Meeting Minutes Wurtsmith BCT Meeting 24 February 2021 Teleconference

Bay West Project No. J150073 Meeting Date: Wednesday, 24 February 2021

Location: Teleconference Meeting Time: 0900-1005 EST

MEETING ATTENDEES VIA TELECONFERENCE:

Dan Medina	AFCEC	Lee Major	Cherokee Nation
Catharine Varley	AFCEC	Andrea Keatley	MDHHS
Mounica Nandula	MDHHS	Puneet Vij	MDHHS
Paula Bond	Aerostar	Saamih Bashir	Wood
Paul Walz	Bay West	Jay Mullett	Wood
Ryan Morrish	Bay West	Jeremiah Morse	AECOM
Dirk Pohlmann	Bay West	Dale Corsi	DLZ
John Bradley	EGLE-RRD - Superfund Section, Lansing	Ann Person	EGLE-RRD -Bay City
Beth Place	EGLE-RRD - Superfund Section, Lansing	Amanda Armbruster	EGLE-RRD - Bay City
Matt Baltusis	EGLE-RRD - Superfund Section, Lansing	Charlie Bauer	EGLE-WRD - Bay City
Joshua Mosher	EGLE-RRD –Asst. Div. Director Lansing	Matt Siler	EGLE-WRD - Bay City

The meeting was held via Microsoft Teams. The meeting began at 0900 hours EST on 24 February 2021 and adjourned at 1010 EST hours. The meeting agenda is attached and posted to the Bay West Collaborative Website.

1. Opening Remarks

P. Walz opened the meeting with a greeting and introductions. The meeting purpose was to discuss environmental restoration program work at the former Wurtsmith AFB.

2. Previous 27 January 2021 BCT Review

- a. 27 January 2021 meeting minutes are under EGLE review.
- b. Action Items EGLE
 - i. Review Wurtsmith UFP-QAPP and propose metrics that will be used for data quality assessment should QA/QC samples be collected by EGLE, including reconciliation if the agreed upon data quality metrics are not achieved. Status (summarized below) is unchanged from last month's BCT meeting. Action Item will remain on next month's Agenda.
 - 1. B. Place agreed to review the QAPP and the split sampling language. B. Place will draft a split sampling procedure for Air Force review and comment. The task is <u>not</u> to revise the QAPP. This task is in progress and should remain on the agenda.
 - 2. B. Place stated the split sampling language would be updated closer to the commencement of PFAS RI field work.
 - ii. Follow up on remaining 5 PFAS MCLs. B. Place stated that discussions have been held had RI scoping meetings and asked what is needed from EGLE? C. Varley stated that P. Bond has documented all the discussions in the QAPP, which is currently in technical review, but it will take approximately one month to finish. B. Place will follow up on the MCLs in the rule or decision-making process and provide a response in writing later this week.
 - iii. Status of revised SRD at CTS, MPTS and FT002. EGLE review has been completed and generally concurs with the proposed changes. C. Bauer stated a formal response should be provided to the Air Force soon. P. Bond asked for a timeframe for EGLE's response, which

- will be the trigger for implementing the sampling changes. C. Bauer stated it should be sent within two weeks.
- iv. Check if groundwater water quality parameters, such as nitrate and nitrite are being collected at the WWTP to help identify sources. C. Bauer stated those parameters are being monitored. C. Varley explained it is not just the WWTP, the Air Force is interested in all areas of Oscoda. As samples are collected, the nitrate/nitrite results (and other water quality parameters) can help suggest source areas. As more data is collected, the additional lines of evidence will be helpful for all parties. B. Place stated that this is a complicated issue in that it involves 3 different state agencies, WRD, RRD and MDHHS. B. Place asked if Air Force would like to see the WWTP data. An action item was added for EGLE to provide the WWTP water quality parameter data. A. Armbruster stated that the monitoring well groundwater samples collected around Oscoda are currently only sampled for PFAS. There is one exception that is sampled for VOCs, but it has been discontinued.

