In 2017, the BLM offered to hold informational meetings in interested communities to provide an update on the environmental cleanup at the Red Devil Mine. The Orutsararmiut Native Council in Bethel accepted the invitation and a meeting was held **June 7, 2017**.

Representatives from the Alaska Department of Environmental Conservation, the Alaska Department of Natural Resources, and The Kuskokwim Corporation were among those present at the meeting. Attached are notes from that meeting.



**Date/Time:** June 7, 2017, 1 p.m.

**Location:** Orutsararmiut Native Council Multi-Purpose Building

**BLM Reps:** Mike McCrum, Bonnie Million, Mark Spencer, and Maureen Clark

**Agency Reps:** Anne Marie Palmieri (ADEC) and David Schade (ADNR)

**Community** 13 participants, including Orutsararmiut Native Council (ONC) and

**Participants:** The Kuskokwim Corporation (TKC)

**BLM Field Manager Bonnie Million** introduced the Red Devil Mine project team members and agency representatives. Million thanked ONC for inviting BLM to provide an update on the Red Devil Mine Remediation project and thanked participants for attending. She explained the objectives of the meeting were to provide an update on the status of the Red Devil Mine remediation project and answer questions.

**BLM Red Devil Mine Project Manager Mike McCrum** presented an overview on the results of the Remedial Investigation/Feasibility Study (RI/FS) to address contamination at Red Devil Creek and discussed the process for moving forward toward the selection of a preferred alternative to address the contamination.

**BLM Biologist Matt Varner** gave a presentation about the fish tissue and telemetry study BLM conducted on the middle Kuskokwim River, which indicates lush and pike are picking up mercury contamination from sources other than the Red Devil mine.

BLM invited questions and comments from participants throughout the meeting. The comments and questions below were among those received during presentation of RI/FS results.

- Question: Is the Red Devil Mine a Superfund site? McCrum: No, however the contaminants at Red Devil Mine qualify the site for clean up under the comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- Question: Have you sampled at the mouth of Red Devil Creek? McCrum: Yes. Follow up question: When did the sampling take place? McCrum: We did the initial sampling 2010 and collected additional samples in 2013. We realigned the creek and constructed a settling pond in the creek in 2014 and I don't believe we've collected any samples in the creek since then.

- Question: Can you tell how much contamination is moving downstream? McCrum: We don't really know. Tailings were in the creek and moving into the river for a long time before BLM was able to begin an investigation of the mine site. There's no way to estimate the volume of tailings that may have migrated into the river during that time. The sampling we've done in the river since 2010 are the basis for evaluating the potential impacts from that historical movement of tailings from the site.
- Question: Are you sampling daily? McCrum: No, we've collected samples of sediment in the creek several times, but not daily. Follow up question: Is this a funding issue? McCrum: No, it's more of a process of collecting information and assessing the potential impact of the tailings in the river as it exists today. We've used early sample results to identify areas in the river that we thought should be sampled more completely. At present, we believe we now have sufficient information on river sediment to assess potential impacts and evaluate cleanup alternatives. It's a process that takes time.
- Question: Will Red Devil be a permitted hazardous waste site if you leave the contamination there? McCrum: No it wouldn't. The EPA policy we're applying to the site (Corrective Action Management Unit) was developed so that BLM, if the onsite alternative is selected, would be able to consolidate the tailings and soil on the mine site and that material would never be given the regulatory label of hazardous waste.
- Comment: If the contamination was moved off site to a hazardous waste facility in the Lower 48 there would be round-the-clock monitoring. There wouldn't be round-the-clock monitoring if the contamination is left at the Red Devil mine site. Due to the dynamic nature of the discussion, BLM did not have an opportunity to reply to this comment.
- Question: Is it possible to dispose of it on site safely? McCrum: That's what we're trying to determine. We're trying to come up with an alternative that would do that.
- Comment: If federal funding goes away, if BLM leaves, you will check it off your box but it would still be there, so it would still be affecting us. Due to the dynamic nature of the discussion, BLM did not have an opportunity to reply to this comment.
- Question: Could what happened at Red Devil happen at Donlin Mine? McCrum and others in the audience: Mines are much more closely regulated today than they were when Red Devil was developed. Due to the dynamic nature of the discussion, BLM did not have an opportunity to reply to this comment.
- **Comment:** We're concerned that funding for monitoring of the Red Devil site will go away over time, but our grandchildren will still be here.
- Question: Would the liner be designed to collect the liquid? McCrum: If there is a bottom liner, yes, the leachate would be collected. It would have to be treated on site or taken off site.

