

June 20, 2017

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



**Subject: Monthly Status Report 17 for May 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 May 1, 2017 through May 31, 2017. A cash flow projection for the following 6-month period is also attached.

ACTIVITIES AND EVENTS DURING THE REPORTING PERIOD

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

- *Work Order 2A-030A - Bench-Scale/Pilot Studies: Phase 1 Work Plans - Bench Scale & Pilot-Scale Constructability*
 - Amec Foster Wheeler continued development of Treatability Study Work Plans during the reporting period, as well as constructability and remedy research
- *Work Order 2A-040A - Permitting Support for Alternatives Evaluation*
 - May 10, 2017: Amec Foster Wheeler received work order authorization from the Court
 - May 10, 2017: Amec Foster Wheeler met with ME DEP permitting representatives to discuss in general terms what permits may be required to implement remedial actions on the river.
 - May 14, 2017: Amec Foster Wheeler submitted meeting minutes for May 10, 2017 meeting with ME DEP to SM/Litigants
- *Work Order 2A-080 – Alternatives Evaluation Report*
 - Development of Alternatives Evaluation Report continued in May 2017
- *Work Order 2A-100 – Hydrodynamic Modeling*
 - May 8, 2017: Amec Foster Wheeler submitted responses to comments on WO 2A-100 from the Litigants
 - May 9, 2017: Conference call held with SM/Litigants to discuss responses to Litigant comments on WO 2A-100
 - May 14, 2017: Amec Foster Wheeler submitted revised WO 2A-100 to the SM/Litigants
 - May 22, 2017: Amec Foster Wheeler received work order authorization from the Court

Tasks 3/3A - Risk Reduction Evaluation

- *Work Order 3A-010 - BAFs/BSAFs, Biota Trending Analysis:*

Correspondence:
Amec Foster Wheeler
511 Congress Street, Suite 200
Portland, Maine 04101
Tel 207-775-5401
Fax 207-772-4762

- Work on BAF/BSAF calculations and biota trending analyses continued in May 2017
- *Work Order 3A-020 – Baseline Risk Assessments:*
 - Work on baseline risk assessments continued in May 2017

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

- *Work Orders 003/003A - Mobile Sediment Pool Characterization:*
 - Amec Foster Wheeler developed figures for the SM/Litigants showing locations of all sediment samples collected in 2016
 - May 16, 2017: Amec Foster Wheeler submits 2016 sediment sample location figures to SM/Litigants via Project SharePoint site
 - The remaining scope of WOs 003/003A is expected to be completed within budget
- *Work Order 004 - 2016 Sediment and Water Quality Monitoring:*
 - April 18, 2017: comments from NRDC regarding the Draft 2016 Sediment and Water Quality Monitoring Report received by Amec Foster Wheeler
- *Work Order 005 - 2016 Biota Monitoring:*
 - May 28, 2017: Amec Foster Wheeler submitted the Draft 2016 Biota Monitoring Report to the SM/Litigants
- *Work Order 4A-010 - Analytical Methods Evaluation and OC Study:*
 - Work continued on the Analytical Methods Development and Comparison Study, including development of a draft technical memorandum
 - Continued development and refinement of the Conceptual Site Model for the project
- *Work Order 4A-020 - Analyses/Evaluation of WO 003A Samples:*
 - Data validation of analytical results for mobile pool sediments/wood debris and subtidal sediments collected in October 2016 continued
 - A Draft report of findings from WOs 003/003A/4A-020 was initiated (scheduled for submission in July 2017)
- *Work Order 4A-030 – 2017 Marsh Platform Sediment Characterization:*
 - May 29, 2017: Amec Foster Wheeler submitted WO 4A-030 for 2017 Marsh Platform Sediment Characterization to the SM/Litigants
- *Work Order 4A-040 – 2017 Sediment and Water Quality Monitoring:*
 - May 8, 2017: The second round of 2017 water quality monitoring was conducted at the OV-02 location just upriver of the former Veazie Dam
 - May 24, 2017: The third round of 2017 water quality monitoring was conducted at the OV-02 location just upriver of the former Veazie Dam
 - The turbidity meter installed by Amec Foster Wheeler at the former Eddington Boat Launch went offline in late April 2017 following the peak of the spring freshet. Since that time Amec Foster Wheeler has been collecting periodic manual measurements at that location to fill in the data record. The river stage fell below 6 feet in late May 2017, allowing for removal of the turbidity probe for diagnosis. A temporary (rental) turbidity meter will be installed to collect daily readings beginning in mid-June, while the turbidity meter and system malfunctions are diagnosed.

