Restoration Advisory Board Meeting Minutes

November 17th, 2022, 16:00 to 18:00 (PST)

RAB Members in attendance:

Michael LaScuola – Spokane Regional Health

District

Richard Francis – United States Environmental

Protection Agency

Chuck Gruenenfelder – Community Member Larry Bowman – City of Airway Heights (CAWH)

Mavor

Jon Weldge – Community Member (Co-Chair of

the board)

Lieutenant Colonel Murley - United States Air

Force

Doug Greenlund – City of Spokane

Jason Cook – Washington State Department of

Ecology

Maurice "Mo" Noder - Community Member &

Homeowner

Teri Cooper – Community Member &

Homeowner

Chris Carver - Community Member &

Homeowner

Air Force Personnel in attendance:

Mark Loucks – AFCEC Kristen Nester – 92nd Airwing / CES

Megan Riccobono – AFCEC Lindsey Wagner – Civil Law FAFB

Amber Wisber – AFCEC

Teri Bruce – 92nd Airwing / CES

Air Force Contractors in attendance:

Abigail Power – Ageiss Kristine Weber – AECOM

Jack Mapes – Ageiss Liz Drake – AECOM

John Peper – Bay West Garrett Lee – EA Engineering

Jacob Bradley – Bay West

Community Members in attendance:

Mark Connally – Community Member (AF)

Mark Henry – Community Member (Jacobs

Engineering)

Jay Smith – Community Member

Mark Cacazos – Community Member

George Compton – Community Member

(Homeowner)

Nancy Compton – Community Member

(Homeowner)

Deborah Lowery – Community Member

Stephanie Mertell – Community Member

(Homeowner)

Marilyn Arry - Community Member

Louis Carver – Community Member

(Homeowner)

Steve Smith — Community Member

(Homeowner)

Suzie Keetns – Community Member

Jay Smith – Community Member

William Bryan – Community Member

Margret Bryan – Community Member

Jesica Skea – Community Member

Jami Storer – Community Member (Golden Star

Home Inspections)

David Briggs – Community Member (Whitebluff Prairie Coalition)

Alex Briggs – Community Member (Whitebluff

Prairie Coalition)

Jane Sloan – Community Member

John Hancock – Community Member

Shelly Summer – Community Member

Sandee Powell – Community Member

Gary Powell – Community Member

Spencer Alexander – Community Member

Diane Corgich – Community Member

(Homeowner)

Mark Vossal – Community Member

Marcella "Marcy" Zambryski – Community

Member (Homeowner)

Leland Ramirez – Community Member

(Homeowner)

NOTE: Some members of the public did not sign

in on the attendance list and may not be

represented in these notes

RAB CALL TO ORDER AND RAB BUSINESS:

Liz Drake from AECOM (Air Force Contractor) called the meeting to order, introduced herself as the meeting moderator, and introduced Lt. Col. Murley and John Weldge as the Co-Chairs of the Restoration Advisory Board (RAB).

Lt. Col. Merely (Co-Chair) Speaking: Welcome to the public and the RAB members. As RAB Co-Chair and as the Air Force (AF) we really appreciate your presence; the roots of Fairchild goes back to the community and the community founded the base. The community partnership is important to us, and we take it very seriously.

John Weldge (Co-Chair): Concurred, and I just want to reflect on what the Col. Said - we are very glad that everybody came.

Liz Drake: Read the mission statement of the RAB charter. "The purpose of the RAB is to promote community awareness and obtain constructive community review and comment on environmental restoration actions in the overall cleanup of Fairchild Air Force Base."

Liz Drake: Asked if RAB minutes from March 2022 were approved by the RAB members.

Chuck Gruenenfelder: (RAB member): Moved to approve the minutes from the RAB meeting from April 2022.

Larry Bowman: Seconded the motion to approve meeting minutes.

Liz Drake: Introduced Mark Loucks as a spokesman for the AF.

Mark Loucks speaking: First and foremost, I want to thank everybody for coming today. For the AF, it is important to us to receive feedback from you as regulators and as members of the community. One of the things I would like to do is to offer the opportunity to answer your questions and we will do that after the RAB; me and my team will stay here to answer every one's questions and we will be here as long as is needed.

AIR FORCE PFAS PRESENTATION:

Mark Loucks speaking: We are currently in the remedial investigation (RI) phase of per- and polyfluoroalkyl substances (PFAS) at Fairchild Air Force Base.

