

KING SALMON RESTORATION ADVISORY BOARD
22 April 2013
BASE LOUNGE, 7:30 P.M.
DRAFT MEETING MINUTES

The meeting was called to order at 7:30 PM by Charley Peyton.

RAB Members Present:

Charley Peyton, Co-Chair
Jay King, Co-Chair

611th CES/CEAR
King Salmon Resident

Guests:

Guy Warren
Brad Burich
Heidi Hammond
John Fulton
Norm Craanen
Ray "Smokey" Taylor

ADEC
Paug-Vik Services, LLC
Paug-Vik Services, LLC
Bristol Bay Borough Manager
Chugach Federal Solutions, Inc.
Chugach Federal Solutions, Inc.

Introduction of Guests:

RAB members and guests introduced themselves.

1 Changes to the Agenda

No changes were made to the agenda.

2 Approval of April 17, 2012 Minutes

The April 17, 2012 minutes were approved without corrections or additions.

3 New Business

Heidi Hammond gave a PowerPoint presentation on a summary of Paug-Vik Service's (PVS's) 2012 field activities for two King Salmon projects: Annual King Salmon Monitoring and Remedial Action Cleanup.

3.1 2012 Annual King Salmon Monitoring

The groundwater zones and aquifers were summarized. Samples were collected from all five groundwater zones in September 2012.

3.1.1 Groundwater Zone 1: Base Living Area

- 10 A-Aquifer wells/well points were sampled. Three well points and three wells had DRO concentrations above the cleanup level of 1.5 mg/L.
- Four well points and one monitoring well exceeded the action level of 0.0027 mg/L for TCE.
- Of the three B-Aquifer wells sampled, the only RAO (Remedial Action Objective) cleanup level exceedance was TCE in well MW-41 (0.049 mg/L). Cleanup level is 0.005 mg/L. TCE exceeded cleanup levels in MW-41 every year since 2002.
- The majority of monitoring well concentration trends indicates intrinsic remediation is decreasing or maintaining stable contaminant concentrations at this site.
- All of the surface water and sediment sample analytes were below RAO cleanup levels.
- Approximately 0.15 liters of product were removed from one product probe at Seep 1. No product probes at Seep 2 contained enough product to remove.

3.1.2 Groundwater Zone 2: Base Industrial Area

- Historically, a petroleum hydrocarbon plume has been observed in the industrial area. This is related to a release from a former fuel transfer system.
- Seven well points, nine A-Aquifer wells, and three surface water samples were collected.
- The groundwater from B-02 had a GRO concentration equal to the RAO cleanup level (13 mg/L).
- MW-708 was dry and could not be sampled in 2012. It is the only other well that had exceedances for GRO and benzene in the 2011 sampling event.
- None of the water samples from Zone 2 exceeded the RAO for TCE (0.05 mg/L).
- Statistically significant decreasing and stable TCE and benzene concentration trends indicate that these two analytes are being naturally attenuated in Zone 2.
- All of the well point and surface water samples were below their RAO cleanup levels.

3.1.3 Groundwater Zone 3: North and South Bluffs

- The three well point samples exceeded the ADEC secondary drinking water standard for iron (300 µg/L). Results were 2,800 – 17,000 µg/L.

- One A-Aquifer well, one B-Aquifer well, and one residential well were sampled. They all had low levels of DRO below the RAO of 1.5 mg/L, and this could possibly be attributed to laboratory contamination.
- One surface water sample location exceeded surface water quality criterion for iron with 2,900 µg/L. Criterion is 1,000 µg/L.
- Three rounds of sampling have been performed at the SBTS lift station since July 2012. Analytical results continue to be well below regulatory criteria for all samples. The fourth round of sampling will occur in June 2013.
- **Question from Charley Peyton:** Was the residential well Durands? Yes.

3.1.4 Groundwater Zone 4: Naknek River Storage

- Six A-Aquifer wells, two B-Aquifer wells, and four residential wells were sampled and two sets of surface water and sediment samples were collected.
- A-Aquifer MW-51 (1.6 mg/L) exceeded the RAO (1.5 mg/L) for DRO.
- MW-62 (2 mg/L) exceeded the RAO for GRO (1.3 mg/L).
- MW-57 was not sampled because there was product present.

Question from Charley Peyton: Did we need to do a product recovery there? It is a very thin layer. At the seeps we do product recovery when the layer is 0.3 feet or thicker. Is it an A well? Yes.

Question from Guy Warren: Do you do any monitoring for sheen at the edge of the river? We haven't for a few years. It has been a while since we went down there and collected a sample. The last time we did there wasn't (any sheen). It has only been the past couple of years that this well has had product in it.

Question from Charley Peyton: When you detected product did you attempt to bail it? Our work plan says that when product is present, we do not collect a sample.