- Comment: If you remove all the contamination, you won't need to deal with the leachate. Due to the dynamic nature of the discussion, BLM did not have an opportunity to reply to this comment.
- **Comment:** It would cost \$183 million to remove all of the contamination. Who would pay for that? **Comment from the audience:** The federal government would pay.
- Question: Have caps over repositories ever been used successfully in Alaska? McCrum and Palmieri: Yes. There isn't enough data right now to determine if a cap is the right alternative for the Red Devil Mine. It might be, but we don't know yet. The modeling would come later.
- Question: So an alternative could be picked but we wouldn't know if it was protective until after it was chosen? Palmieri: BLM couldn't move forward if it isn't protective of human health. The design BLM has is preliminary.
- Comment from Schade: Mercury is naturally occurring in this area. Even if we took it all off site, you're still going to have that natural occurrence there. What is the background level of mercury? What is the natural occurrence? We don't know. The state has been putting a lot of pressure on BLM so they've slowed down the process. I'm still in the asking questions phase. I'm trying to keep an open mind. Our focus is protection of human health. We, the state, are pushing BLM pretty hard.
- Question: How many people would the project employ and for how long? McCrum: We don't know. A contractor will be hired to do the work. We can encourage local hire, but who they hire is out of our hands.
- Comment from McCrum: We are obliged to monitor the site. Every five years we have to do a performance review to see if it's working the way it's supposed to. If not, we have to fix it.
- Comment: We've been told that if you (BLM) select alternatives one, two or three we (TKC) should not take conveyance of the land. **BLM did not respond**.
- Question: If you lived at Red Devil what would you choose for the cleanup? Schade: We don't have enough information to make a good decision right now. I'm not comfortable enough to know.
- Comment: We see so much cancer. If you kill a moose are you going to get cancer? We don't know where it's coming from. I don't want to wait fifty years for less cancer. Due to the dynamic nature of the discussion, BLM did not have an opportunity to reply to this comment.
- Question: How many monitoring wells do you have at the Red Devil site? McCrum: We have 43 and we will be adding 20 more.

- Question: How do you do the sampling in the river? McCrum: We use a sample tube on the end of a weighted cable. We get out in a boat with a tripod up front and lower the tube down to the river bottom and collect a sample in the tube. A check valve in the bottom of the tube holds the sample in place. Follow up question: So you're getting soil from the river bed? McCrum: Yes. The data we collected from the sediment samples is being analyzed and will be used as part of a human health and ecological risk assessment. The results of that analysis will be used to inform a feasibility study in which BLM will evaluate how best to address the risk posed by the mine tailings in the sediment.
- Question: Are you looking at all the ways people are contacting the sediment, such as swimming? Palmieri: Yes. We have a team of people looking at the health effects, including state epidemiology, BLM, the Alaska Department of Environmental Conservation, Department of Natural Resources, Alaska Department of Fish and Game, Alaska Department of Health and Social Services, and EPA. We have people who work with us to assess the risk so it's all getting looked at.
- Comment/Question: I am shocked that this is not a high priority on the national list of Superfund sites. How can we get it moved up on the priority list? Schade: It's a scale issue. We try to get in that realm but we don't compete nationally so we have to work through back channels. I've tried to put projects up for funding nationally and pretty soon you realize they get lost. We have local leads with the BLM so we have a lot more influence. If it was on the national Superfund list it would be a project managed out of D.C.