- Slide 4: I will talk about our current challenges and what remediation we have already implemented. I want to talk about Engineering Evaluation / Cost Analysis (EE/CA) or as we sometimes call it 'EEKA'. Sometimes these actions take us a while and here at Fairchild they will take a while. We will also talk about actions that can be taken immediately to protect human health and the environment.
- **Slide 5:** This slide shows the AF base, the CAWH, and the airport.
- **Slide 6:** This slide shows the "affected area" this area [of PFAS]. It may grow and it may shrink but will be driven by data.
- **Slide 7:** Response actions that have already been implemented as what is called a "time-critical action" basically an emergency response.
- **Slide 8:** We installed a treatment system on CAWH 'Well 9" to clean the water and thus we are capable of producing large amounts of water for the city through use of the filtration system.
- **Slide 9**: Talked about the filtration systems that were installed by the AF and how the systems work with granular activated carbon (GAC), a particulate filter, and a UV disinfection.
- Slide 10: Challenges for home filtration systems after the installation of the filtration systems: 1) Low pressure issues. Low pressure is caused by buildup of particulate matter and some homes have needed to be re-plumbed. 2) Odor issues caused by water chemistry. One issue was solved with a chlorine rinse to clean the system; a different issue was caused by manganese and is currently being worked on for a fix.
- **Slide 11**: I will discuss the RI schedules. The source removal is the first item [to be completed]. We need to figure out the source areas depth and width so that we can remove the contamination. As far as current water contamination, we need to install more wells off of the AF Base in the correct areas to monitor the contamination. Right now, we have all of the

monitoring on the private wells but that does not give us all the information we need. After the initial phase of the RI is complete, we will go to the baseline risk assessment. This is phase two of the RI; currently we are still in Phase 1 of the RI.

- **Slide 12**: RI fieldwork began on 7 June 2021; 108 soil borings were completed in the 5 areas, including no name ditch and the Airfield ponds, as of September 2022. In addition to the borings, 28 monitoring wells were installed on base. We are working with the county to get the monitoring wells installed off base.
- **Slide 13**: Source areas. We have had several crashes onsite as well as fire training areas and calibration areas where the firefighting foam fire nozzles were calibrated sometimes monthly and sometimes on a weekly basis.
- **Slide 14:** Mark showed on-base wells (have been installed) and off-base wells that are in the process of being installed once the details are worked out with the county.
- **Slides 15- 20**: Mark showed slides of where data were collected from the source areas from soil borings. We plan that next time we show these points we will have data to show with these points. [Showed several slides of maps that have points overlayed on them of various locations]
- **Slide 21**: We have used the EE/CA to evaluate the clean-up alternatives and that has led to a few different potential alternatives being included to the evaluation.
- **Slide 22**: We are doing a Critical Process Analysis to evaluate how to cut off the source area and excavate the source. In our studies, that has been the best way to have good outcomes at reducing the contamination. Thank you everyone do the RAB members have any questions?

RAB QUESTION AND ANSWER AFTER THE PFAS PRESENTATION:

Maurice Noder 'Mo' asked: When did we first learn about PFAS contamination?

Mark Loucks answered: After the U.S. Environmental Protection Agency (EPA) came out with the lifetime health advisory limit. We started coming out and learning about that in and around 2017 and 2018.

Mo asked: So then forgive my naivety but it seems like that is a long time to take to get to source evaluation. Why did it take so long to start drilling holes in the ground?

Mark Loucks answered: First, we focused on the drinking water and that took a couple of years. Then we must follow the regulatory process. Finally, we have to identify the source areas, so we know where to excavate. We don't know if the contaminant area is the size of this table or five times the size of this room. When we first started, all we had was GAC to filter and treat the contamination. Now we have resins and plasmas and other chemical reactions that can work faster and hopefully achieve clean-up more quickly. As we keep going what we hope is to get better and faster at cleaning the contamination.

Doug Greenlund asked: The EPA has recently changed its level concentration permissible for PFAS. What will the AF follow?

Mark Loucks answered: The AF will follow whatever level that the regulatory agency established. **Jason Cook** asked: What is the barrier that is going in to prevent contamination going to be constructed of?

Mark Loucks answered: Hydraulic control would be implemented, which could be just a series of extraction wells, or we have had a long 600-foot trench dug at a different base with a series of hoses and pumps to achieve hydraulic control. We are not looking at putting an impermeable barrier into the soil.

[Public complaints about not being able to hear]

Larry Bowman: We previously approved monitoring wells in Airway Heights. What is the timeline for the installation of the monitoring wells in the CAWH?

Megan Riccobono: The AF has not had consistent communication with the city to get those moving forward.

Larry Bowman: I will personally follow up on those agreements, what is the timeframe for well installation?

