

**Meeting Minutes**  
**Wurtsmith BCT Meeting**  
**28 April 2020**  
**Teleconference**

Bay West Project No. J150073  
Location: Teleconference

Meeting Date: Tuesday, 28 April 2020  
Meeting Time: 0900-1050 EST

**MEETING ATTENDEES VIA TELECONFERENCE:**

Dave Gibson	AFCEC	Lee Major	Cherokee Nation
Mark Weegar	Cherokee Nation	Abiy Mussa	MDHHS
Jeremiah Morse	AECOM	Andrea Keatley	MDHHS
Dale Corsi	DLZ	Puneet Vij	MDHHS
Paul Walz	Bay West	Saamih Bashir	Wood
Dirk Pohlmann	Bay West	Beth Flynn	Wood
Andrea Stawowy	Bay West	Ryan Morrish	Bay West
Matt Siler	EGLE- WRD – Bay City	Amanda Armbruster	EGLE- RRD – Bay City
Tarek Buckmaster	EGLE- WRD - Lansing	Charlie Bauer	EGLE- WRD – Bay City
Mike Neller	EGLE- RRD – RRD Director, Lansing		
John Bradley	EGLE-RRD – Superfund Section, Lansing		
Beth Place	EGLE-RRD – Superfund Section, Lansing		
Matt Baltusis	EGLE-RRD – Superfund Section, Lansing		
Dan Yordanich	EGLE-RRD – Compliance/Enforcement, Lansing		

The meeting was held via Skype. The meeting began at 0900 hours on 28 April 2020 and adjourned at 1050 hours. The meeting agenda is attached and posted to the Bay West Collaborative Website.

**1. Opening Remarks**

D. Gibson 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 24 March 2020 BCT Review**

- a. The 24 March 2020 BCT Meeting Minutes are still under review by EGLE, they will submit comments, before 1 May 2020. (Note: EGLE provided comments on 4 May 2020, the minutes were posted as final on the Bay West Collaborative Website on 5 May 2020, a copy will be place in the Oscoda Township Library once it reopens.)
- b. Action Items – EGLE
  - i. Provide comments on Wurtsmith documents
    1. Discussed in section 3 below.
  - ii. 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 metrics are not achieved.
    1. B. Place agreed to review the QAPP and the split sampling language. B. Place will draft a split sampling procedure and the Air Force will review and comment. The task is not to revise the QAPP. This task is in progress and should remain on the agenda.
  - iii. Inform the Air Force what data is needed to update the CTS Interim sampling plan.
    1. Discussed later is Section 8.
- c. Action Items – Air Force
  - i. Notify EGLE how draft documents will be handled.

1. A procedure is in place for EGLE review. Documents will be placed on a website where EGLE can review, no downloading or printing. A timeframe will be set for all documents, most will be available for 45 days for EGLE to review and provide comments. If necessary, a meeting will be held to discuss any comments that cannot be resolved via email. B. Place asked if there is a way that after the review time has expired, and EGLE comments submitted, that the document can still be available for reference. D. Gibson took an action item to investigate the process after a document has been placed on the website.
- ii. Approve the 4<sup>th</sup> and 5<sup>th</sup> Quarterly Residential Well sampling data and submit to EGLE.
  1. The data was submitted to EGLE on 8 April 2020.
- iii. D. Gibson will follow up on the OWAA 10 Parcels status and the topic will be added to the agenda.
  1. The legal and real estate teams are engaged and have drafted the deed. Restrictions were previously developed by Air Force, but all work stopped due to PFAS issues. After Air Force legal approves, the deed will proceed to OWAA and EGLE.
- iv. Schedule a call with EGLE to discuss the document review process
  1. The call was held on 26 March 2020. The typical review time will be 45 days. The documents will be placed on the website as previously discussed. Some documents will not require EGLE review and they will be made available as final documents. EGLE will still receive all documents. Air Force will provide the logic or reference(s) to support EGLE review is not necessary.
  2. B. Place asked if the schedule would continue to be part of the BCT Agenda. D. Gibson said yes, the BCT Agenda will be the main tracking document. He is also working on an excel spreadsheet.

### 3. DOCUMENT SUBMISSION SCHEDULE AND STATUS

- a. Draft 2017 LTM Annual Report (Bay West)
  - i. Responses to EGLE comments are under Air Force review.
- b. Draft 2017 PTS Annual Report (Bay West)
  - i. Document posted as final on 22 April 2020.
- c. Final 2018 LUC/IC Report
  - i. Document posted as final on 22 April 2020.
- d. Draft 2018 LTM Annual Report (Bay West)
  - i. Responses to EGLE comments are under Air Force review.
- e. Draft 2018 PTS Annual Report (Bay West)
  - i. Submitted for Air Force review 18 March 2020, it should be submitted to EGLE in approximately 40 days.
- f. Draft Final SS-57 ESD (Bay West)
  - i. EGLE comments have been received. M. Weegar pointed out that the information requested in 3 of the 4 EGLE comments was included in the Final Remedial Action Work Plan (RAWP). The 4<sup>th</sup> comment was related to the biovent/biosparge system installed as part of the ROD. The ESD only covers what the Air Force is proposing to do as a new/supplemental treatment technology to be added to an existing ROD. Commenting on other components of remediation not included in the ESD is “out of bounds”. Typically, at the ESD stage, regulators send a letter/email indicating agreement with the remedy enhancement. M. Weegar asked that, given the fact that EGLE’s comments/request for information was covered in the Final

RAWP, if EGLE would like to withdraw their comments. B. Place will take the action item to reevaluate the SS-57 ESD comments and should have a response in one week. (EGLE via emails dated 5-May-20: 1) withdrew their comments on the ESD; and 2) provided agreement with the modification of the existing remedy to include the additional component of in situ anaerobic biodegradation.)

