

Joint Base McGuire-Dix-Lakehurst (JB MDL) Restoration
Advisory Board (RAB) Final Meeting Minutes
Meeting No. 68 – 30 September 2021

SUBJECT: Restoration Advisory Board (RAB) Meeting No. 68 – Meeting Minutes

- 1) Place: Virtual Meeting via MS Teams
- 2) Date/Time: Thursday, 30 September 2021; 6:45 PM
- 3) Co-Chairs: Mr. Christopher Archer, Deputy Base Civil Engineer, JB MDL
Mr. Michael Tamm, Resident, Southampton Township, New Jersey

4) Attendees:

COL David Jokinen	JB MDL, 87 th CEG/CC
Mr. Tom Besselman	RAB Community Member
Mr. Frank Storm	RAB Community Member
Ms. Branwen Ellis	NJ Pinelands Commission, RAB Member
Ms. Rhyan Grech	Pinelands Preservation Alliance, RAB Member
Ms. Carla Struble	US Environmental Protection Agency, Region II (EPA)
Mr. Bill Friedmann	US Environmental Protection Agency, Region II (EPA)
Mr. Haiyesh Shah	NJ Department of Environmental Protection (NJDEP)
Ms. Kristine Iazzetta	NJ Department of Environmental Protection (NJDEP)
Mr. Ralph Rodrigues	NJ Department of Environmental Protection (NJDEP)
Mr. Michael Figura	JB MDL, AFCEC/CZO, Environmental Restoration Program
Mr. King Mak	JB MDL, AFCEC/CZO, Environmental Restoration Program
Mr. Jim Richman	JB MDL, AFCEC/CZO, Environmental Restoration Program
Ms. Jalise Wright	JB MDL, AFCEC/CZO, Environmental Restoration Program
Mr. John Montgomery	JB MDL, AFCEC/CZO, Environmental Restoration Program
Mr. Michael Wierman	JB MDL, AFCEC/CZO, Environmental Restoration Program
Ms. Susan Trussell	US Army Corps of Engineers
Mr. Gene Fowler	Pinelands Municipal Council, Jackson Township
Ms. Catherine McMillen	Aerostar
Mr. Tim Llewellyn	Arcadis
Mr. David Heuer	Arcadis
Ms. Katrina Harris	Bridge Consulting Corp./Arcadis

5) Handouts

- JB MDL Restoration Advisory Board, Meeting No. 68, 30 September 2021, Agenda
- JB MDL Restoration Advisory Board, Meeting No. 68, 30 September 2021, Presentation Slides

6) Call to Order:

The meeting was called to order by Mr. Christopher Archer, Deputy Base Civil Engineer, JB MDL. He welcomed everyone and thanked everyone for attending the virtual meeting of the RAB.

7) Minutes of Previous Meeting and Review of Agenda Items:

Mr. Jim Richman noted the meeting was being recorded for purposes of preparing the minutes.

Mr. Richman reviewed four action items from the last meeting (PowerPoint slides #2-10).

Mr. Richman said Mr. Tamn had asked for more information regarding Operable Unit-1 and the drainage system from McGuire; specifically, confirmation that discharge is to North Run, whether contaminated groundwater from the landfill areas could discharge to the stream, and when the last round of sampling had been conducted.

Mr. Richman advised there are two groundwater divides within the main portion of McGuire. He explained in the northern divide, groundwater flow is north-northeast to North Run; in the southern divide, groundwater flow is south-southeast to Bowkers Run, Jacks Run, Larkins Run, and Newbold Run to the south end of Dix near Pemberton. He added that between the divides, groundwater flows east-northeast to South Run and New Egypt. Mr. Richman displayed and reviewed aerial photographs showing the surface water flow and watersheds and the groundwater divides.

Mr. Richman said the last round of surface water sampling in North Run was done in 2016; detections over the non-degradation standards included arsenic, cobalt, pyrene, toluene, chlorobenzene, bis(2-ethylhexyl)phthalate, and mercury. He explained that generally detections were only slightly above standards, and risk assessments indicated no risk to human or ecological receptors. Mr. Richman said the final remedy for Operable Unit 1 includes continued surface water sampling.