c. MDHHS

- i. Check if groundwater water quality parameters, such as nitrate and nitrite, will be collected during the next round of residential well sampling to assist in the source identification. P. Vij stated that water quality parameters including nitrate and nitrite will be added to the analyte list for the next round of sampling. Pre and post filter samples will be collected.
- ii. B. Place commented that it has not been discussed internally what will be done if nitrate/nitrite are detected in monitoring wells in the Van Etten Lake area, or residential wells. C. Varley stated that it would be another line of evidence for Air Force fingerprinting, results would be compared to what is collected on the Base. At this time, it is unknown what conclusions would be drawn from the data. B. Place questioned whether, depending on the nitrate/nitrite concentrations detected, the intent was to trace PFAS impacts to a septic field or agricultural field. C. Varley explained that the monitoring of groundwater parameters are done for many reasons (e.g., as indicators for injections to know if the technology is working). They are another line of evidence; many lines of evidence are needed to prove success. B. Place stated that everyone needs to understand what the data will be used for prior to data collection, who should be funding the extra analysis, and everyone should also agree to secondary uses of that data. C. Varley commented that as Dr. Anderson is evaluating data, EGLE could wait to collect the water quality parameters to see which areas they need to be collected from. EGLE does not currently have plans to collect nitrate and nitrite data.
- iii. A. Keatley clarified the MDHHS data quality objective for general chemistry samples is for filter efficacy. This is the standard procedure to make sure filters are being protective for all parameters and it has not been completed in this area yet but will be on the next round of sampling. C. Varley stated that is a good idea, and that is being done at other bases.

d. Aerostar

i. Provide EGLE the order of sites to be discussed at the PFAS RI QAPP meeting. – Information was provided, and meeting has already taken place.

3. DOCUMENT SUBMISSION SCHEDULE AND STATUS

Only documents that have changed status since the previous BCT were discussed.

- a. Draft 2018 PTS Annual Report RTC to Air Force comments were submitted to Air Force for review on 3 February 2021. L. Major will follow up on the status of the review.
 - i. B. Place asked if the Annual LTM sampling was scheduled for May 2021 and if EGLE would be able to review the sampling plan prior to the start of sampling. P. Walz stated that the 2020 LTM was currently under Air Force review and it contained the sampling plan for all sites not only the LTM sites. In 2020, Bay West followed the 2019 Sampling Plan, as the 2020 Sampling Plan had not been approved at the time field work was executed. The 2021 Annual sampling will be completed by the follow-on contractor.
 - ii. B. Place asked if the follow-on contractor will be attending the BCT meetings prior to taking over the contract? C. Varley explained the Air Force is still working on funding for the new BECOS contractor, the goal is to not have a lull in operations.
- b. FT002 RAWP Addendum Submitted as final on 3 February 2021. Yesterday L. Major pointed out that Draft still appeared in the header. The document was revised and has been reposted to the Collaborative Website.
- c. FT002 UST Removal Work Plan Submitted RTCs on EGLE comments for Air Force review last week. Field work start date is 19 April 2021. C. Varley had the technical director do a review of the work plan and the Air Force agrees with the work that is included in the work plan. Bay West may move forward with the field work. Before any injections take place with the follow-on contractor there will be another review.

Bay West / Wood

- a. SS008 and WP004 Draft Final Work Plans
 - i. EGLE submitted comments on 28 October 2020, there were no comments on the SS008 UFP-QAPP RA-O WP/FSP, it will be submitted Final. Revised RTCs for the WP004 UFP-QAPP RA-O WP/FSP were submitted 17 November 2020. EGLE had a conversation with S. Bashir and requested more information on why one monitoring well will not be replaced. Revised RTCs were subsequently submitted to EGLE. EGLE will respond to the revised RTCs before 5 March 2021.
 - ii. VIAP Q4 samples were collected last week.

Aerostar

- a. Note all dates for document submittals stated on the Agenda are projected dates.
- b. Van Etten Lake Proposed Plan is under Air Force legal review, the goal is to complete the review prior to the next BCT.
- c. Clark's Marsh Proposed Plan All EGLE comments have been resolved. The document was provided to the USFS, comments are expected today, Aerostar will let the Team know if they included anything substantive which would involve edits to the Proposed Plan. Document should go final very soon.
- d. UFP-QAPP date has been delayed. A revised project schedule will be sent. The QAPP is under Air Force review.
- e. Risk Assessment Work Plan Under Air Force review, estimated date 16 March 2021.
- f. MPTS Action Memorandum Under Air Force legal review, estimated EGLE review March 2021.
- g. Remedial Action Work Plans- still planning on EGLE review in April 2021. Will include all IRA and design information. This document will be split into two documents one for each site.

To Be Submitted

- a. Draft 2019 PTS Annual Report was submitted to Air Force for review on 15 February 2021.
- b. Draft 2019 LUC Report was submitted to Air Force for review on 28 January 2021.

c. Draft 2020 LTM Annual Report was submitted to Air Force for review on 17 February 2021.