- g. Draft SS-57 RA-C Report (Bay West)
  - i. Document has been approved by the Air Force; Bay West will submit the document to EGLE using the new process/website.
- h. Draft SS-017 Site Closure Technical Memorandum (Bay West)
  - i. Approved by the Air Force, Bay West will submit it after the VIAP Work Plan is approved.
- i. Draft SS-072 Proposed Plan (Bay West)
  - i. Currently under Air Force Review
- j. Five-Year Review (Bay West)
  - i. Document currently under Air Force for review.
  - ii. EGLE will receive the document in approximately 4 weeks.
- k. The 4<sup>th</sup> and 5<sup>th</sup> Private/Public Drinking Water Monitoring Report (Wood)
  - i. Submitted to EGLE on 8 April 2020.
  - ii. EGLE was not given the opportunity to comment on the Drinking Water Monitoring Reports since it was a document submitting results. B. Place stated that in the schedule it would be helpful to state what EGLE will/will not review and the reasoning why.
- l. VIAP Work Plan (Bay West / Wood)
  - i. Work is on schedule and Wood will be in the field next week 4 May 2020. Air Force will share deliverables throughout the process.
- m. The Final ESI Report (Wood)
  - i. Comments from Air Force legal have been received, the Final Amendment has been sent to the Air Force for one final review. The document should be posted as final today or tomorrow. (Note: the Final ESI Amendment was submitted on 28 April 2020).
- n. 2019 Annual Reports (Bay West)
  - i. LTM AR is scheduled to be submitted to the Air Force in May 2020.
  - ii. Systems AR is scheduled to be submitted to the Air Force in June 2020.
  - iii. PTS AR is scheduled to be submitted to the Air Force in July 2020.

#### **4. FIELD WORK UPDATE AND SCHEDULE**

- a. FT-02 Carbon Change out
  - i. The 19<sup>th</sup> GAC change out took place on 5 March 2020, 102 days since the last change out. The next change out is scheduled for 8 June 2020, this date could be pushed back, depending on analytical results from the weekly sampling.
- b. SS-57 RAWP Implementation
  - i. Power Point presentation given at the end of the field work section. (PowerPoint attached at the end of the minutes)
  - ii. Only one of an estimated 25 injection events over 12 years has been completed. The January 2020 event was the first quarterly post-injection groundwater performance monitoring event. With only one round of sampling there is not enough data to demonstrate the effectiveness of the remedy. It was noted that IAB injections are not a new technology and were previously proven effective at FT-02.
- c. FT-02 RAWP Implementation

- i. Bay West working with the Air Force on a Modification in the near future that will include concrete transportation and disposal off-site. Once contract mod is awarded, Bay West will implement the FT-02 VOC source area RAWP.
- d. Annual LTM groundwater monitoring
  - i. The LTM is scheduled to begin next week on 4 May 2020. Bay West sent the proposed 2020 Sampling Plan to the EGLE for review and concurrence. Bay West is planning on sampling LF-27, SS-72 and LF-30/31 in May. All proposed changes in the sampling plan are with wells and/or analytes that have been below criteria for 5 or more years. Bay West provided the Data Hit tables along with the sampling plan to aide in the review. P. Walz asked B. Place if EGLE would be split sampling any wells for the three sites mentioned. B. Place stated that with the current work and travel restrictions, she is uncertain what might be allowed. Bay West will send an email with specific sampling dates for each site. (Note the email was sent on 29 April 2020). (Note: Rather than pursuing EGLE concurrence of the 2020 Sampling Plan, it was later decided to follow the previously approved 2019 Sampling Plan).
- e. VIAP Update
  - i. Field work will begin next week 4 May 2020. Wood has been in contact with Gary Kellan with OWAA. There will be two weeks of soil gas sampling then the sub-slab work is scheduled in the buildings. The Miss Dig group meet is scheduled for Monday, 4 May 2020. B. Place also received a call from G. Kellan, asking if the sub-slab was the only way to get the samples.
- f. Wood Field Work Update
  - i. On 11-12 February 2020 the last of the public and private wells were sampled. The Well Sampling Report is being drafted and is on schedule to be submitted to the Air Force in April 2020. This was the last field event under their contract.
  - ii. B. Place asked if residential well sampling will now stop. D. Gibson stated the historical data has been evaluated and there are no wells trending upward. The next step, during the RI, includes developing a sentinel well program on base, downgradient of the plumes. M. Weegar asked S. Bashir to confirm that it was his understanding that the Township has plans to extend the water line. S. Bashir confirmed that yes, Wood had been told the line will be extended, but the is the details are unknown. The 7 wells that were sampled in February 2020 might be connected; Whispering Woods will be connected. M. Weegar stated that if the 7 residential wells are connected that might negate the need for the sentinel well plan since there would be no residential wells impacted.
  - iii. B. Place asked if all the concentrations remained below criteria in the residential wells that were sampled. M. Weegar stated yes, or the Air Force would have provided bottled water or hook up to city water.

