

October 8, 2017

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



**Subject: Monthly Status Report 20 for August 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 August 1, 2017 through August 31, 2017. A cash flow projection for the following 6-month period is also attached.

ACTIVITIES AND EVENTS DURING THE REPORTING PERIOD

Task 2A - Technologies and Remedial Approaches for Consideration

- *Work Order 2A-030A - Bench-Scale/Pilot Studies: Phase 1 Work Plans - Bench Scale & Pilot-Scale Constructability*
 - August 2, 2017: Amec Foster Wheeler submits responses to Litigant comments on the Sediment Erosion Testing Work Plan
 - August 15, 2017: Amec Foster Wheeler submits responses to Litigant comments on the Resampling Amendment Test Plot Work Plan
- *Work Order 2A-040A - Permitting Support for Alternatives Evaluation*
 - Amec Foster Wheeler compiled meeting minutes for July 13, 2017 meeting held in Bangor Maine with NOAA, USACE, ME DEP, ME DIFW, and ME DMR to discuss permitting issues associated with potential remedial actions
 - August 27, 2017: Issued letter to Maine State Historic Preservation Office (SHPO) requesting locations of historical significance within the Penobscot River Estuary
- *Work Order 2A-051 - Leachability/Toxicity Testing*
 - Amec Foster Wheeler initiated planning and subcontracting for the Leachability/Toxicity testing
- *Work Order 2A-053 - Dewatering / Flocculant Testing / Water Treatment*
 - Amec Foster Wheeler initiated planning and subcontracting for the Dewatering / Flocculant Testing / Water Treatment activities
- *Work Order 2A-054 - Sediment Erosion and Transport Testing*
 - Amec Foster Wheeler initiated planning and subcontracting for the Sediment Erosion and Transport Testing
- *Work Order 2A-055 – Amendment Test Plot Re-sampling*
 - Amec Foster Wheeler initiated planning and subcontracting for the Amendment Test Plot Re-sampling
- *Work Order 2A-080 – Alternatives Evaluation Report*

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- Development of Alternatives Analysis Report continued in August 2017
- *Work Order 2A-100 – Hydrodynamic Evaluation*
 - Amec Foster Wheeler continued development of the 2-D hydrodynamic model
 - Subcontracting of the USGS for ADCP and CTD profiles in the river continued

Tasks 3/3A - Risk Reduction Evaluation

- *Work Order 3A-010 - BAFs/BSAFs, Biota Trending Analysis:*
 - August 28, 2017: Mallinckrodt submits comments on the Draft 2016 BSAF Technical Memorandum
- *Work Order 3A-020 – Baseline Risk Assessments:*
 - Work on baseline risk assessments continued in August 2017

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

- *Work Order 004 - 2016 Sediment and Water Quality Monitoring:*
 - Revisions to the Draft 2016 Sediment and Water Quality Monitoring Report were initiated based on comments from NRDC and Mallinckrodt
- *Work Order 005 - 2016 Biota Monitoring:*
 - August 30, 2017: Amec Foster Wheeler submitted the Final 2016 Biota Monitoring Report to the Special Master/Litigants
- *Work Order 4A-010 - Analytical Methods Evaluation and OC Study (formerly Work Order 012):*
 - Work continued on the Analytical Methods Development and Comparison Study Technical Memorandum
 - Continued development and refinement of the Conceptual Site Model for the project
- *Work Order 4A-020 - Analyses/Evaluation of WO 003A Samples:*
 - August 7, 2017: Comments received from NRDC on Draft 2016 Mobile Sediment Characterization Report; awaiting Mallinckrodt comments prior to document revision
- *Work Order 4A-030 – 2017 Marsh Platform Sediment Characterization:*
 - Sediment sampling for WO 4A-030 was completed in August 2017
 - Analyses of WO 4A-030 samples initiated
- *Work Order 4A-040 – 2017 Sediment and Water Quality Monitoring:*
 - Sediment sampling for WO 4A-040 was completed in August 2017
 - Periodic downloads of the turbidity meter at Eddington were made throughout the period; the meter is functioning properly
- *Work Order 4A-050 – 2017 Biota Monitoring:*
 - Sediment sampling for WO 4A-050 sediments co-located with 2017 biota sampling locations was completed in August 2017
 - Planning of the field schedule and staffing for 2017 fish and shellfish biota monitoring to be conducted in September 2017 were initiated