Megan Riccobono: The AF can get the contractor out and install these wells in about a month after the agreement is signed. However, with winter weather, below freezing temperatures, and snow, installations may be delayed until later in 2023 when the fieldwork can be performed.

[Additional public complaints about not being able to hear]

Liz Drake: The public is not able to hear could the RAB members please speak up? And maybe face the audience when they are speaking?

[General agreement from the RAB members]

Liz Drake introduced **John Peper** and **Kristine Weber** as contractors to the AF and technical experts for the clean-up of on-base sites under the Performance-Based Remediation Contract.

2022/2023 PERFORMANCE-BASED REMEDIATION (PBR) OVERVIEW:

John Peper and Kristine Weber presenting:

John Peper: We are working on 60 sites on Fairchild Air Force Base (AFB); we will cover a few of them in this presentation. There are 59 historical environmental sites and one historical Military Munitions Response Site. We work through these sites following the CERCLA process using work plans, remedial action operations, treatment operations, remedial designs, investigation reports, and treatment reports.

Kristine Weber: This [Site SS039 slide] shows the plumes pre- and post-injections of hot spot 1 and 2. This map shows the distal plume that has a small off-base presence to the north of the AFB.

Kristine Weber: [Site SD037] Talked about the injections that occurred at SD037 as a pilot study, and the groundwater monitoring that occurred after the injections.

John Peper speaking: This site is called the Craig Road Landfill or site LF002. The site background: The site was established in the 80s with the discovery of trichloroethene (TCE) contamination, which is the same chemical of concern Kristine was talking about for her two sites. We conducted remedial action operations at the site. These activities consisted of groundwater sampling, soil vapor extraction that was started in 2010, filing the 2021 annual groundwater monitoring report (which was approved), filing the 2022 semi-annual groundwater monitoring report (which is under review). The site has been successful at removing TCE and 99.6% of the original TCE mass has been removed through treatment.

John Peper: [Site WP003] Talked about the background of the site and historical sampling and remediation, the pump and treat, excavated drum area in 2000, the pilot study that was conducted, and the monitoring that is currently taking place for the pilot study. Next year we will have these pilot study data to report after the annual report is approved.

John Peper: Introduced the Voluntary Cleanup (VCP) sites that are regulated by the Washington State Department of Ecology. John discussed the total 21 VCP sites and the 16 closed sites within the VCP

program that have been deemed needing No further Action. He discussed the remaining five sites that are open with four sites currently undergoing remedial actions.

Kristine Weber: Discussed VCP sites, TU506 and TU500, and the excavations that were completed on base to remove contamination in 2022. Kristine continued and covered the quarterly monitoring after the excavation that is being completed. Kristine related these data to the Feasibility Study that will be forthcoming in 2023.

John Peper: Covered the 2023 calendar year Public Comment Opportunities: these opportunities included the sites DP064, which is a hardfill landfill on base that will have a proposed plan for public comment in 2023; WP003, which was talked about previously in the presentation, will have a Proposed Plan available for public comment in 2023 as well; and the oil water separator site (OW058) will also have a Proposed Plan for public comment in 2023.

PUBLIC COMMENT PERIOD:

Jim Dalton: Question about the new EPA recommendation. Why are we not using the new EPA recommendation? The concentrations swing on my well every time it is tested, sometimes it's above and then it is below. How long does it take to implement those policies?

Mark Loucks: We have already been evaluating people in your situation. We understand that the federal guideline will be lower than the current 70 that it is now. We are getting ready right now to change to the new level that will come out.

Jim Dalton: When you test on a quarterly basis, what is the criteria for change? How do I get a test?

Mark Loucks: Once you have a test above that level you get a system put in. We are tracking trends and we want to make sure that once you are above that level, you get a system.

Spencer Alexander: My neighbors across the road have both had systems installed. I have been tested once. I have called in once and got no response from the AF. What are the criteria for getting the water tested?

Mark Loucks: If you did not have a detection then you were not put on a quarterly sampling routine for testing. We will continue to test the homes that have had a detection. We need to retest the 290 homes once the new level has come out.

Leland Ramirez: I found out about this whole thing by fluke. My wife and I bought a house and put in a well and then found out afterwards that the water has this problem. What communications has the AF had with the county to let people know that there is a problem?

Mark Loucks: I feel for you. Mike represents the regional health district he can talk to you about the county and what the health district has done. The AF has let as many people know as we possibly can.

Lindsey Wagner: In terms of the legality, Fairchild is a federal entity. We have let the county know but cannot force action by the county.

Leland Ramirez: It is a public safety issue, why is there a legal barrier?

Lindsey Wagner: I don't personally have that answer.