## 5. AIR FORCE UPDATES

- a. RAB
  - i. The next RAB meeting will be a virtual meeting in the July 2020 timeframe. The Air Force is working on a list of topics for the agenda. The Air Force is also busy returning the many media requests. There were approximately 180 people registered for the call and there were some technical difficulties, they will continue to be worked on. The next RAB will include a 30-minute briefing for all the members, to minimize the technical issues.
  - ii. M. Neller commented that once travel restrictions are no longer in place, some RAB meetings should be held in Oscoda, MI as a face to face meetings, including the first RAB meeting after restrictions are over.
- b. Central Treatment System (CTS) Status

- i. CTS is operating as designed. No comments
- c. Mission Pump and Treatment System (MPTS) Status
  - i. MPTS is operating as designed. No comments
- d. LF-30/31 FS Status
  - i. FPM is the contractor working on the FS to address the residual LNAPL in the smear zone, and the 30% design for landfill drainage. The Air Force technical team has completed its review and it is now under legal review. It will then be submitted as a Final Document. FPM's Contract consisted of the 30% design, not the complete the design. The final design will be completed under a different contract. D. Gibson will take the action to find out if this work is included in next year's plan. Since the ROD is in place, implementation of the remedy would be through an ESD, like SS-57.
- e. OWAA 10 parcels
  - i. Discussed previously.
- f. MPTS EE/CA and Action Memorandum
  - i. Is not a time critical document. EGLE will have a 30-day review time. The EE/CA will go out for public review, a Public Notice will be posted in the Oscoda Press. EGLE will provide comments at the same time as the public.
  - ii. M. Neller asked for a status of the Air Force's Oscoda Township MPTS fees. D. Gibson stated the Air Force is getting a Contract set up for a Contractor to review the proposed fee and the Contract will hopefully be in place in about 4 weeks.
- g. Tentative schedule for the PFOS/PFOA RI, with milestones
  - i. The RAB slides included the generic schedule to be completed in the period of performance.
  - ii. M. Neller asked if after the September 2020 award there would be more clarity in the schedule? D. Gibson stated there would be, as it is the Contractor's responsibility to look at all elements of work scope, evaluate available data, determine additional data needs, and prepare a schedule. M. Weegar clarified that during the SI the goal was to see if PFOS/PFOA was present in the different sites on Wurtsmith, and during the ESI to further evaluate pathways to drinking water exposure. As the AF moves into the RI phase, part of the focus will be on the GSI criteria. Where plumes appear to be venting to surface water, the PFOS/PFOA plumes will need to be delineated to that level Potential interim actions will be prioritized.
- h. Past Air Force residential well sampling results
  - i. Discussed Previously.

## 6. EGLE RRD – SUPERFUND SECTION UPDATES

- a. RAB
  - i. B. Place requested the Air Force share any topics they plan on discussing. In the past, joint presentations were done and EGLE is still open to participating if the Air Force is interested.
- b. EGLE data
  - i. As requested by the Air Force, EGLE will not forward its data to Air Force until the RI contractor is on board. The Air Force encouraged EGLE to have this data available for the RI contractor.
  - ii. The EGLE and DNR will have a call to discuss collaborating on wildlife and ecological data collection. (A telecon was held on 5 May 2020: DNR is encouraged to compile the data they have to provide to the contractor's team.)

## **7. EGLE RRD – BAY CITY DISTRICT UPDATES**

- a. Kings Corner Road Dump
  - i. No update.
- b. Oscoda area sampling
  - i. A. Armbruster stated Quarterly sampling will continue and is on schedule.
  - ii. An investigation will take place at McDonald Store site, there was a fire and foam was used.

## **8. EGLE WRD – UPDATES**

- a. SRD Update: Process to issue “replacement” SRD for CTS and MPTS
  - i. T. Buckmaster stated the 2016 SRD for AS, BZ and MS is out of date and EGLE agrees with Air Force that it should be updated. The plan was to optimize MPTS after 3 months of data. A new SRD will be drafted, optimizing the sampling plan for both CTS and MPTS. The schedule for the revised optimized sampling plan for the CTS is 2-3 weeks, a reduction in required VOC sampling will be considered.
- b. Other – Surface water/fish sampling in area
  - i. B. Place believes sampling was completed and will share information when available.

## **9. MDHHS UPDATES**

- a. Residential Well sampling update
  - i. A. Mussa stated sampling is on hold due to COVID19, sampling will resume after lockdown. So far 65 residents have been sampled in the Oscoda area and results have been received, some have detections. The maximum total PFAS concentration was 72 ppt. All the data needs to be collected and evaluated before any determinations are made.

## **10. Next Meetings:**

- a. BCT – 27 May 2020 0900-1100 EST
- b. BCT – 24 June 2020 0900-1100 EST

## **11. ACTION ITEMS:**

- a. EGLE
  - i. B. Place will re-evaluate the SS-57 ESD comments.
  - ii. Draft CTS and MPTS Interim sampling plan or revised SRD
- b. Air Force
  - i. D. Gibson will investigate the process after a document has been placed on the document review website. Specifically, can the document remain available for reference until it goes final.
  - ii. Follow up on LF-30/31 FS to see if the work is included in next year’s plan.