Is this something new? In the past this well has had results above cleanup levels.

Charley Peyton: Do we think this is the plume from the old tank farm finally reaching the end? There used to be a pipeline here where they offloaded the barges and a big tank here. So the source may actually be different from the source that is coming down the road.

Charley Peyton: Do you ever see surface sheen? Answer from Norm Craanen: It depends on the time of year. Yes you can see some stuff but you never know for sure where it comes from. It could be from people driving by. It could be spills from the tank yard.

- No water samples from Zone 4 exceeded RAOs for BTEX or TCE.
- No analytes exceeded screening levels in the surface water samples.

- Xylene (0.043 mg/kg) and naphthalene (0.22 mg/kg) exceeded the screening level (0.025 mg/kg) in one of the sediment samples.
- DRO was detected in both the B-Aquifer wells and in similar concentrations in the residential wells. Detections were between 0.017 mg/L and 0.02 mg/L which are well below the RAO of 1.5 mg/L and could possibly be attributed to laboratory contamination since DRO was also found in the lab method blank.

3.1.5 Groundwater Zone 5: Fire Training Areas/Landfills

- Six A-Aquifer wells were sampled and four sets of surface water and sediment samples were collected.
- Wells SVE-2 (2.0 mg/L) and MW-02 (3.1 mg/L) exceeded the RAO for GRO (1.3 mg/L).
- Wells SVE-2 (2 mg/L), FT01-FD9 (1.7 mg/L), and MW-02 (3.8 mg/L) exceeded the RAO for DRO (1.5 mg/L).
- Well MW-02 (0.0088 mg/L) exceeded the RAO for TCE of 0.005 mg/L.
- The surface water sample from RFC-04 (drainage ditch adjacent to plume) exceeded ADEC water quality criteria for TAH, TAqH, and xylene. Sample concentrations/criteria are: 0.159/0.01 mg/L, 0.162/0.015 mg/L, and 0.065/0.0018 mg/L, respectively.
- The surface water sample from RFC-04 exceeded ADEC water quality criteria for m,p-xylene, o-xylene, and naphthalene. The surface water sample from RFC-05 exceeded the water quality criteria for m,p-xylene, TAH, and TAqH.
- Sediment from RFC-04 exceeded ADEC sediment screening criteria for m,p-xylene and naphthalene. The sample concentrations/screening criteria are 0.064/0.025 mg/kg and 0.18/0.0465 mg/kg, respectively.

3.2 2011 RAC

3.2.1 SA036-DR-9

- In 2012, PVS excavated the site to remove thirteen asphalt drums and soil with POL contamination.
- 38 cubic yards of contaminated soil were excavated and taken to the biocell.
- 3 drums of tar/asphaltic material were collected, characterized, and shipped offsite for disposal.
- 24 confirmation samples from six excavated areas indicated the remaining soil at the site was below the cleanup levels for contaminants of concern.

3.2.2 SA036-DR13

- In 2008, a large amount of metal and wood debris was found at this site, including a partially full TCE drum and two G&W oil reservoirs.

Question from Guy Warren: Did you test the oil for PCBs? Yes, we checked burn specs, and then gave the oil to Norm to burn in the smart ash burner (no PCBs).

- In 2012, while excavating contaminated soil, more debris including lead batteries and battery pieces were found.
- Eight 1-cy super sacks with TCE contaminated soil were shipped off site for disposal.
- One 1-cy super sack with lead contaminated soil was shipped off site.
- Batteries and battery debris were shipped off site.
- 13 cy POL contaminated soil were taken to the biocell for treatment.
- Five TCE excavation confirmation sample results were clean for TCE and POL.
- While excavating beneath the reservoirs, a large quantity of debris, including batteries, was encountered. Excavating stopped. Sample results from under the reservoirs indicate that POL contamination remains at this site (520 mg/Kg for DRO).

3.2.3 SA039-UST

- A wooden UST removed from this site was cleaned, dismantled, and taken to the local landfill.
- 307 cy of POL contaminated soil were taken to the biocell for treatment.
- One drum of UST sludge and 1 drum of UST water were shipped offsite for disposal.
- The excavation was 33' x 36' and 12' deep.
- 15 excavation confirmation samples and 6 stockpile samples collected indicate that the cleanup of this site is complete.
- The excavation was backfilled with clean soil.

3.2.4 SA039-DR18

- 90 cy of POL contaminated soil were excavated and taken to the biocell for treatment.
- The excavation was 16' x 30' and 8' deep.
- The excavation was lined and backfilled prior to receiving sample results.
- One of nine confirmation samples had DRO above cleanup levels.

3.2.5 SA039-DR14

- 303 cy of POL contaminated soil were excavated from this site and taken to the biocell for treatment.
- 1 excavation confirmation sample and one stockpile sample came back above cleanup levels.
- This site is not finished.

