Fairchild Air Force Base

2022 Restoration Advisory Board (RAB) Meeting Minutes

24 March 2022 4:00 PM (PST)

List of Attendees:

RAB Members Present:

- **Jon Welge** (Community Co-Chair)
- Chuck Gruenenfelder (Community Representative)
- **Doug Greenlund** (City of Spokane)
- **Steve Smith** (Community Member and Homeowner)
- Cris Carver (Community Member and Homeowner)
- Michael LaScuola (Community Representative, Spokane Regional Health District)
- Fairchild AFB Staff and Support Staff:
 - Mark Loucks (AFCEC/CZOM)
 - Amber Wisber (AFCEC/CZOM/Fairchild PM)
 - Laura Shepherd (AGEISS)
 - Ariana Wilkinson (Air Force/92ARW)
 - Laura Sliger (Air Force/92ARW)
 - Leo Behan (Air Force/92ARW)
 Abigail Power (AGEISS)
- **Additional Attendees:**
 - John Peper (Bay West LLC)
 - Jacob Bradley (Bay West LLC)
 - Michael Sonderman (AECOM)
 - Nate Ellison (PNNL)
 - Garret Lee (EA Engineering)

- Maurice Noder (Community Member)
- Col. Michael Freeman (RAB Installation Co-Chair)
- Lt. Col. David Murley
- Christer Loftenius (Washington Department of Ecology, in attendance for Jason Cook)
- Larry Bowman (City of Airway Heights Mayor)
- Jess Braun (Air Force/92ARW)
- Jeff Johnson (Air Force/92ARW)
- Karen Coulter (AFCEC/CZPW)
- Lonnie Duke (AFCEC/CZPW)
- Captain Kaitlin Holmes (Air Force/92ARW/PA)
- Marc Connally (Retired Air Force)
- Anne Minihan (AECOM)

Bring the meeting to order and the introduction of RAB members:

Mark Loucks, the Installation Commander, and the Community Co-Chair welcomed everyone to the meeting and asked the RAB members to introduce themselves.

All RAB members introduced themselves. Mark Loucks acknowledged the three new RAB community members and the local Native American tribes that work with the Air Force (AF) around Spokane. Those tribes being the Spokane Tribe, Kalispel Tribe, Coeur D'Alene Tribe, and the Confederated Tribes of the Colville Reservation.

RAB Members Orientation (Mark Loucks speaking)

Mark Loucks discussed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process and how it relates to the RAB. He reviewed the Remedial Investigation (RI) (nature and extent of contamination), Feasibility Study (way to construct alternatives), Record of Decision (ROD) (legal binding document that requires state & EPA approval), public comment periods, the purpose of the RAB, and a description of what the members can accomplish. Mark Loucks described that the CERCLA process requires public involvement. He mentioned that the Fairchild RAB has been in place since 1994 and that Michael LaScuola and Chuck Gruenenfelder have been on the RAB since 1995. He noted that RAB member positions are volunteer positions. Mark Loucks encouraged members to provide input and review the Administrative Record/Information Repository for more information.

Questions and Comments:

- Larry Bowman: It would be helpful and relevant for community members to know about the systems that were installed and how they are operated, as well as the constituents of concern.
 - Mark Loucks: Yes, we can get that set up and do a different public meeting.
- Doug Greenlund: Can there be a discussion of clean-up standards and the goals of the Air Force?
 - Mark Loucks: Yes, we can add that discussion to a public meeting.
- Larry Bowman: Different systems were put in place; filtration verses a new water source. How is the community going to be made whole? How will the City of Airway Heights come off the City of Spokane water supply? I would like to see more public outreach. The community doesn't know where the plume has traveled. Where is it today? More public meetings were requested and would be useful.
 - Mark Loucks: We will discuss PFOS/PFOA in the next section, but I will say that the RI (Remedial Investigation) this summer will better define the plume and you will see some maps on slides to come [of the plume]. The Air Force can also schedule site tours, training, and meetings for people who want to learn more.
- Steve Smith: What are the health effects of long-term and high exposure in the past? Does that cause greater susceptibility to future exposures of PFOS/PFOA? Property values as a result of the contamination and clean-up have been affected. People are concerned of the value of the property with contamination of the groundwater. We had neighbors who tried to sell a 10-acre parcel and they could not get half of the market value. Why can't we have a discussion about these problems at this meeting?
 - Mark Loucks: The Air Force does not study the effects of PFOS/PFOA on the body; the Agency for Toxic Substances and Disease Registry (ASTDR) is currently completing

studies on the effects of PFOS/PFOA on the body. We can invite ATSDR to present at a future meeting. Property value impacts are always a concern when things like this happen. The Air Force legal has been looking into what the Air Force can do for homeowners.