28 April 2020

BCT Teleconference – Agenda

Wurtsmith AFB, Oscoda, MI

**1. Air Force Opening Remarks/General Business Discussion**

**2. Previous BCT Meeting – 24 March 2020**

- a. Meeting Minutes – comments/approval
- b. Action Items - EGLE
  - i. Provide comments on documents submitted for review in accordance with the schedule provided.
  - ii. Review Wurtsmith UFP-QAPP and propose metrics for assessing data quality for split samples and corrective actions if metrics are not met.
  - iii. Inform the Air Force what data is needed to update the CTS Interim sampling plan.
- c. Action Items - Air Force
  - i. Notify EGLE how draft documents will be handled.
  - ii. Approve 4th and 5th Quarterly Residential Well sampling data and submit to EGLE. (submitted to EGLE on 8 April 2020.)
  - iii. D. Gibson will follow up on the OWAA 10 Parcels status.
  - iv. Schedule a call with EGLE to discuss the document review process going forward, (e.g., which documents will be submitted for EGLE review and comment, which documents will be submitted for informational purposes only, timelines to provide comments on documents submitted for EGLE review, etc.). (Call was held on or about 26 Mar 20. D. Gibson is working the approach to be used for draft documents.)

**3. Document Submission Schedule and Status**

Document (Contractor)	Date submitted to EGLE	EGLE Review Status	Comments
Draft 2017 LTM AR (Bay West)	11-21-18	Comments Rec'd 3/25/20	RTCs under Air Force Review
Draft 2017 PTS AR (Bay West)			Final document posted
Draft 2018 LTM AR (Bay West)	4-4-19	Comments Rec'd 3/25/20	RTCs under Air Force Review
Draft 2018 PTS AR (Bay West)			Submitted to Air Force on 3/18/20
Draft Final SS-57 ESD (Bay West)	1-9-20	Comments due Mid-March 2020	EGLE Comments Pending
Draft SS-57 RA-C Report (Bay West)			RTCs under Air Force Review
Draft SS-17 Site Closure Tech Memo. (Bay West)			Will be submitted to EGLE after VIAP Work Plan is approved.
Draft SS-72 Proposed Plan (Bay West)			Under Air Force review
Draft Five-Year Review (Bay West)			Submitted to Air Force on 3/23/20
4 <sup>th</sup> and 5 <sup>th</sup> Private/Public Drinking Water Monitoring Report (Wood)	4-8-20		Submitted to EGLE 4/8/20
VIAP Work Plan (Bay West / Wood)	4-21-20		Draft copy submitted to EGLE on 4/21/20
Final ESI Report (Wood)			Response to comments in Air Force Legal review.

#### **4. Field Work Update and Schedule**

- a. FT-02 Carbon change out event was completed on 5 March 2020, approximately 102 operational days since the last change out. The next change out is tentatively schedule for the week of 8 June 2020 approximately 95 days since the last change out.
- b. SS-57 RAWP Implementation – Presentation on baseline and first post-injection performance. Second post-injection performance monitoring event completed the week of 13 April 2020.
- c. FT-02 RAWP Implementation – Air Force working on modification for concrete removal and disposal.
- d. Annual LTM groundwater monitoring scheduled to begin May 2020. Draft 2020 Sampling Plan and Schedule to be provided to EGLE prior to commencement of field work. May 2020 IRP sites include LF-27, SS-72 and LF-30/31.
- e. VIAP Update – Field work scheduled for May 2020.
- f. Wood Field Work Update – Completed the 6<sup>th</sup> and final quarterly private and public well sampling event 11-12 February 2020. Event included only wells not connected to municipal water (7 private and 2 public wells). Report was submitted in 8 April 2020. This is the last field work task under TO 149.

#### **5. Air Force Updates**

- a. RAB Update
- b. Central GAC Treatment System (CTS) Status
- c. Mission Pump and Treat System (MPTS) Status
- d. LF-30/31 FFS status update on RTCs for LNAPL FFS and the LF-30/31 30% Drainage Design.
- e. OWA 10 parcels
- f. Mission Street EE/CA and Action Memorandum.
- g. Tentative schedule for the PFAS RI, with milestones.
- h. Past Air Force residential well sampling results

#### **6. EGLE RRD - Superfund Section Updates**

- a. Other – RAB topics
- b. Submittal of EGLE data to Air Force

#### **7. EGLE RRD - Bay City District Updates**

- a. Kings Corner Road Dump
- b. Au Sable Township

#### **8. EGLE WRD Updates**

- a. SRD Update: Process to issue “replacement” SRD for CTS and MPTS.
- b. Other – Surface water/fish sampling in area

#### **9. MDHHS Updates**

- a. Residential Well sampling update

#### **10. Schedule Next BCT Meeting**

- a. 27 May 2020 teleconference 0900-1100 EST
- b. 24 June 2020 teleconference 0900-1100 EST





**Former Wurtsmith AFB  
BRAC Cleanup Team Meeting  
28 April 2020**

**Summary of VOC & Microbial Plate Count Results  
Baseline and 1<sup>st</sup> Quarterly  
Performance Monitoring Events  
SS-57 IAB Remedy**



# Presentation Outline

- Site background
- IAB remedy configuration
- IAB performance monitoring schedule
- IAB performance monitoring results to date
- Recommendations
- Q&A?