Mr. Richman noted the second action item was a question by Mr. Andrew Gold about impacts to JB MDL groundwater from horizontal drilling fluid discharged during construction of NJ Natural Gas' Southern Reliability Link natural gas pipeline. Mr. Richman reviewed newspaper coverage of the pipeline discharges. He advised there was no significant impact to JB MDL from the incidents.

Mr. Richman said the third action item was an inquiry by Mr. Tamn regarding the next update of the Community Involvement Plan. Mr. Richman advised the update would be discussed later in the meeting.

Mr. Richman stated the fourth action item was Mr. Gene Fowler's asking about JB MDL holding a more robust meeting on the PFAS program, similar to the poster session held a few years ago. Mr. Richman said JB MDL is considering the suggestion and the best time for such a meeting in light of the pandemic and when new information would be available. Mr. Richman discussed a few of the documents currently under preparation related to the PFAS program which would lead to field work and provide additional data next year.

Mr. Richman reviewed the meeting agenda (PowerPoint slide 11).

Mr. Michael Tamn, RAB Community Co-Chair, asked for any comments on the minutes from the March 25, 2021 meeting. A motion was made, seconded, and passed to approve the minutes.

Mr. Tamn asked for a motion on the membership application of Mr. Gene Fowler. A motion was made, seconded, and passed by the community members to approve the membership application of Mr. Fowler.

8) Environmental Restoration Program Administrative Updates/Notifications
(Power Point slides #12-17):

Mr. Richman reviewed several recent contract actions that had been completed. He stated the Performance Based Remediation contract had been modified to adjust McGuire milestones and performance objectives related to the inclusion of the Pinelands Standards and adding 1-4 dioxane. He advised a contract was completed for the Lakehurst Area A/B, C treatment system optimization for PFAS. Mr. Richman said a contract also was issued for the Dix Five Year Review, and a contract modification was done for Phase II of the time critical removal action at LF019 for the removal of munitions and munitions debris.

Mr. Richman next discussed several public notices that had been placed in local newspapers on September 18 and 19. He explained the notices were for the signing of a Record of Decision for McGuire Operable Unit 1, the Dix FR004 Proposed Plan, and the Engineering Evaluation/Cost Analysis for the Phase II Off-Base Water Line. Mr. Richman advised the documents are available on the Air Force's Administrative Record website and the JB MDL Restoration Advisory Board website; he encouraged members of the public to review the documents and provide comments. Mr. Haiyesh Shaw asked for confirmation that EPA's lifetime health advisory standard is being used for the off-base properties, and Mr. Richman confirmed that is the standard being used.

9) Lakehurst Five Year Review (PowerPoint Slides #18-22):

Mr. Mike Figura reminded the RAB he had presented on the initiation of the CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) required Five Year Review for the Lakehurst National Priority List sites at the August 2020 meeting. He advised the review has been completed. He noted it included six areas of impacted groundwater and sites within those six areas; he displayed a map showing the six areas (Area A/B, Area C, Area D, Area H, Area I/J, and Area K). Mr. Figura explained the purpose of the Five Year Review is to determine whether the remedies implemented at each of the areas/sites remains protective of human health and the environment. Mr. Figura displayed a table showing the areas/sites, the remedies in place for each area, and the Five Year Review recommendations. He advised EPA concurred that the remedies are protective. He stated a public notice about the report will appear in local newspapers this coming weekend. Mr. Figura said the next Lakehurst Five Year Review will be due 31 August 2026.

10) Lakehurst Proving Grounds Time Critical Removal Action (PowerPoint slides #23-37):

Mr. Figura advised he would be discussing the removal action which was recently completed, including results and findings. He reminded the RAB the objective was to identify and remove chemical warfare material (CWM), munitions and explosives of concern (MEC), munitions debris (MD), and/or munition constituents (MC) from two disposal pits identified at the Target Area A and Parachute Jump Circle Bomb Target. Mr. Figura displayed an aerial photograph showing the disposal pit locations.

Mr. Figura reviewed a list of the numerous agencies and organizations involved in the removal action and discussed their key roles in the action.

Mr. Figura displayed photographs which showed the negative-pressure Engineered Control Structure which was placed over the disposal pits, the disposal pit excavation, and a removed Mark II 75mm projectile.