- *Work Order 4A-060 – 2017 Additional Mobile Pool Characterization:*
 - Geophysical and physical data collected in July 2017 were assessed for evaluating potential further geophysical activities this season
- *Work Order 4A-070 – 2017 Intertidal and Subtidal Sediment Characterization:*
 - Initiated intertidal and subtidal sediment collection for this work order in July 2017
- *Work Order 4A-080 – Thin Interval Coring*
 - Subcontracted University of Kentucky (Dr. Kevin Yeager), Texas A&M, and Flett research for sediment core processing and analyses
 - Coordinated division of core sectioning with University of Kentucky, Texas A&M, and Flett Research
 - Initiated sediment core collection for this work order in August 2017

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

Tasks 6A – Meetings/Communications

- *Work Orders 6A-010/6A-020 - Meetings/Reporting:*
 - August 17, 2017: Monthly Project Status Call held with the Special Master/Litigants
 - September 1, 2017: Amec Foster Wheeler submitted Invoice # J02207063 for the month of July 2017 to the Special Master/Litigants
 - September 1, 2017: Amec Foster Wheeler submitted the Monthly Report for the month of July 2017 to the Special Master/Litigants

Task 7/7A – Community Involvement

- *Work Orders 006/7A-010 - Community Involvement:*
 - August 14, 2017: Amec Foster Wheeler issues Community Involvement Records of Contact memorandum for contacts between June 1, 2017 and August 3, 2017 to the Special Master/Litigants
 - August 15, 2017: Amec Foster Wheeler presented a summary of the Phase III Engineering Study to lobstermen in Belfast, Maine
 - August 16, 2017: Amec Foster Wheeler presented a summary of the Phase III Engineering Study to Mr. Steve Miller of the Islesboro Islands Trust and to lobstermen in Islesboro, Maine in two separate meetings
 - Updated the website document repository to include the most recent monthly reports and approved work orders

PROPOSED ACTIVITIES FOR THE FOLLOWING 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*
 - No further activity anticipated under this work order
- *Work Order 2A-040A - Permitting Support for Alternatives Evaluation*
 - Continue permitting support for Alternatives Evaluation

- *Work Order 2A-051 - Leachability/Toxicity Testing*
 - Complete subcontracting and plan for field sample collection in September 2017
- *Work Order 2A-053 - Dewatering / Flocculant Testing / Water Treatment*
 - Complete subcontracting and plan for field sample collection in September 2017
- *Work Order 2A-054 - Sediment Erosion and Transport Testing*
 - Complete subcontracting and plan for field sample collection in September 2017
- *Work Order 2A-055 – Amendment Test Plot Re-sampling*
 - Complete subcontracting and plan for field sample collection in September 2017
- *Work Order 2A-080 - Alternatives Evaluation*
 - Continue development of remedial alternatives
- *Work Order 2A-100 - Hydrodynamic Evaluation*
 - Continue development of 2-D hydrodynamic model
 - Prepare for field events to collect tidal levels, ADCP, CDT, and SedFlume data in September 2017

Task 3 - Risk Reduction Evaluation

- *Work Order 3A-010 – BAFs/BSAFs, Biota Trend Analyses:*
 - Respond to Mallinckrodt comments on the Draft 2016 BSAF Technical Memorandum
- *Work Order 3A-020 – Baseline Risk Assessments:*
 - Continue development of baseline risk assessments

Task 4 - Potential Data Needs and Additional Field Work

- *Work Order 004 – 2016 Sediment and Water Quality Monitoring:*
 - Respond to Mallinckrodt and NRDC comments on Draft 2016 Sediment and Water Quality Monitoring Report and submit Final report
- *Work Order 005 – 2016 Biota Monitoring:*
 - No further activities are anticipated under this work order
- *Work Order 4A-010 - Analytical Methods Evaluation and OC Study (formerly Work Order 012):*
 - Submit Analytical Methods Development and Comparison Study Technical Memorandum to Special Master/Litigants
 - Continue to refine and update the CSM
- *Work Order 4A-020 - Analyses/Evaluation of WO 003A Samples:*
 - Respond to NRDC and Mallinckrodt comments on the Draft 2016 Mobile Sediment Characterization Report
- *Work Order 4A-030 - Additional Marsh Platform Characterization:*
 - Continue analyses of core sediment samples
- *Work Order 4A-040 - 2017 Sediment & Water Quality Monitoring:*
 - Continue analyses of core sediment samples
- *Work Order 4A-050 - 2017 Biota Monitoring*
 - Monitor laboratory analytical progress for biota samples submitted in June and July 2017