# SS-57 Old Apron Hydrant Fuel System



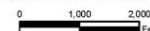
Figure 1

SS-57 Site Location Map

Wurtsmith BRAC



NAD 1983 StatePlane Michigan Central FIPS 2112 Feet Intl



- Approximate IRP Site Location
- Stream
- Lake
- Former Installation Boundary



Date Drawn/Revised: 3/7/2018 Project No. J150073

# SS-57 Background

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- **Approved RAP/DD (2002) Remedy (for VOCs only):** biovent, biosparge, pump & treat, institutional controls, long-term monitoring, Five-Year Review, and public education
- **Biovent and Biosparge** systems began full time operation in 2004
- **Pending ESD (2020)** adds *In situ Anaerobic Biodegradation* (IAB) - with amendments delivered via a series of infiltration trenches - to supplement existing remedy and associated optimization components
- **IAB Remedy** presented in Final RAWP (Bay West, 2019) and approved by EGLE
- **Bay West Contract Performance Objective for IAB:** RIP in POP = achieved 2019

# SS-57 IAB Remedy Purpose and Approach

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- **IAB Remedy**
  - **Purpose:** expedite achievement of RAOs
  - **Approach:**
    - **Supply nitrate** (electron acceptor) to facilitate anaerobic biodegradation to address residual fuel constituents adsorbed to subsurface soil and/or dissolved in shallow groundwater
    - **Deliver amendment** (nitrate/phosphate) to subsurface via **3 infiltration trenches** (IFs) at 3 historical source areas upgradient from biosparge and biovent systems footprint
    - **Performance Monitoring** conducted to assess effectiveness and guide frequency and duration of IAB remedy applications

# Synopsis of IAB Remedy Status

- Infrastructure at Site SS-57 installed: September 2019
- Baseline sampling: 9 October 2019
- Remedy startup/amendment delivery: 22-24 October 2019
- Remedy startup field parameter monitoring: November and December 2020
  - Results indicated no changes to the amendment application process are necessary
- 1<sup>st</sup> quarterly performance monitoring (PM) event: January 2020