Lt Col. Murley: I will take this communication issue on personally and look into it.

Michael LaScuola: All well drillers were notified about this. There is a flyer that goes along with your septic system. The only other effort that could be made is at the Washington Department of Ecology level. We have tried to compel well drillers, but the county cannot do more.

Leland Ramirez: I do not accept that there is a legal barrier between the AF and the public.

Larry Bowman (CAWH Mayor): We get this concern a lot, what would you like to see done about the problem?

Leland Ramirez: The AF needs to let the county know that there may be a problem with your well.

Larry Bowman (CAWH Mayor): Thank you. We will take your comment under advisement.

Alex Biggs: If you are doing a well test, every county has different standards. The thing that is done most of the time in real estate is this. This is what is standard and that is all that gets done. How much of this will be on the website?

Mark Loucks: The Administrative Record (AR) is the place that these data will go to. It is not directly on the website, but it is accessible from the website - there is a direct link to the database.

Marcy Zambryski: I live on Garfield Road. My husband died of cancer, my dogs died of cancer, my mother died and of cancer. This contract is for five years. I have an issue with a five-year contract with the AF. I don't want the current system, I want a different system. I want a rain catchment system. Why does this contract have to be a for a filtration system?

Mark Loucks: First, I am very sorry for your loss. Thank you for your idea it is a good one. This is why we have public comment periods. We will write your idea down and evaluate it. As for the five-year contract, five years is the legal limit that the AF can make a contract, but it is renewable after those five years and if there is contamination, it will be renewed.

Marcy Zambryski: I can't sell my home because the AF has poisoned my water.

Mark Loucks: If you feel that you have had damages, there is a number you can call and a route you can take to seek compensation from the AF.

George Compton: When I heard about this problem, I had my well tested. It cost me \$400, and I contacted Fairchild and I had them come out and put in a system. When I found out about this, I drove all the way up the road. This is such a small area of the county they probably weren't paying that much attention. I hate to say this, but it goes back to buyer beware. The people on the west side of Garfield Road - those wells should be tested. I am very concerned about my neighbors. Get the system put in. Does anyone know if there has been a study of the chemical's corrosion of metal? The pipe in the pressure tank was installed incorrectly; the pump was bunt up.

Mark Loucks: As far as my knowledge of water chemistry goes, these chemicals should not cause increased corrosion of metal. But I don't know of any studies that have looked into it specifically.

Mark Vossal: Has there been testing on people for PFAS?

Mark Loucks: The ATSDR took blood samples from people in CAWH, and they concluded that there were elevated blood levels of PFAS.

Mike LaScoula: The exposure assessment was completed by ATSDR. Now they are doing the public health assessment, for people who will volunteer, who have been exposed. The assessment is to try and make a determination of what the human health effects are. According to **Capt. Wendel**, who was part of the study, what they believe is that there are issues with thyroid, cholesterol, and pre-natal, those are the proposed issues. We petitioned for the human health study. We don't have a laboratory in Spokane to test blood in Spokane and it is difficult to get tested.

Mark Vossal: How effective is the filtration system and how long will it hold up? How often is it serviced?

Mark Loucks: The treatment of PFAS is to provide water to below the threshold, meaning below the detection limit. Every time we have a detection that goes past a filtering canister, we change it out. The frequency of the change-out for the filtration system depends on the home. Some only need to be changed-out rarely and others are changed-out more frequently.

John Hancock: I appreciate idea of the cleaning up the source. How long does it take for the groundwater to go from the base to my house?

Mark Loucks: We don't know that right now. The estimate is several decades to go from the base to the full extent of the plume. The problem with the groundwater plumes that we have experienced with other contaminants is that they are hard to remediate. It is expensive to clean up and it takes a while. Frankly, for the folks that are exposed is where our effort is going to be concentrated. That is where the money and the effort is going to be concentrated.

Liz Drake: I would like to do a time check. It looks like we have about 5 minutes left. Do we have any RAB member comments?

FINISHING UP RAB BUSINESS:

We will be looking at March for the next RAB meeting with the second or third Thursday of the month in March 2023 being the tentative time.

Liz Drake: It sounds like we [the AF] would like to vote in a new member.

Mark Loucks: Can we vote in each of the four tribes as RAB members?

Larry Bowman (CAWH Mayor): Motioned to add each of the tribes as members to the RAB. The motion was seconded by **John Weldge**.

The AF asked the RAB to formally add **John Hancock** to the RAB. The motion was accepted and seconded.

The RAB Co-chair, **John Weldge**, moved to adjourn the meeting; the motion was seconded by **Larry Bowman**, the CAWH Mayor.