3.2.6 SA039-DR16

- 50 cy of soil were excavated and placed in biocells for treatment.
- The contract limit of 800 cubic yards was reached while working on this site and before all contamination could be removed.
- The excavation was lined with plastic and backfilled with clean soil until excavating can resume.

3.2.7 DA0-37

- Three 300 pound batteries were removed two years ago along with the soil beneath them. Two confirmation samples were above cleanup levels for lead. This year we removed more lead contaminated soil and placed it in 1 cy super sack and shipped it off site along with battery debris.
- 4 samples from the 5.5' x 2.5' excavation and 1 sample from beneath each single battery location were below cleanup levels.

3.2.8 Biocell Operations

- Two biocells were completed in 2011.
- In 2012, the blowers were turned on, air flow was balanced, and several thousand gallons of water were pumped from the biocells, filtered, and discharged into holding ponds until sample results confirmed the water was clean.
- One new biocell was constructed in 2012 to treat contaminated soil excavated during the RAC project.
- The biocell was filled with petroleum-contaminated soil from SA036-DR9 and SA036-DR13, SA039-DR14, -DR16, -DR18, and the UST site.
- The biocell contains approximately 800 cubic yards of material.
- After the biocell was loaded, multi-incremental sampling was performed to determine contaminant concentrations prior to treatment.
- Covers were secured on the biocell and the air pipes were connected to blowers.
- Biocell operation will restart in 2013.

3.2.9 RAC Waste Disposal

Shipped to an off-site disposal facility in 2012:

- 8 1-cy Super Sacks with TCE-contaminated soil

- 1 1-cy Super Sack with lead-contaminated soil
- 1 drum with lead battery and battery debris
- 3 drums of tar/asphaltic material
- 1 drum of UST sludge and 1 drum of UST water

3.2.10 Remaining Work Under RAC Contract

- SA039: Drum Area 3, southeast of North Bluff.
 - Excavate POL-contaminated soil.
 - Remove and dispose of 2 heavy equipment oil filters.
- SA039 Drum Area 14: Continue Excavation
- SA039 Drum Area 16: Continue Excavation
- SA039 Drum Area 18: Continue Excavation
- DA031: a former barrel dump at the gravel pit near mile 5 on Lake Camp Road.
 - Excavate POL-contaminated soil
 - Remove and dispose of at least 30 drums with asphaltic material. Some of the drums are partially buried so there could possibly be more than 30.
- DA034: northeast section of Groundwater Zone 2.
 - Excavate POL-contaminated soil.

Charley Peyton: For the record, there is no remaining scope or funding under your old RAC contract. Paug-Vik will be coming back this year to do the monitoring work. Right now we have no RAC schedule for this year. It will be in the FY14 budget for a couple of reasons: shortness of funds and also we are at a catch breath point where we will try to bundle all of it. The Air Force is trying to do these large contracts.

Guy Warren: What is the schedule for the 2012 GWM report? It is being reviewed and will ready hopefully this week.

Norm Craanen: There is no work out here, major stuff where you will have to have extra space? We just want to plan in case you have stuff you need to store. No RAC work, just monitoring and EA's work. And land farm operations – turning on blowers.

Guy Warren: Is the 2012 RAC report on the same schedule as the groundwater report? It should be following right behind the groundwater report.

3.3 ADEC Comments/Questions

Guy Warren: I've picked up this project in the last year, so I'm still getting familiar with it. From what I've seen from the long term monitoring, it seems the (contaminant) concentrations are going down and we seem to be getting towards the end of where we need to continue monitoring. Some of our big concerns as an agency is the inconsistency in where we are at with the CERCLA process as far as the signed decision

documents for all the operable units. I think this is something we need to be working on in the next year or two to make sure we have decision documents for everything.

3.4 Air Force Information Updates

Charley Peyton: The LEC management plan was written over the last couple of years and made final in December. That is a first step in the 611th hopefully more successfully integrating land use controls into all of our operations. It can generally be said that in the past land use controls were established in decision documents, RODs, work plans, etc, and the environmental folks knew about it for the most part but it didn't always get well communicated to the other parts of the 611th. We would see situations where it wasn't in a dig permit process for someone to be going and locate where all of the contamination was. This wasn't just King Salmon. This was all the 611th sites. I would say it was an Air Force wide problem. I also have a major issue with their land use controls.

So our approach was to write this plan which said those land use controls which are already established, here is what we understand them to be, here is how we are going to communicate them to all of our folks, and that is going to be an ongoing process. We've just started getting language added to contracts so that folks in the field are being made more aware of what we are trying to communicate more with our internal folks as new officers come in for the different section and branches and flights, that they be made more aware of land use controls. That document is due for at least a couple of major revisions. Right now it is mainly a CERCLA and POL based land use controls. A major next step is for landfills to be included.