# Remedy Component: Biovent and Biosparge Systems

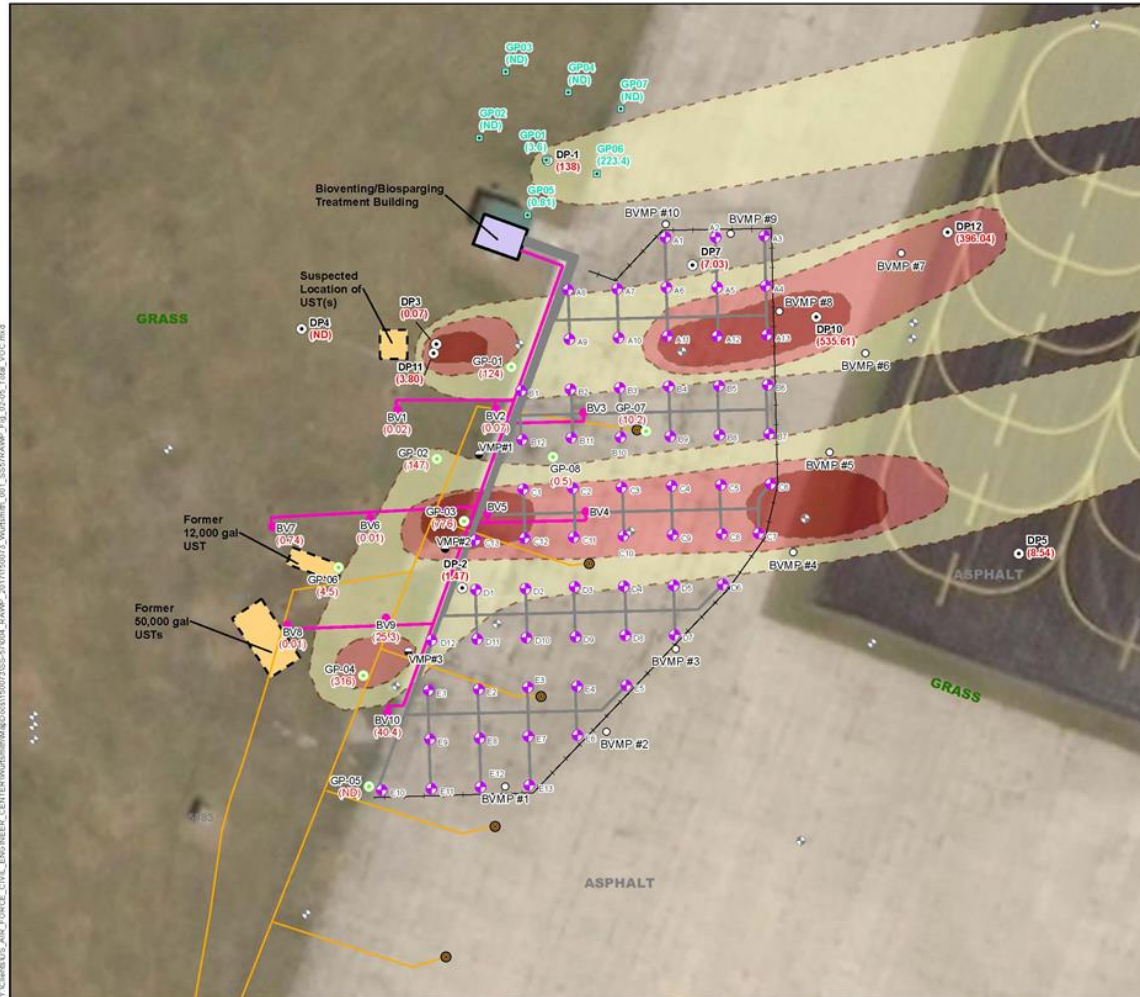


Figure 3

## Total Sorbed-Phase VOC Concentrations

### Wurtsmith BRAC



NAD 1983 StatePlane Michigan Central FIPS 2112 Feet Intl  
 0 50 100 200 Feet

- MWH Geoprobe Location (October 2013)
- Direct Push Location (ECC)
- Monitoring Well Location
- Dec. 2009 Saturated Zone Soil Sample (Toltest, 2009)
- Biosparge Well
- Vapor Monitoring Point
- Biovent Well
- Vapor Monitoring Point
- Former Fueling Hydrant
- Biosparge Pipeline
- Biovent Pipeline
- Former Fueling System
- Fence Line
- 100 mg/kg Total VOC Isopleth
- 300 mg/kg Total VOC Isopleth
- 500 mg/kg Total VOC Isopleth