- Cris Carver: Can you provide contact information that actually works? There has been contact
 information provided that did not work. We were told the contact was either dead, retired, or
 had moved.
 - Mark Loucks: I have a phone number with a staffed phone that is a direct line to my people. Amber, do you have that number?
 - o **Amber Wisber**: Yes, it is 509-457-2591.
 - Mark Loucks: This is the Public Affairs phone number, and they are here today at the RAB. You can call this number and explain what you want to speak about, and the correct personnel will be identified and contact you. I can promise to have someone get back to you; I hope within one to two days.
- Chuck Gruenenfelder: Thank you for the presentation. It was good to see the different environmental issues and evolvement of the RAB. I would offer that environment cleanups are complex and take a lot of time. PFOS/PFOA was not on the radar 10 years ago. Would the Air Force provide information on a projection of timeframes for the sites? To provide context for the operable sites and their timelines, I think this could greatly help with public understanding and trust.
 - Mark Loucks: Yes, the AF can provide proposed timelines for sites, and we can provide timelines for sites that have already been completed on the base on our website. We can provide timelines for current sites; however, those are an estimate. They may be finished sooner than the estimate but more often they take longer than the estimated time.
- **Cris Carver:** I just want to add to my previous statement to say that Laura Shepherd has been very helpful.
- Doug Greenlund: There is a large amount of work that has already been completed. I suggest
 that the closed sites as well as progress on open sites should be added to a document to
 showcase cleanup successes.
 - Mark Loucks: Yes, the AF can make a document showing the completed sites that have been through the CERCLA process.
- Larry Bowman: I agree this would be good for homeowners to hear.

PFOS/PFOA Overview (Mark Loucks speaking)

Mark Loucks detailed the current state of the PFOS/PFOA investigation at the AF base and off AF base property:

- 27 new private wells have been added to the AF sampling agenda since the last in-person RAB, with 21 landowners located within the extended sampling area who have agreed to allow the AF to sample their wells.
- 83 filtration systems have been installed.
- 7 private well systems are undergoing installation.
- 2 homeowners have refused to have systems installed at their homes.

- 4 wells (7 homes) have been connected to the City of Airway Heights water supply.
- 101 wells sampled were above action levels for PFOS/PFOA and either have systems installed or are pending action.
- For private homes, the AF will provide 10 gallons per minute (gpm) flow through an installed private well filtration system (this is measured at the outflow of the well).
- A 24-hour hotline is available for emergency repairs and response.
- Old lines in houses will be corroded and sometimes need moderation or reinstallation for private filtration systems; this has been a continuing issue.
- Odor issue from bacteria has created problems. The AF has mitigated this by cleaning the Granular Activated Carbon (GAC) tanks and replacing the affected GAC with fresh GAC.
- The AF is working with the City of Airway Heights to get an aquifer permit to add an additional well to the city water supply for the City of Airway Heights.
- There are some early actions under consideration including:
 - Installing extraction systems along the base boundary to keep contamination on base.
 - o Data needs to be collected and the study completed before these systems are installed.
- Non-Time Critical Removal Action (NTCRA) on hold, awaiting further documentation from the City of Airway Heights prior to selection.
- Discussed the Critical Process Analysis (CPA). The AF believes extraction systems should be installed at the base boundary.
- The Phase I RI field work will begin in Spring 2022.
- The plume areas that need to be better defined will have new monitoring wells installed.
 - There are 56 new well installs and slug testing planned to better define the aquifer that holds the PFOS/PFOA contamination.
- Showed a map of on-base source areas and off-base contamination plume.

Questions and Comments:

- **Cris Carver**: Who pays for the water that is coming from the City of Spokane [when the AF hooks up a private well owner to city water]?
 - Mark Loucks: The homeowner pays. However, they are told that they must pay for it up
 front and the AF will install a filtration system on their well if they would rather have that.
 The AF pays for the city hook up to the house if that is what the homeowner decides they
 want
- Steve Smith: Is there a problem with plumbing for the city well?
 - Mark Loucks: No, there is no problem for the city well but there have been problems for private wells, and we will discuss this on later slides.
- Steve Smith: We received a new pump and the water pressure is bad, we only get ½ gallons per minute (gpm). The low water pressure happened after the tanks were installed. We had a good pump it was a ¾ horse power (HP). The guy who came out installed a ½ HP. He said it would be fine because of the new technology, but now we have less pressure. And I know that we have hard water, but the problems started after the tanks were installed so that tells me what I need to know.
 - Mark Loucks: We [the AF] will deliver 10 gpm; that is our commitment. We will work
 through Megan to do everything we can to achieve that for you and others in the
 community with filtration systems.