- *Work Order 4A-050 – 2017 Biota Monitoring:*
 - Amec Foster Wheeler revised the Biota Monitoring Plan
 - Planning of the field investigations and staffing for 2017 biota monitoring continued
- *Work Order 4A-060 – 2017 Additional Mobile Pool Characterization:*
 - May 24, 2017: Amec Foster Wheeler submitted WO 4A-060 to the SM/Litigants for review
- *Work Order 4A-070 – 2017 Intertidal and Subtidal Sediment Characterization:*
 - Amec Foster Wheeler prepared WO 4A-070 for 2017 Intertidal and Subtidal Sediment Characterization to the SM/Litigants for review

Tasks 6A – Meetings/Communications

- *Work Order 6A-010 - Meetings/Reporting: Nov 2016 thru July 2017*
 - May 14, 2017: Amec Foster Wheeler submitted meeting minutes to the Special Master/Litigants for the April 24, 2017 Phase II Study Panel Meeting in Boston, MA, and the April 25, 2017 Quarterly Project Status Meeting in Boston, MA
 - May 14, 2017: Amec Foster Wheeler submitted a letter to the Special Master requesting a 3-month schedule extension for the delivery of the Final Engineering Study, proposing a due date of March 31, 2017
 - May 15, 2017: Amec Foster Wheeler attended Monthly Project Status Call with SM/Litigants
 - May 17, 2017: Amec Foster Wheeler submitted Invoice # J02206692 and Monthly Report for the month of April 2017 to the Special Master/Litigants
 - May 19, 2017: Amec Foster Wheeler submitted meeting minutes to the Special Master/Litigants for the May 15, 2017 Monthly Project Status Call

Task 7 – Community Involvement

- *Work Order 006 - Community Involvement:*
 - May 3, 2017: Community Involvement Memo and the Stakeholder Letter comments received from Mallinckrodt
 - May 9, 2017: Amec Foster Wheeler requested final comments from the SM/Litigants on the website content
 - May 15, 2017: NRDC submitted final comments on website content
 - May 24, 2017: Amec Foster Wheeler activated the Community Involvement website (<http://www.ia.com/>)
 - Amec Foster Wheeler developed an online community survey associated with the website
 - Amec Foster Wheeler developed a list of potential Frequently Asked Questions (FAQs) that interested parties may have related to the Project.

PROPOSED ACTIVITIES FOR THE FOLLOWING PERIOD

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

- *Work Order 2A-030A - Phase 1 Bench-Scale Treatability Studies Work Plan*
 - Issue draft work plans to the SM/Litigants for review

- *Work Order 2A-040 - Permitting Support for Pilot-Scale Amendment Plots and Alternatives Evaluation:*
 - Continue to arrange for discussions with federal and state agencies regarding permitting requirements for full-scale remedial alternatives
- *Work Order 2A-080 - Alternatives Evaluation*
 - Continue development of remedial alternatives
- *Work Order 2A-100: Recovery Times & Sediment(Hg) Transport*
 - Continue planning of field activities required to support hydrodynamic modeling

Task 3A - Risk Reduction Evaluation

- *Work Order 3A-010 – BAFs/BSAFs, Biota Trend Analyses:*
 - Continue development of BAFs/BSAFs
- *Work Order 3A-020 – Baseline Risk Assessments:*
 - Continue development of baseline risk assessments

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

- *Work Orders 003/003A - Mobile Sediment Pool Characterization:*
 - Submit updated project database to SM/Litigants
- *Work Order 004 – 2016 Sediment and Water Quality Monitoring:*
 - Revise Draft 2016 Sediment and Water Quality Monitoring Report based on comments from the Litigants
 - Final Report is scheduled to be submitted by July 14, 2017
- *Work Order 005 – 2016 Biota Monitoring:*
 - Respond to Litigant comments on the Draft 2016 Biota Monitoring Report
- *Work Order 4A-010 - Analytical Methods Evaluation and OC Study (formerly Work Order 012):*
 - Prepare and submit Technical Memorandum regarding analytical methods development and comparison study
 - Continue to refine and update the CSM
- *Work Order 4A-020 - Analyses/Evaluation of WO 003A Samples:*
 - Prepare draft Technical Memorandum of results of mobile pool investigations conducted under WOs 003, 003A, and 4A-020
 - Draft Technical Memorandum due to SM/Litigants by July 30, 2017
- *Work Order 4A-030 - Additional Marsh Platform Characterization:*
 - Initiate planning for wetland marsh characterization field program, expected to start in July 2017
- *Work Order 4A-040 - 2017 Sediment & Water Quality Monitoring:*
 - Install temporary turbidity monitoring meter (while other is being repaired)
 - Complete repairs to original turbidity meter and re-install
 - Plan for 2017 sediment monitoring, scheduled to take place in late July 2017
- *Work Order 4A-050 - 2017 Biota Monitoring*
 - Conduct bird and polychaetes monitoring