Date Drawn/Revised: 11/20/2018 Project No. J150073



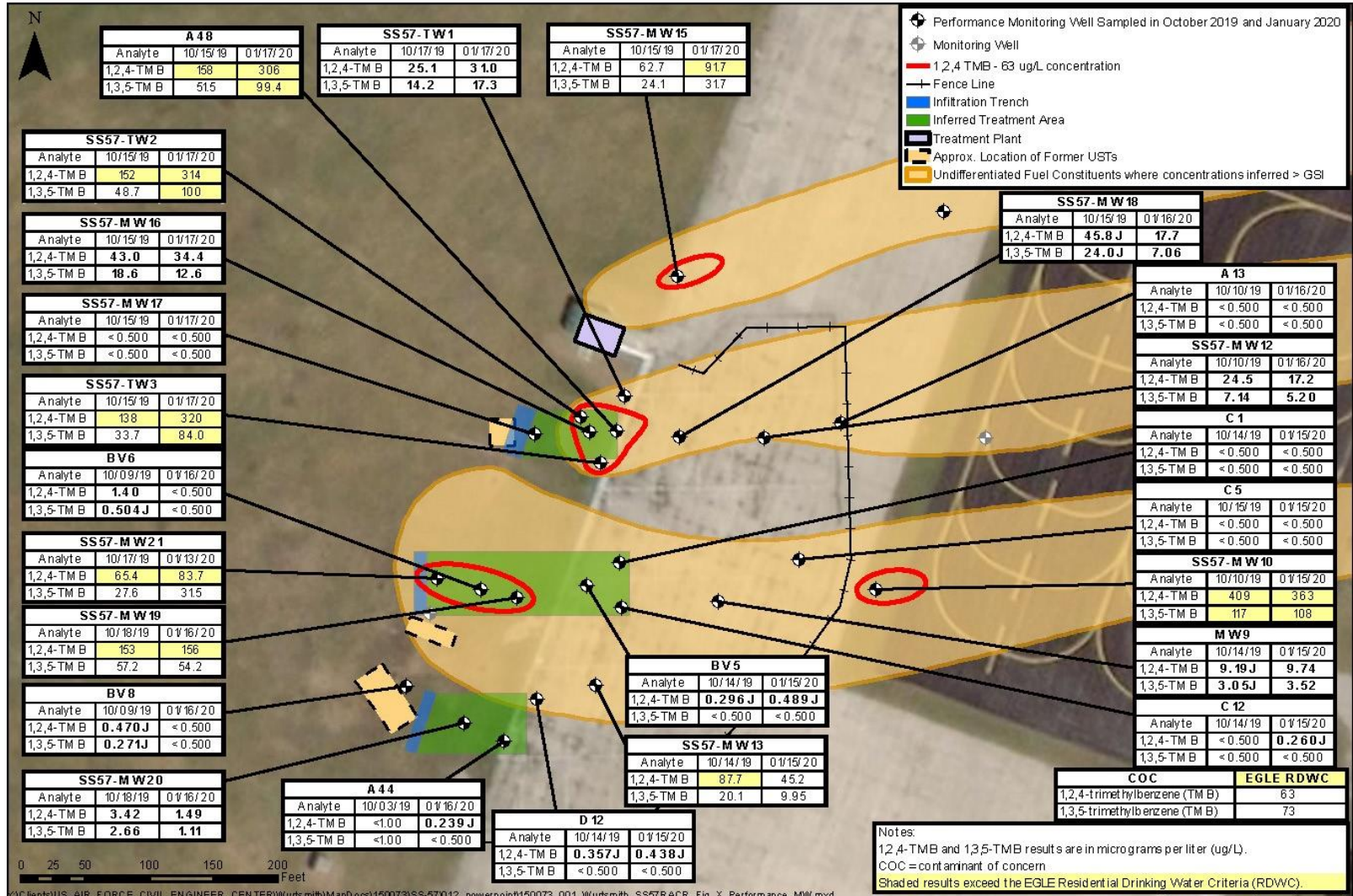
# Quarterly IAB Performance Monitoring

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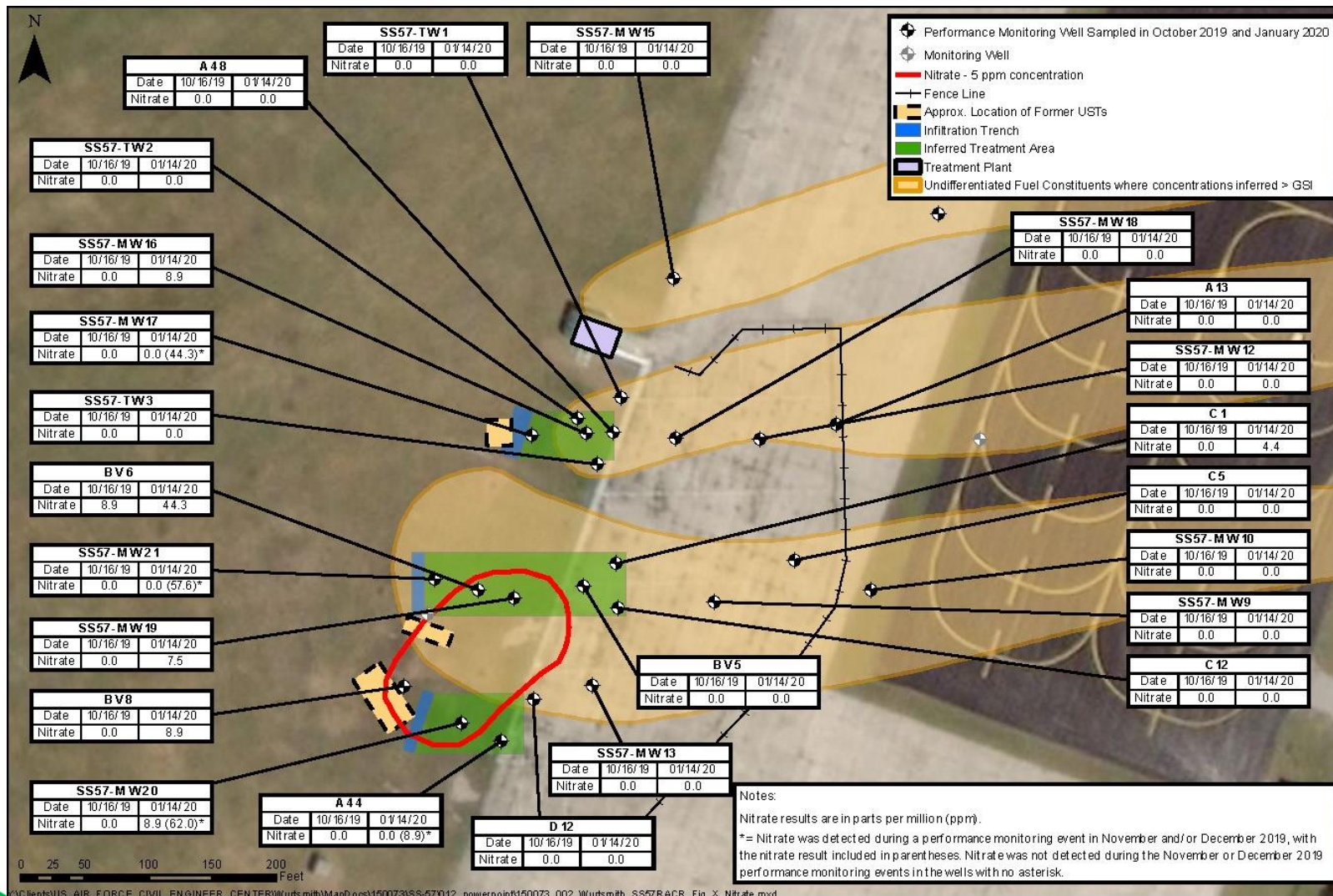
- **Quarterly PM well network includes 27 wells,**
  - Baseline sampling event conducted October 2019
  - 1<sup>st</sup> quarterly PM event was in January 2020
  
- **Quarterly PM sampling parameters**
  - VOCs (EPA SW-846 Method 8260B)
    - Measures COC treatment progress
  - Nitrate (NO<sub>3</sub>)/Nitrite (NO<sub>2</sub>) (HACH field test strips)
  - Phosphate (PO<sub>4</sub>) (HACH field test strips)
    - Measures presence of biostimulation reagents
  - Microbial enumeration (total heterotrophic plate counts)
    - Measures microbial population changes
  - Groundwater quality parameters (pH, specific conductance, turbidity, temp, DO, ORP)
    - Measures geochemistry
  - Well riser headspace gas measurements (GEM 2000)
    - Measures production of COC degradation by products