4. FIELD WORK UPDATE AND SCHEDULE

Bay West

- a. FT002 Carbon Change out
 - i. The 22nd GAC changeout took place on 14 January 2021, the system operated 106 days between changeouts, all effluent sampling results remained below criteria.
- b. SS057 RAWP Implementation
 - i. The semi-annual sampling event is scheduled for April 2021, after results are received, validated, and evaluated, the need for a fourth injection will be evaluated and executed, if results suggest it is warranted.
- c. FT002 RAWP Implementation
 - i. Field work is tentatively scheduled to begin 19 April 2021. Work will include UST removal and RAWP construction.
- d. 2021 RA-O groundwater monitoring and annual base-wide gauging event will be completed by the follow-on Contractor.
- e. Bay West will perform the SS057 semi-annual April sampling event; sampling related to FT002 RAWP construction of the IAB remedy and UST removal, including baseline sampling; and treatment system sampling through 26 June 2021 at FT002 and LF030/31.

Bay West/Wood

- f. VIAP Update
 - i. S. Bashir stated Q4 sampling event took place the week of 15 February 2021. The VIAP report will include the Q4 results, so results will not be distributed to the EGLE or Air Force until the report is completed. Draft report should be completed in May 2021. If there are any changes from historical data, the Team will be notified.

Aerostar

- g. Central Treatment System (CTS) Status
 - P. Bond stated the CTS had carbon changeouts in the SAC and lead vessels in February 2021.
 This changeout was a more intense cleanout, as there was carbon cemented in the bottom of
 the tank that took additional effort to remove. System was off for 4 days during the change
 out.
- h. Mission Pump and Treatment System (MPTS) Status
 - i. P. Bond stated the MPTS is operating as designed, regular sampling confirms SRD requirements are being met.
- i. PFAS Remedial Investigation Status
 - i. UFP-QAPP is in Air Force review.
 - ii. The Van Etten Lake remedial design is 90% complete, Aerostar is responding to comments and back checking all edits.
 - iii. The Clark's Marsh remedial design is 90% complete, Aerostar is responding to comments and back checking all edits.
 - iv. A Remedial Action Work Plan is in development which will include packages for each IRA that EGLE will review.
 - v. P. Bond wanted to follow up on Meeting Minutes from the October 2020DQO meeting, EGLE comments were not received. B. Place will follow up on meeting minute comments, they should be ready this week.

- vi. P. Bond stated minutes are being drafted for the other DQO meeting and they will be submitted for Air Force review soon.
- vii. B. Place asked when EGLE will receive the Remedial Action Work Plan, before or after the ROD is signed? The Proposed Plan will be finished while the ROD is being drafted. The Remedial Action Work Plan will probably be ready before the ROD is finished. B. Place asked if there would be any advantage for EGLE to review the design portion of the work prior to the work plan. P. Bond stated probably not, the basis of design information EGLE has discussed is not included in the design package. The Remedial Action work plan includes the scientific back up regarding the design.
- viii. B. Place asked if Air Force could share the GIS shapefiles that Aerostar has developed for RI/IRA. C. Varley stated the question has been asked to the Air Force team and it is being worked on. Data sharing for all parties would be beneficial. EGLE will continue to share data as it is collected. P. Bond asked if there is there any way to get the X and Y coordinates for locations? B. Place asked what specifically what was missed because some of the X and Y locations were generated by addresses and were different from the GIS coordinates collected by EGLE. P. Bond stated they are using the addresses. But she would like to work with EGLE to make sure all locations are accurate. P. Bond would like to talk to database person, and make sure new data can be added to the existing database.
 - ix. J. Morse and P. Vij are meeting with a database person to work out the differences. After that meeting the information will be shared with P. Bond and H. Anderson on the Air Force team. P. Bond will send this list of differences to B. Place so they can be discussed at the Friday meeting.
 - x. Public meeting date for the Clark's Marsh Proposed Plan is tentatively scheduled for the third week in March 2021, the Van Etten Lake one will follow.

5. AIR FORCE UPDATES

- a. OWAA 10 parcels
 - i. Air Force has been talking to Air Force Real Property. The paperwork needs to be updated. C. Varley stated there has been communication between EGLE and Air Force on the topic.
 - ii. B. Place requested the parcel number for the parcel located in OT024, because she thought Air Force has mentioned that it will probably go before the other parcels. (the one during the AMC discussion). L. Major will provide the parcel number. The Air Force is not sure which parcel will go first. OWAA was interested in the parcel with the building they would like to demo, but the demo has been postponed. Air Force will let EGLE know if anything is needed.
- b. RAB Update
 - i. The next RAB was scheduled for 21 April 2021. C. Varley is working on the action item list.
- c. Oscoda Township Stormwater discharge fee
 - i. The discharge fee is still under Air Force legal review about what can and cannot be paid for.

