment Characterization:
 - Processing of intertidal and subtidal sediment cores continued for samples collected in September 2017
 - Sediment sample analyses and data validation ongoing
- Work Order 4A-080 Thin-Interval Core Sampling:
 - Chemical and radiological analyses of processed sediment cores continued
- Work Order 2A-100 Hydrodynamic Evaluation:
 - December 22, 2017: Draft Hydrodynamic Simulation Report submitted to the Special Master/Litigants

Tasks 5A - Phase III Engineering Study Report

- Work Order 5A-010 Phase III Engineering Study Report
 - No activities were conducted under this work order during the reporting period

<u>Tasks 6A – Meetings/Communications</u>

- Work Orders 6A-010/6A-020 Meetings/Reporting:
 - December 14, 2017: Special Master, Litigants, and Amec Foster Wheeler attended a Monthly Project Status Call
 - December 20, 2017: Attended meeting with representatives of Mallinckrodt and NRDC to discuss remediation process implemented at Southern Cove in summer/fall 2017

- December 22, 2017: Amec Foster Wheeler submitted the Monthly Report and Invoice #J02207624 for the month of November 2017 to the Special Master/Litigants

Task 7/7A – Community Involvement

- Work Orders 006/7A-010 Community Involvement:
 - Updated the website document repository to include the most recent monthly reports and approved work orders
 - December 14, 2017: Draft Communication and Community Involvement Plan submitted to Special Master/Litigants

PROPOSED ACTIVITES FOR THE FOLLOWING PERIOD

Tasks 2/2A - Technologies and Remedial Approaches for Consideration

- Work Order 2A-040A Permitting Support for Alternatives Evaluation:
 - Continue permitting support for Alternatives Evaluation
- Work Order 2A-051 Leachability/Toxicity Testing:
 - Prepare write-up of the leachability and toxicity testing and results
- Work Order 2A-053 Dewatering / Flocculant Testing / Water Treatment:
 - Prepare write-up of the dewatering, flocculant, and water treatment testing and results
- Work Order 2A-054 Sediment Erosion and Transport Testing:
 - Submit ERDC report on Sedflume testing results to Special Master/Litigants
- Work Order 2A-055 Amendment Test Plot Re-sampling:
 - Review results as part of the Amendment Plot Re-sampling Study conducted by Dr. Gilmour
- Work Order 2A-080 Alternatives Evaluation:
 - Continue development of remedial alternatives and preparation of Draft Alternatives Evaluation Report
- Work Order 2A-100 Hydrodynamic Evaluation:
 - Awaiting comments from the Special Master/Litigants on the Draft Hydrodynamic Simulation Report

Task 3 - Risk Reduction Evaluation

- Work Order 3A-010 BAFs/BSAFs, Biota Trend Analyses:
 - Limited activities anticipated under this task
- Work Order 3A-020 Baseline Risk Assessments:
 - Continue development of baseline risk assessments

Task 4 - Potential Data Needs and Additional Field Work

- Work Order 4A-010 Analytical Methods Evaluation and OC Study (formerly Work Order 012):
 - Issue the revised 2016 Analytical Methods Evaluation Technical Memorandum following receipt and incorporation of additional MeHg analytical results

- Issue the Draft Analysis of Lignin Oxidation Products in Sediments technical memorandum to the Special Master/Litigants for review
- Continue to refine and update the CSM
- Work Order 4A-020 Analyses/Evaluation of WO 003A Samples:
 - No further activity is anticipated under this work order
- Work Order 4A-030 Additional Marsh Platform Characterization:
 - Awaiting comments from the Special Master/Litigants on the Draft Marsh Platform Characterization Technical Memorandum
- Work Order 4A-040 2017 Sediment & Water Quality Monitoring:
 - Awaiting comments from the Special Master/Litigants on the Draft 2017 Sediment & Water Quality Monitoring Report
- Work Order 4A-050 2017 Biota Monitoring:
 - Continue preparation of the Draft 2017 Biota Monitoring Report
- Work Order 4A-060 Additional Mobile Pool Characterization:
 - Submit the Draft 2017 Additional Mobile Sediment Characterization Report to the Special Master/Litigants on January 11, 2018
- Work Order 4A-070 Additional Intertidal and Subtidal Sediment Characterization:
 - Complete data validation of sediment analytical results
 - Prepare Draft 2017 Intertidal and Subtidal Sediment Characterization Report
- Work Order 4A-080 Thin-Interval Core Sampling:
 - Complete laboratory analyses, and conduct data validation
 - Continue coordination with universities regarding core analyses and reporting of results
 - Initiate preparation of Draft 2017 Thin-Interval Core Sampling Report