# 1<sup>st</sup> PM Event: VOCs Results Summary

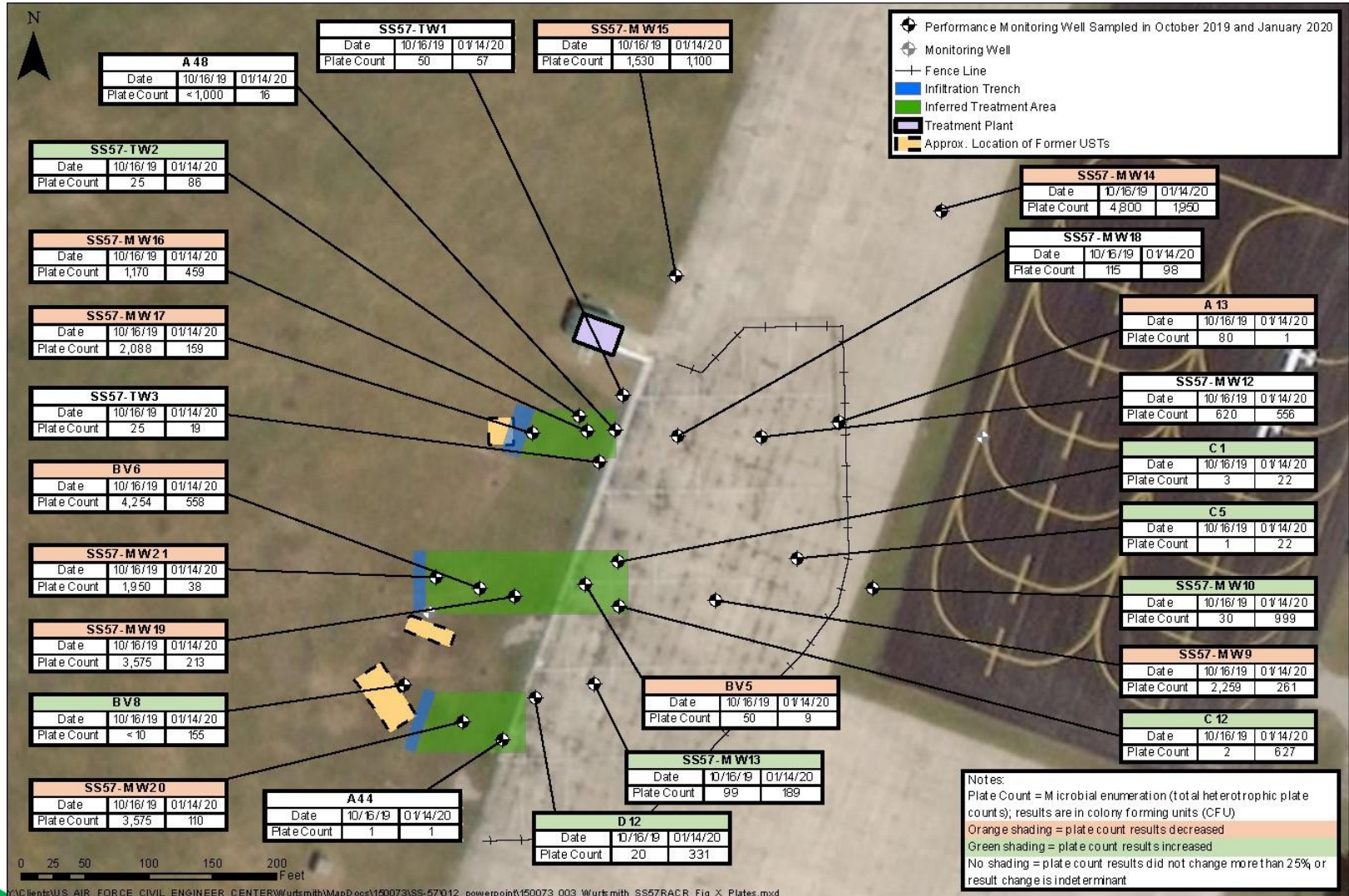


# 1<sup>st</sup> PM Event: Nitrate Results





# 1<sup>st</sup> PM Event: Microbial Plate Counts Results



# SS-57 IAB Performance Monitoring Next Steps

- **1<sup>st</sup> Quarterly PM results:** Data set (i.e., one post-injection performance monitoring event) is too small to indicate if changes to the amendment application process or monitoring program are warranted
- **Quarterly PM** will continue to assess effectiveness of IAB remedy in reducing COC concentrations
- **Periodic updates** will be provided during BCT meetings, and performance data will be provided in the Annual RA-O Report

**Projected Schedule for Future Quarterly PM Events and IAB Applications**

Event	Projected Date
Quarterly Performance Monitoring #2	April 2020
Amendment Application #2 to Three Infiltration Trenches	Summer 2020, estimated at May or June* after validated results from second quarterly PM event are available
Quarterly Performance Monitoring #3	July 2020
Quarterly Performance Monitoring #4	October 2020
Amendment Application #3 to Three Infiltration Trenches	Fall 2020, estimated at November or December* after validated results from fourth quarterly PM event are available

*Notes:*

*Initial amendment application: 22-24 October 2019*

*\*Date may be adjusted depending upon results acquired from quarterly performance sampling*

# Questions?

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