- Prepare for fish/shellfish collection in September 2017
- *Work Order 4A-060 - Additional Mobile Pool Characterization*
 - Evaluate geophysical data collected in summer 2017 and plan for any further investigations in September 2017, if necessary
- *Work Order 4A-070 - Additional Intertidal and Subtidal Sediment Characterization*
 - Continue sediment sample collection
- *Work Order 4A-080 - Sediment Geochronology Cores*
 - Complete universities subcontracting
 - Coordinate with universities and laboratories regarding processes for core sectioning and analyses
 - Initiate sediment core collection in September 2017

Task 6A – Meetings/Communications

- *Work Orders 6A-010/6A-020 - Meetings/Reporting:*
 - Prepare and submit invoice, monthly report, cash flow projection, and updated project schedule for September 2017 to the Special Master/Litigants
 - Prepare for and attend September 14, 2017 Monthly Project Status Call with Special Master/Litigants
 - Submit meeting minutes for August 17, 2017 Monthly Project Status Call
 - Prepare for October 4-5, 2017 Quarterly Project Status Meeting in Bangor, Maine

Task 7/7A – Community Involvement

- *Work Orders 006/7A-010 - Community Involvement:*
 - Submit meeting minutes for August 15 and 16, 2017 with lobstermen from Belfast and Islesboro, and Steve Miller of Islesboro Islands Trust
 - Follow-up by phone or email with interested parties

FUTURE MEETINGS AND CONFERENCE CALLS

- The next Quarterly Project Status Meeting with the Special Master and Litigants will be held in Bangor, Maine on October 4 and 5, 2017. A tour of the river by boat will be conducted on one of these days, dependent upon weather conditions
- The next Monthly Project Status Call will be held from 1:00 – 2:00 PM (Eastern time) on Thursday, September 14, 2017.

CASH FLOW PROJECTION

Please refer to Attachment A for the Amec Foster Wheeler financial status summary and cash flow projection for the next six months.

PROJECT DELIVERABLES SCHEDULE

The schedule below provides an overview of project deliverable dates:

Monthly Status Report 20 for August 2017
 Penobscot River Estuary Phase III - Engineering Study

Work Order	Deliverable	Draft to SM/Litigants	Final to SM/Litigants
004	2016 Sediment and Surface Water Monitoring Report	3/28/2017	9/12/2017
005	2016 Biota Monitoring Report	5/28/2017	8/30/2017
3A-010	Technical Memorandum - BSAFs	7/12/2017	9/15/2017
4A-020	2016 Mobile Pool Characterization Report	7/12/2017	N/A
4A-010	Technical Memorandum - Analytical Methods Evaluation	9/15/2017	N/A
4A-030	Technical Memorandum - 2017 Marsh Platform Characterization	11/8/2017	N/A
3A-020	Risk Assessment Report	11/9/2017	1/12/2018
4A-040	2017 Sediment and Surface Water Monitoring Report	11/17/2017	1/17/2018
4A-060	Technical Memorandum - 2017 Additional Mobile Pool Characterization	11/30/2017	N/A
2A-100	Hydrodynamic Model Report	12/1/2017	N/A
7A-010	Community Involvement Plan	12/5/2017	2/5/2018
2A-080	Alternatives Evaluation Report	12/15/2017	3/30/2018
4A-070	Technical Memorandum - 2017 Intertidal & Subtidal Sediment Characterization	1/12/2018	N/A
3A-020	Risk Reduction Report	1/19/2018	3/30/2018
4A-050	2017 Biota Monitoring Report (w/o Black Duck data)	2/2/2018	3/23/2018
5A-010	Phase III Engineering Study Report	2/2/2018	3/30/2018

N/A - not applicable; comments from SM/Litigants will be incorporated in Final version to be included as an Appendix to the Alternatives Evaluation Report
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) Patricia Duft (Mallinckrodt)
 Jared Thompson (NRDC) Jeffrey Talbert (Preti Flaherty)
 Project File (3616166052)