There will be a contract put in place in 2014 for a contractor to specifically do that and add any new information from any new RODs to be put into the decision document into the plan. This will be 611th wide. This certainly impacts us out here (King Salmon) because we have a contractor in place operating the site. So this is one of those where we want to make sure this information is communicated. There is a work instruction there and it is still in the signature process internally. The work instruction spells out exactly what different flights we do. It will say for instance, that the RPM is responsible for documenting land use control and seeing to it that those are put into other contracts. It stipulates in the real estate section for instance, we'll include information of all maps. It says that our GIS section will continually update the data base with new information.

It is a fairly complex process and made even more complex by the fact we are going through a major reorganization. So as soon as that thing is signed you will probably see a major revision to that as well as seeing names moved around. Reorganizations that you need to be made aware of, but I don't think it will impact the remedial program a major way, in a month or two, I will be considered an AFCEC employee answering my chain to San Antonio rather than answering to the commander of the 611th and all of the RPMs will be moved under AFCEC. We will actually merge with the RPMs under the 673rd which manages JBER. Our money has been coming from AFCEC for many years now so that part doesn't change, but it will change how a lot of our decisions are done. It still

has to be worked out how we still work for the 611th because the 611th signs so many of our sites.

The sequestration will impact us probably over the next few months which means we will probably be put on a 32 hour work week. However, there will be message on the voice mail on who to contact if something was to occur, not only for remediation but for compliance as well. I imagine there will be a few officers to man the phone because they won't be affected by the sequestration the same as we are.

Drum Area Sites DA031 and DA034, and Salvage Area Site SA043: This was originally called the Six Sites Project. About a year ago we ended up splitting these three off because they were a little different in character. This plan was sent off to previous RAB attendees digitally and put a notice in the Bristol Bay Times and any comments that would come in would be documented. To my knowledge we haven't received any yet but, they are still open to receiving any. These three sites have been discussed as needing remediation. CH2M is the firm that wrote this and is collecting comments. Proposed remedial actions include removing soil and drums. If you do have any comments, we are still receiving them. When this is finalized, this will go into the FY 14 scope for RAC work. Do you have any question for the Air Force or about our remedial actions?

EA TCE Study: EA will be out here as well this year. We have always been getting low level TCE hits here MW-41, (Zone 1) and there was always the tendency to dismiss it as bad data and even the notion that it was a smear of contamination. In 2011, EA did an investigation so that we could say that before we pulled that well. It turned out that they found more evidence of TCE in the B-Aquifer and found evidence that the aquitard between A and B wasn't completely competent, that it is discontinuous. This year we are going to expand that area with a grid and do soil and gas monitoring. The purpose is to as efficiently as possible, identify the size and source of the TCE plume. My guess is that it came possibly from activities in these previous buildings in this area. But we don't know. We are going to keep it in the grid as open minded as possible and try to determine where the TCE is coming from. We are talking about the A and the B aquifers there.

Where is the backup well? ***Norm Craanan:*** It is right there where (they were doing their work). That is why we had to close that system. Our backup well is right where you were drilling. What else is it contaminated with? That is some of the questions we are having. Our water source is in the C-Aquifer by the fire house. We might have to go off of that for a while for repairs. My question is what do we have to test for for safe drinking? The issue with the C well is mechanical. The pipe is broken. We don't know how long we will be off of it. We have 50,000 gallons in our system we can use. I just want to see what the analytical was and how high.

Charley Peyton: We will get you a copy of EA report with results.

Guy Warren: Another data set would be the groundwater data in the UST Compliance Report. TCE was found almost everywhere they punched holes in the ground (PASI report).

4 Old Business

RAB Meeting Schedule: The past two falls we haven't had meeting because there is no new information to present. Requested general feedback about going to one annual meeting rather than two. No one objected.

Residential Monitoring Program: Does anyone know of any residents that want to be included. We will continue with the residential wells we have been doing. One possibility would be Cousak's lodge that is opening this year just down river from Kings in Zone 4.

Communications in General: Articles in the local newspaper might be more effective in reaching more people to make them aware of what we are doing and get them more involved.

5 Date and Time for Next Meeting

The date of the next meeting was discussed but not confirmed. It could possibly be held in March before people get busy with other activities. We want to avoid conflicts with Borough Assembly meetings held on the first Monday of the month and Planning and Zoning Meetings held on the first Tuesday of the month.

6 Meeting Adjourned

The meeting was adjourned at 8:42 p.m.

Sign-in Sheet:

Name

Charley Peyton, 611th

Guy Warren

Brad Burich, PVS

Heidi Hammond, PVS

Norm Craanen, CFSI

Ray "Smokey" Taylor, CFSI

John Fulton

Jay King, Resident