6. EGLE RRD – SUPERFUND SECTION UPDATES

- a. Other
 - i. B. Place stated a letter was sent to Air Force requesting PFAS sampling in the LF030/031 effluent. Air Force confirmed the letter was received. EGLE is evaluating LF030/031 as a whole and would like to have a discussion at a future BCT. C. Varley is also getting an understanding of site history and status and the appropriate path forward, as planning and programming is happening across the base. B. Place asked how the Air Force would respond

- to the additional sampling request letter. C. Varley stated D. Medina would have to let the Team know.
- ii. RAB Topics B. Place asked if there would be any other topics added to the RAB Agenda other than the updates on RI and IRAs? C. Varley said Air Force is still working on the Agenda. The Air Force will share the RAB Agenda once its drafted.

7. EGLE RRD – BAY CITY DISTRICT UPDATES

a. Oscoda area sampling – A. Armbruster stated AECOM completed the quarterly groundwater event the end of January 2021. Results will be shared with the Air Force when they are available. Several drinking water wells in AuSable Township that were down gradient of a monitoring well that had an exceedance were sampled during this event. A total of eight residential wells were sampled, five were non-detect but three had detections of PFAS below criteria.

8. EGLE WRD - UPDATES

a. C. Bauer stated there was no update from his department.

9. MDHHS UPDATES

- a. Residential Well sampling update
 - P. Vij stated the next round of Residential well sampling is scheduled for April 2021, that will
 capture winter homes also. Pre and post filter samples will be collected as well as general
 chemistry.

10. Next Meetings:

- a. BCT 17 March 2021, 0900 1100 EST confirmed
- b. BCT 28 April 2021, 0900 1100 EST confirmed
- c. BCT 19 May 2021, 0900-1100 EST confirmed

11. ACTION ITEMS:

- a. EGLE
 - i. B. Place will review the Wurtsmith UFP-QAPP and propose metrics for assessing data quality for split samples and corrective actions if metrics are not met.
 - ii. Follow up on remaining 5 PFAS MCLs provide a response in writing on where the MCLS are in in the rule or decision-making process.
 - iii. Submit response to proposed changes in the CTS, MTPS, and FT002 SRDs.
 - iv. Provide the Air Force with the Oscoda WWTP water quality parameter results.
 - v. After the database call, provide update on X and Y coordinates for sampling locations.

b. Aerostar

i. Provide EGLE a list of residential well location differences to B. Place so they can be corrected at the Friday meeting.

c. Air Force

i. Provide EGLE OT024 parcel number.

1. Air Force Opening Remarks/General Business Discussion

2. Previous BCT Meeting – 27 January 2020

- a. Meeting Minutes Minutes are under Air Force review.
- b. Action Items EGLE
 - i. Review Wurtsmith UFP-QAPP and propose metrics for assessing data quality for split samples and corrective actions if metrics are not met.
 - ii. Follow up on remaining 5 PFAS MCLs.
 - iii. Status of revised CTS, MTPS, and FT002 SRD.
 - iv. Check if groundwater water quality parameters, such as nitrate and nitrite, are being collected at the WWTP to help identify sources.

MDHHS

v. Check if groundwater water quality parameters, such as nitrate and nitrite, will be collected during the next round of residential well sampling to assist in source identification.

Aerostar

i. Provide EGLE the order of sites to be discussed at the PFAS RI QAPP meeting.

3. Document Submission Schedule and Status

Document	Date submitted to EGLE	EGLE Review Status	Comments
Bay West			
Draft 2018 PTS Annual Report			RTCs to AF comments submitted to AF on 28 January 2021.
Draft SS017 Site Closure Tech Memo.			Based on a review by Air Force legal, an ESD or Proposed Plan/ROD Amendment will be used to document Site Closure.
Draft SS072 Proposed Plan			Air Force has issued an RFQ to Bay West to revise the Risk Assessment and FS. No work on Proposed Plan until these two documents have been revised.
Draft Five-Year Review			Submitted to Air Force on 23 March 2020: under Air Force review. Submission to EGLE April 2021.
Draft 2019 LTM Annual Report			Submitted to Air Force on 11 September 2020; under Air Force review.
Draft 2019 Systems Annual Report			Submittal to Air Force on 23 December 2020; under Air Force review.
FT002 RAWP Addendum			Document submitted as final on 03 February 2021.
FT002 UST Removal Work Plan			Document submittal to EGLE on 10 December 2020. EGLE comments received on 12 January. RTCs are being prepared.
Draft 2019 LUC Report	Final version is posted to collaborative website for informational purposes only.		Submitted to the Air Force on 28 January 2021 for review.