Mr. Figura advised six of the Mark II 75mm projectiles were found; after further examination, four were determined to be potential/probable mustard filled and two were determined to be dirt/water

filled. He noted all six of the items will be destroyed on-site using the Explosive Destruction System that will be brought to JB MDL.

Mr. Figura reviewed the next steps which include preparing a removal action report, as well as several documents for the destruction of the six items which will likely occur in the summer of 2022.

11) Performance-Based Remediation Contract Update/Project Successes:

Mr. Dave Heuer, Phase Manager for Arcadis, stated he would be providing an update on a number of Dix and McGuire sites (PowerPoint slides #38-68).

- a) Former Pumphouse C (TU021): Mr. Heuer noted recent activities included conducting an air sparge/soil vapor extraction (AS/SVE) pilot test in January 2021 and completing a source area soil removal action from May through September 2021. He advised TU021 Pumphouse C was used for aircraft fueling operations and consisted of six 50,000 gallon and one 5,000-gallon jet fuel underground storage tanks. He stated that while the tanks were removed in 2005, contaminated media (soil and groundwater) remained. Mr. Heuer displayed maps showing the site location and layout. He noted the site is in a location critical to McGuire's mission so close coordination with Airfield Operations is needed. Mr. Heuer discussed the AS/SVE pilot test and advised the test concluded the technology would not be suitable for this site due to hydrogeologic conditions. Mr. Heuer showed a number of photographs of the soil removal action, noting that approximately 3,700 tons of impacted soil was removed.
- b) Former Underground Storage Tanks at Building 2913 (TU003): Mr. Heuer said the site is a former gasoline station near the Arnold Road gate. He noted that while the tanks have been removed, contaminated groundwater and residual petroleum products are trapped across the water table interface despite three remedial actions. He discussed a fourth remedial action being performed to address the remaining impacts which includes groundwater and Light Non-Aqueous Phase product remaining in several wells. Mr. Heuer displayed a graphic showing the Thermal In-Situ Sustainable Remediation technology being implemented at the site. He explained the technology slightly warms the groundwater temperature to increase the natural attenuation and reduce contaminant concentrations. Mr. Heuer said the technology has been operational since the fall of 2020, and the data to date indicates the remedy is working as designed and reducing the presence of Light Non-Aqueous Phase product in the wells. He advised the system will continue to operate for several years, along with quarterly or semi-annual groundwater monitoring.
- c) Sub-Surface Injections Conducted to Accelerate Monitored Natural Attenuation Remedies at McGuire and Dix: Mr. Heuer explained that several State-led sites at McGuire and Dix under monitored natural attenuation remedies exhibit stable trends indicating they would not achieve the remedial goals in time to meet the performance-based remediation contract performance objectives. He stated focused amendment injections were conducted, or are planned, to address the remaining low-level residual contamination. Mr. Heuer reviewed aerial photographs showing the site locations. He advised NJDEP had issued the Permit by Rule approval in July 2021. He noted the injections of calcium peroxide, persulfate, or activated carbon would be completed in 2021.
- d) Air Sparge/Soil Vapor Extraction Remedies at TU019a and NW044 (Dix): Mr. Heuer stated air sparge/soil vapor extraction remedies have been in place at both sites since 2016 and have reduced contaminants of concern close to remedial goals. He noted the systems have been shut down to assess rebound conditions in coordination with NJDEP. Mr. Heuer stated at TU019a the system will be restarted to focus on the area near MW-1 where a few compounds remain above

standards. He noted at NW044 minor xylenes in the source area near well MW-2 are elevated; this area will continue to be monitored and, if needed, the system may be turned back on.

