Residents don't want radioactive waste landfill in back yard.

Gallup Independent By Kathy Helms Dine Bureau (June 10, 2010)

MONUMENT VALLEY, Utah – While Thursday's meeting regarding cleanup of radioactive waste from the former Skyline Mine was sparsely attended by community residents, the message was clear: Not in my back yard!

Slopes near the foot of Oljato Mesa are covered with radioactive waste rock and waste ore that was either pushed over or fell from the top of the mesa where the 1940s-era mine was located. Portions of the cliff directly below the mine are visibly stained a gray-green color from former mining activity.

A gondola was used to transport ore from the mine to the foot of the mesa where it was loaded into trucks for transport to the mill. Portions of the gondola, including steel cables, remain at the foot of the mesa, including in Elsie Begay's back yard.

In 2001, U.S. Environmental Protection Agency's Emergency Response Section demolished one hogan belonging to the Begay family, constructed of radioactive stone southeast of the mine site.

Begay and her family lived three years in the hogan. She later lost two sons to radiation-related illnesses. Last year, she underwent thyroid surgery after being told by doctors that she was at high risk of cancer. Her story is told in the award-winning documentary, "The Return of Navajo Boy," by Jeff Spitz and Bennie Klain.

Skyline Mine is one of an estimated 520 abandoned uranium mines located throughout the Navajo Nation. Portions of Skyline on top of the mesa reportedly were closed by capping them with fill material. However, due to the steep terrain, mine waste at the eastern edge and bottom of the mesa were not removed during closure activities, according to a 2008 EPA report.

Jason Musante, on-scene coordinator for EPA's Superfund Removal Program's Emergency Response Section, Eugene Esplain from Navajo Nation Division of Superfund, representatives of Navajo Abandoned Mine Lands Program, members of the Begay family and four or five other residents turned out for the June 3 meeting at Monument Valley High School.

Musante reviewed some results from EPA's final assessment report at the community workshop/informational meeting.

"Last week, I had met with the Begay family and told them about what I was proposing to do out there. The main thing I wanted to talk to them about was us doing a repository right there at the site, and their preference was not to have a repository there," he said.

Musante wants to build a disposal cell – similar to a landfill – to hold the radioactive waste. "The design I was proposing, you could stand right on top of the repository and you wouldn't receive more than two times the background (safe) level of radiation," he said, "but their preference was still not to have that located there."

Eugene Esplain of Navajo Superfund said there was very little public notice about the meeting, so community residents want to have another one to discuss the remedy further. Musante plans to go door to door to notify residents.

Esplain said the presentation was basically a summary of activities which EPA began in 2008. "They call it a finalized report, which we kind of dispute, because it's still a living document as far as we're concerned." Radiation has been detected at an 'average' of 10 times background level, he said. "That's the thing about it. You have to show it a little bit better than that, I think."

For three days in November 2008, the Superfund Technical Assessment and Response Team collected soil samples and performed surface scans for gamma radiation. EPA found two areas where the radiation activity measured greater than 40,000 counts per minute, compared to safe levels of 4,500 counts per minute.

Fourteen soil samples per area then were collected from two areas identified as having unusually high gamma activity – ranging from 9,402 counts per minute to 139,125 counts per minute, with an average count of 38,663. The area with the highest count is known as the "Decision 2," which had one localized reading above 999,999 counts per minute.

"When things are above twice background, it's a concern for health effects for people," Musante told residents during an April meeting at Oljato Chapter.

EPA is basically looking at cleanup of four main areas – the arroyo, the talus slope area, the transportation loading area, and the material itself on the mesa.

"It's going to be a challenging task to get that contaminated soil off that ledge – the inaccessible stuff that Navajo AML couldn't get to. It's like a 400 foot drop," Esplain said. "I don't know how they're going to do it. They've got to do that first. They're going to have to work in conjunction with Navajo AML. They have a site there from past reclamation."

Musante's proposed waste repository basically would create a Tupperware effect, he said. Engineers would put down well-graded soil, add some geotechnical-style fabric and a high-density polyethylene liner – very much like typical landfill construction.

"That would be seamed together, all the material would be put inside, we'd put a liner/cover on it and seam that together with the lower – so you've actually got Tupperware underground. The idea would be that no water could infiltrate into it. No water or moisture inside could escape, and there wouldn't be impacts to groundwater.

"We then put the cap material on top and put enough material so the exposure to anybody who would be directly on top of it would be indistinguishable from natural background concentration. Then we can revegetate it."

Musante said an engineer from Navajo AML asked why he was putting in a liner, stating that it seemed unnecessary and expensive. "His consideration was maybe you could do more with the money than spending it on a liner. None of the AML repositories have liners."

Musante, Esplain and AML representatives will meet again June 21 and try to find a home for the waste burial ground.

"With right there at Skyline Mine not being on the table, our next step, I hope, is to look for an area outside Moonlight Mine. There are residents about a half- to three-quarters of a mile away," Musante said. The proposed waste repository actually would pose far less an exposure risk than Moonlight Mine does now, he added.

"But I want to talk with other people nearby first, because it has been my experience that they are the ones that are the most impacted by these issues, like the Begays."

There is money available to start cleanup, but there has to be a reclamation plan in place before Oct. 1, the start of the new fiscal year, to use the funding. "We do kind of need to move things along because we have a 'turn into a pumpkin date' of Sept. 30," Musante said.

He is hoping the agencies can work together and present a proposal for a repository to Oljato Chapter for approval by mid-July. "I believe having local folks support whatever we do is very important," he said.