Bay West / Wood			
WP004 UFP-QAPP RA-O WP/FSP			EGLE provided comments on 28 October 2020, Wood submitted RTCs on 12 November 2020. Based on discussions with EGLE, RTCs were revised resubmitted to EGLE on 8 February 2021.
SS008 UFP-QAPP RA-O WP/FSP			Submitted as final on 8 February 2021.
VIAP Q3 Results			Submitted to the Air Force on 25 January 2021 for review.
Aerostar			
Van Etten Lake Proposed Plan			Estimated EGLE submission date 5 February 2021.
Clark's Marsh Proposed Plan	Issued to EGLE 12/14/2020	EGLE Comments Received 1/6/2021 and resolved on 2/8/2021	EGLE comments resolved, USFS will review prior to being issued final.
PFAS RI UFP-QAPP			Estimated EGLE submission date 16 February 2021
Risk Assessment Work Plan			Estimated EGLE submission date 16 March 2021
MPTS Action Memorandum			Estimated EGLE submission date March 2021
Remedial Action Work Plan			Estimated EGLE submission date 15 April 2021
Bay West - To be submitted			
Draft 2019 PTS Annual Report			Report submitted to Aerostar on 28 January 2021 for review of CTS and MPTS sections. Scheduled for submittal to Air Force in February 2021.
Draft 2020 LTM Annual Report			Scheduled for submittal to Air Force in March 2021.
Draft 2020 LUC Report	Final version will be posted to collaborative website for informational purposes only.		Scheduled for submittal to Air Force in March 2021.
Draft 2020 Systems Annual Report			Scheduled for submittal to Air Force in May 2021.
Draft 2020 PTS Annual Report			Scheduled for submittal to Air Force in July 2021.

4. Field Work Update and Schedule

Bav West

- a. FT002 The 22nd Change out was completed on 14 January 2021; the system ran 106 days between change outs. The next change out is tentatively scheduled for April 2021.
- b. SS057 RAWP Implementation –The fourth quarterly performance monitoring sampling was completed the week of 12 October 2020. The third injection was completed 11 November 2020, with substrate addition limited to the middle trench. Semi-annual performance monitoring is scheduled for April 2021. After the results are received and reviewed the fourth injection event will be scheduled.
- c. FT002 RAWP Implementation Concrete pad demolition, which will be combined with the UST removal and IAB system construction, is scheduled to begin on 19 April (weather dependent).
- d. 2021 RA-O groundwater monitoring and annual base-wide gauging to be completed by the follow-on Contractor.
- e. 2021 RA-O sampling and analytical that will be performed by Bay West: April SS057 semi-annual performance monitoring; FT002 and LF030/031 treatment system sampling through 26 June; and FT002 sampling related to RAWP construction and UST removal, including baseline sampling for IAB remedy.

Bay West/Wood

a. VIAP Update – Q4 sampling event scheduled week of 15 February 2021.

Aerostar

- a. Central GAC Treatment System (CTS) Status
 - i. Lead and SAC GAC changed out the week of 8 February 2021.
- b. Mission Street Pump and Treat System (MPTS) Status
 - i. Continued regular O&M.
- c. PFAS Remedial Investigation Status/Schedule
 - i. The UFP-QAPP is under USAF review.
 - ii. The Van Etten Lake 90% remedial design is currently under USAF review.
 - iii. The Clark' Marsh 90% design is being developed.

5. Air Force Updates

- a. OWAA 10 parcels
- b. RAB Update
- c. Oscoda Township Stormwater discharge fee

6. EGLE RRD - Superfund Section Updates

a. Other – RAB topics

7. EGLE RRD - Bay City District Updates

- a. Kings Corner Road Dump Known PFAS contamination site off Base.
- b. Loud Drive Known PFAS contamination site off Base.
- c. Oscoda area sampling Other areas where PFAS is being sampled off Base.

8. EGLE WRD Updates

- a. Surface water/fish sampling in area
- b. Oscoda Township Wastewater Treatment Plant Update: status of additional PFOS/PFOA sampling; actions related to PFOS/PFOA discharges to groundwater.

9. MDHHS Updates

a. Residential Well sampling update

10. Schedule Next BCT Meeting

- a. 17 March 2021 teleconference 0900-1100 EST confirmed during previous meeting.
- b. 21 April 2021 teleconference 0900-1100 EST tentative.
- c. 19 May 2021 teleconference 0900-1100 EST proposed.