- Plan for fish sampling in August/September 2017
- *Work Order 4A-060 - Additional Mobile Pool Characterization*
 - Pending WO authorization, plan for field investigations
 - Scope will include geophysical investigations and sampling of mobile sediment pool to refine the size estimate of the mobile pool
- *Work Order 4A-070 - Additional Intertidal and Subtidal Sediment Characterization*
 - Pending WO authorization, plan for field investigations
 - Scope will include coring in intertidal flats east of Verona Island and in the Orland River

Task 5A - Phase III Engineering Study Report

- *Work Order 5A-010 - Engineering Study Report*
 - Prepare and submit WO 5A-010 for preparation of the Engineering Study Report

Task 6A – Meetings/Communications

- Prepare and submit invoice, monthly report, cash flow projection, and updated project schedule for June 2017 to the Special Master/Litigants
- Prepare for and attend June 15, 2017 monthly project status call with SM/Litigants
- Submit meeting minutes for June 15, 2017 Monthly Project Status Meeting with the Special Master/Litigants
- Plan for a late September/early October Quarterly Project Status Meeting and river tour in Bangor, ME

Task 7 – Community Involvement

- Share website location with project stakeholders and ask them to complete an online survey about the website content

FUTURE MEETINGS, AND CONFERENCE CALLS

- Quarterly Status Meetings with the Special Master and Litigants will be held in Boston, MA on the following dates:
 - July 20, 2017
 - Late September/early October meeting and river tour in Bangor, ME
- Monthly Project Status Calls will be held from 2-3PM (Eastern time) on the following dates:
 - June 15, 2017

PROJECT DELIVERABLES SCHEDULE

The schedule below provides an overview of project deliverable dates:

Work Order	Deliverable	Draft	Final
004	2016 Sediment and Surface Water Monitoring Report	3/28/2017	7/14/2016
005	2016 Biota Monitoring Report	5/28/2017	8/30/2017
2A-030	Bench Scale Treatability Work Plans	6/30/2017	
2A-050	Work Order 2A-050 - PHASE 1 Bench-Scale/Plot Studies	6/30/2017	7/15/2017
7A-010	Work Order 7A-010 - Add'l. Support Community Involvement	6/30/2017	7/15/2017
5A-010	Work Order 5A-010 - Phase III Engineering Study Report	6/30/2017	7/15/2017
6A-020	Work Order 6A-020 - Meetings: Aug-Dec2017	6/30/2017	7/15/2017
3A-010	BSAF Tech Memo	7/14/2017	9/14/2017
4A-020	2016 Mobile Pool Characterization Report	7/30/2017	
4A-010	Analytical Methods Evaluation	7/30/2017	
4A-010	Conceptual Site Model Tech Memo	9/30/2017	
4A-030	Technical Memorandum - 2017 Marsh Platform Characterization	11/1/2017	1/15/2018
4A-040	2017 Sediment and Surface Water Monitoring Report	11/1/2017	12/18/2017
3A-020	Risk Assessment	11/9/2017	1/12/2018
4A-070	Technical Memorandum - 2017 Intertidal & Subtidal Sediment Characterization	11/15/2017	1/30/2017
4A-060	Technical Memorandum - 2017 Additional Mobile Pool Characterization	11/30/2017	2/15/2017
2A-100	Hydrodynamic Model	12/1/2017	2/1/2018
006	Community Involvement Plan	12/5/2017	2/5/2018
2A-080	Alternatives Evaluation Report	12/15/2017	3/5/2018
3A-020	Risk Reduction Report	1/19/2018	3/18/2018
5A-010	Phase III Engineering Study Report	1/31/2018	3/31/2018
4A-050	2017 Biota Monitoring Report	3/31/2018	

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) Patricia Duft (Mallinckrodt)
 Jared Thompson (NRDC) Jeffrey Talbert (Preti Flaherty)
 Project File (3616166052)