Ms. Katrina Harris discussed an update of the Community Involvement Plan which is underway (PowerPoint slides #69-71). She noted the last major update with community interviews was completed in 2016; since that time, appendices have been updated with new contacts and elected officials. Ms. Harris said the 2021 update will include updating site information; adding PFAS information; updating appendices; conducting community interviews by phone and e-mail with RAB members, local officials, on-base contacts, nearby businesses and residences, and their referrals; updating the community assessment section of the plan based on current demographics and information from community interviews; updating communication and involvement activities based on interviews and changes made since last update, e.g., placing public notices in Pine Barrens Tribune as suggested by Frank Storm. Ms. Harris displayed the primary questions that will be asked of RAB members and non-RAB members. She noted the questions had been sent to the RAB members, and if members had not responded yet, she would be following-up with them. Ms. Harris said once a draft of the plan is ready, it will be shared with the RAB at a future meeting. Mr. Tamn asked if the 2016 Plan had been distributed, and Ms. Harris responded that it had been distributed to the RAB in 2016 and a copy is available on the RAB web site. Ms. Harris said she could also send a copy to anyone would like a copy.

Mr. Tim Llewellyn gave an update on other projects under the Performance Based Remediation Contract (PowerPoint slides #72-101):

- a) Boeing Michigan Aeronautical Research Center (BOMARC): Mr. Llewellyn stated two volatile organic compound (VOC) plumes impacted by TCE and DCE, originate from BOMARC, with the OT016 plume extending onto Colliers Mill Refuge and the WP005 plume largely contained within the site. He reminded the RAB the remedy selected for both plumes was air sparge which has been operating for about a year; the air sparge will operate for more than 50 years on-site but off-site impacts are expected to be addressed within 10 years. He advised the air sparge system is running well with some intermittent mechanical issues being addressed as they occur. He reviewed the uptime for the system, noting improvements will be seen in the future statistics. Mr. Llewellyn showed some of the charts generated by the system performance monitoring; he noted the overall data looks good, but data trends will take several years to show the overall influence. Mr. Llewellyn noted the Year 1 groundwater data will be presented at the next meeting.
- b) McGuire National Priorities List Sites

Mr. Llewellyn next discussed the McGuire National Priorities List Sites and accomplishments since the last meeting, as well as short term goals:

- OU-1, Three sites (primarily former landfills--northern part of the Base): Record of Decision has been signed, and the Remedial Design is under review by the Air Force. Remedial Action will occur in spring 2022.
- OU-3, Four sites (primarily former landfills--eastern end of the Base): The Remedial Design is under review by EPA and NJDEP. Remedial Action will occur in spring 2022.
- OU-4, One site (active bulk fuel storage tanks--center of the Base): Record of Decision under review by EPA and NJDEP and a signed document is expected this calendar year. Remedial Design will be submitted to the Air Force in October 2021, with Remedial Action to begin in late 2022.
- OU-5, Three sites (various activities--center of the Base): Proposed Plan is on hold pending review and potential impact of new NJDEP soil standards.

- OU-6, One consolidated site (aircraft operations--aircraft apron): Feasibility Study is close to being finalized. Proposed Plan will be submitted to the Air Force this fall.
- OU-7, Four sites (former maintenance operations--western part of Base): Feasibility Study is under EPA and NJDEP review.
- OU-8, Six sites (former operations--on the airfield itself): Feasibility Study is under EPA and NJDEP review.

(c) McGuire State Led Sites

Mr. Llewellyn displayed an aerial photograph showing the location of the active sites. He reviewed a chart showing 23 sites have been completed to date, leaving seven active sites. Mr. Llewellyn stated ongoing active remediation was underway at five sites, and two sites are close to completion..

(d) Dix State Led Sites

Mr. Llewellyn displayed an aerial photograph showing the location of the active sites. He reviewed a chart showing 14 sites have been completed to date, leaving six active sites. Mr. Llewellyn reviewed the remediation underway at the six active sites, noting SS07 will continue remediation after the contract ends in 2024.

(e) Site Closures Achieved Through the Performance Based Remediation Contract

Mr. Llewellyn advised three additional site closures have been achieved since the last meeting. He noted overall 33 sites have been closed at McGuire, 53 at Dix, and 35 at Lakehurst.

12) RAB and Public Comments:

Mr. Tamn asked for additional questions from RAB members and then from members of the public observing the meeting. No other comments were offered. Mr. Tamn asked for any topics for the next meeting and none were offered.

13) Meeting Adjourned:

Mr. Tamn asked for a motion to adjourn the meeting. A motion was made, seconded and unanimously passed to adjourn the meeting at 8:28 PM.

The tentative date for the next meeting is January 2022.