Task 6A – Meetings/Communications

- Work Orders 6A-010/6A-020 Meetings/Reporting:
 - Prepare and submit monthly report, cash flow projection, and updated project schedule for December 2017 to the Special Master/Litigants
 - Prepare for and attend Quarterly Project Status Meeting on January 26, 2018

Task 7/7A - Community Involvement

- Work Orders 006/7A-010 Community Involvement:
 - Awaiting comments from the Special Master/Litigants on the Draft Community Involvement Plan to Special Master/Litigants
 - Following approval from Special Master/Litigants, post Final 2016 Sediment and Water Quality Monitoring Report and Final 2016 Biota Monitoring Report to website
 - Monitor incoming messages from interested parties regarding the website content
 - Follow-up by phone or email with interested parties

FUTURE MEETINGS AND CONFERENCE CALLS

- January 23, 2018: Meeting with ME DEP to discuss status of Phase III Engineering Study
- January 26, 2018: 8A-4P Quarterly Project Status Meeting in Boston, MA

CASH FLOW PROJECTION

Please refer to Attachment A for the Amec Foster Wheeler financial status summary and cash flow projection through June 30, 2018.

PROJECT DELIVERABLES SCHEDULE

The schedule below provides an overview of project deliverable dates:

Work Order	Deliverable	Draft to SM/Litigants	Comments Due from Litigants	Final to SM/Litigants	Reports Proposed for Publication to Website
005	2016 Biota Monitoring Report	5/28/2017		8/30/2017	X
3A-010	Technical Memorandum - BSAFs	7/12/2017		9/15/2017	
4A-020	2016 Mobile Sediment Characterization Report	7/12/2017	N/A	N/A	
4A-010	Technical Memorandum - Analytical Methods Evaluation	9/15/2017	N/A	N/A	
4A-030	Technical Memorandum - 2017 Marsh Platform Characterization	12/11/2017	1/26/2018	N/A	
4A-040	2017 Sediment and Surface Water Monitoring Report	12/15/2017	1/26/2018	3/13/2018	Х
7A-010	Community Involvement Plan	12/14/2017	2/2/2018	3/15/2018	Х
2A-100	Hydrodynamic Model Report	12/22/2017	2/9/2018	N/A	
4A-060	Technical Memorandum - 2017 Additional Mobile Sediment Characterization	1/11/2018	3/2/2018	N/A	
4A-070	Technical Memorandum - 2017 Intertidal & Subtidal Sediment Characterization	2/2/2018	3/21/2018	N/A	
3A-020	Risk Assessment Report	2/9/2018	3/30/2018	5/10/2018	Х
4A-050	2017 Biota Monitoring Report (w/out Black Duck data)	2/16/2018	4/5/2018	5/17/2018	Х
4A-080	Thin-Interval Sampling (Geochron Core) Report	2/28/2018	4/13/2018	N/A	
2A-080	Alternatives Evaluation Report	3/15/2018	5/3/2018	6/13/2018	Х
3A-020	Risk Reduction Report	3/15/2018	5/3/2018	6/13/2018	Х
5A-010	Phase III Engineering Study Report	3/31/2018	5/15/2018	6/29/2018	Х

Shaded dates indicate actual completion dates

If you have any questions regarding the information contained in this report, please call me at 207-651-0315.

Sincerely,

Nelson Walter, PE, LSP, LEP, PMP

Principal Project Manager

Attachments

Attachment A - Cash Flow Projection

cc: Mitchell Bernard (NRDC)

Jared Thompson (NRDC)

Patricia Duft (Mallinckrodt)
Jeffrey Talbert (Preti Flaherty)

Project File (3616166052)

ATTACHMENT A – CASH FLOW PROJECTION Penobscot River Estuary Phase III - Engineering Study