- Chuck Gruenenfelder: What are the actions being taken to address the five source areas and what
 would be the best way to clean up the source areas? Is there Air Force looking at removal of source
 areas?
 - Mark Loucks: Once the RI is completed, we will know more. Some immediate actions are being considered for the source areas, including excavation.
- Larry Bowman: How do we account for data from sites where homeowners won't let the Air Force have access?
 - Mark Loucks: The Air Force is working on installing 56 new monitoring wells in areas around the base and in the greater plume area. These should be able to capture the nature of the plume.
- Chuck Gruenenfelder: Do we have data to preclude Craig Road Landfill as 5th source area?
 - Mark Loucks: No, they cannot be excluded.
- Christer Loftenius: Is sampling only being performed in basalt?
 - Mark Loucks: Sampling is being performed in various areas to obtain more representative sampling.
- Jon Welge: Are there alternatives being considered for the treatment systems?
 - Mark Loucks: Yes, there are removal actions being considered.
- Larry Bowman: What is being done for the different contamination zones? Can we get communication for those other zones that are off-base?
 - Mark Loucks: We are working on that through the Remedial Investigation this spring and summer.
- **Jeffrey Johnson (MSG Deputy)**: Have you considered or looked into off-base crashes as potential source areas?
 - Mark Loucks: We have not considered that yet and we need to get the information on where those crashes were and when they were (for any that are Air Force-related). We will work with the City of Airway Heights and the County fire departments to get that information.
- **Doug Greenlund**: What are your thoughts on monitoring wells to try and determine the leading edge of the plume?
- RAB members talking over each other. [Undiscernible].
 - Mark Loucks: We are looking for that plume boundary edge and we need to put in more
 wells. We don't know yet where the leading edge is, and we will know more once the
 investigation is complete and more flow data is obtained.
- Jon Welge: Have you considered age dating and looking for the certain ratios for the types of PFOS/PFOA that come from Aqueous Film-Forming Foam (AFFF) as opposed to landfills? I know there is the Craig Road Landfill that is east of the base.
 - Mark Loucks: Of the wells that we have sampled we have seen the makeup from PFOS/PFOA consistent with the make-up known to come from AFFF. We have not done age dating of the water samples.
- Larry Bowman: Can we go deeper on residential wells? Is there a depth that this plume has stayed concentrated at or a depth that it hasn't gone beyond? Are there any geological controls on the plume itself?

- Mark Loucks: We know that the contamination is in certain geologic units, and we know
 that generally it is shallow near base and gets into deeper geologic units the further off-base
 it gets. There seems to be a depth that the plume has not reached.
- Michael LaScuola: When is the RI getting going?
 - Mark Loucks: It is getting going this summer [2022].

Performance Based Remediation Contract (PBR) Overview

(John Peper and Michael Sonderman speaking)

Site SS039 (Speaker Michael Sonderman):

- SS039 overview of the site
- Identified hotspots for plume
- Showed the off-base plume data for the SS039 plume to the North of base
- Injections completed last fall, significant reductions identified
- Report in progress

Site SD037 (Speaker Michael Sonderman)

- SD037 overview
- Showed map of the plume
- Review of the depth and information of the plume prior to the current study
- Clean-up from the Feasibility Study

Site LF002: (Speaker John Peper)

- Overview and timeline of the site
- Numbers of wells that are sampled and data from those wells
- Showed a map of the results of the data that shows the extent of the contamination

Site WP003 (Speaker John Peper)

- Overview of WP003
- Feasibility Study addendum field work that was completed
- Feasibility Study (Pilot Study injection)
- How the plume has shrunk and is continuing to clean up through a map of the current plume

Voluntary Cleanup Program (VCP) Sites (John Peper and Michael Sonderman speaking):

- Cleaning up 60 sites under 10 year contract
- 21 sites have achieved No Further Action (NFA)
- TU506 and TU500
 - o Excavation of the sites to clean up GW at the sites
 - WDOE is working with AECOM
 - o Summary and reports of the contamination will be proved on the sites

Public Comment Periods that are upcoming:

- OU2 DP064 Proposed Plan public comment period
- OU8 WP036 Contaminated Groundwater and Sediment at Bldg. 1454 and RW11 Weapon Storage Area Record of Decision (ROD)

Questions and Comments:

• **Chuck Gruenenfelder**: Is there any overlap between the TCE sites and the PFOS/PFOA sites? Do the injections that treat TCE also treat PFOS/PFOA?

- Mark Loucks: The base has not tested the well at SD037 for PFOS/PFOA yet. They will be sampled this summer under the RI.
- Christer Loftenius: What was contained in the drums that were buried at WP003?
 - John Peper: I don't know specifically what was buried in the drums off the top of my head. But the plume from the buried drums resulted in arsenic, trichloroethylene (TCE), and vinyl chloride (VC) contamination.
- **Jon Welge**: The AF could contact the Spokane Historical Society or the FFA for historical crashes. Would there be tours before the next RAB meeting?
 - o Mark Loucks: We can hold a tour or meeting before the next RAB meeting.
- **Chuck Gruenenfelder**: Are there any other outreach meetings planned within the next 6 months for PFOS/PFOA?
 - Mark Loucks: We are looking into having another RAB meeting within the next 6 months.

Public Comment Opportunity

Anne Minihan opened the floor to public comments and questions.

- Captain Holmes: How soon on base tours?
 - Mark Loucks: As early as summer or before next meeting.

Action Items

Jon Welge moved to accept the meeting minutes from the 2021 RAB and the minutes were accepted.

Jon Welge suggested that the next RAB meeting start with the National Anthem.

No specific dates were set for tours, trainings, or other public meetings. The next RAB was planned to be scheduled and held within 6 months' time.

Meeting Adjournment

Mark Loucks thanked everyone for attending and adjourned the meeting.