IDAHO CLEANUP PROJECT

CITIZENS ADVISORY BOARD

Meeting Minutes

February 27, 2020

List of Acronyms

AMWTP	Advanced Mixed Waste Treatment Project
ARP	Accelerated Retrieval Project
CAB	Citizens Advisory Board
DDFO	Deputy Designated Federal Officer
DEQ	Department of Environmental Quality
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
EBR	Experimental Breeder Reactor
EIIFC	Eastern Idaho Interagency Fire Center
EM	Office of Environmental Management
EPA	Environmental Protection Agency
ESER	Environmental Surveillance, Education, and Research Program
FFA/CO	Federal Facility Agreement and Consent Order
FY	Fiscal year
HEO	heavy equipment operator
HLW	high-level waste
ICP	Idaho Cleanup Project
INL	Idaho National Laboratory
ISA	Idaho Settlement Agreement
IWTU	Integrated Waste Treatment Unit
MFC	Materials and Fuels Complex
NE	Office of Nuclear Energy
NRF	Naval Reactors Facility
ORPS	Occurrence Reporting and Processing System
ORR	Operational Readiness Review
PGF	process gas filter
RCRA	Resource Conservation and Recovery Act
RWMC	Radioactive Waste Management Complex
SDA	Subsurface Disposal Area
SNF	spent nuclear fuel
SSAB	Site-Specific Advisory Board
WIPP	Waste Isolation Pilot Plant

The Idaho Cleanup Project (ICP) Citizens Advisory Board (CAB) held its quarterly meeting on Thursday, February 27, 2020 at the Residence Inn in Idaho Falls, Idaho. An audio recording of the meeting was created and may be reviewed by calling CAB Support Staff at 208-557-7886.

Members Present

Jackie Agenbroad
Keith Branter
Brad Christensen
Teri Ehresman
Marvin Fielding
Brandon Leatham
Talia Martin
Trilby McAffee
Cathy Roemer
Larry Schoen
John Sigler

Member(s) Not Present

Josh Bartlome

Deputy Designated Federal Officer (DDFO), Federal Coordinator, and Liaisons Present

Connie Flohr, Deputy Designated Federal Officer (DDFO), U.S. Department of Energy Idaho Operations Office (DOE-ID)
Brad Bugger, Federal Coordinator, DOE-ID
Danielle Miller, Incoming Federal Coordinator, DOE-ID
Fred Hughes, Program Manager, Fluor Idaho
Mark Clough, State of Idaho
Pete Johansen, Idaho Department of Environmental Quality (DEQ)
Lynne Hood, U.S. Environmental Protection Agency (EPA)

Others Present

Racquel Clark, VNSFS-ESER
Kevin Claver, VNSFS-ESER
Rick Hilath, Fluor Idaho
Kaylin Loveland, Atkins
Keith Moore, Shoshone-Bannock Tribes
Don Sticinski
Grant Cavdill, DEQ
Rick Vensen, DEQ
Bryan Breffle, Fluor Idaho
Shayna Martin, Shoshone-Bannock Tribes
Trevor Atkinson, DEQ
Peter Christensen
William Kirby, Jacobs
Amy Farman, VNSFS
Betsy Holmes, DOE
Amy Taylor, U.S. Senator Risch
Mike Helser
Nolan Bjorkman, Fluor Idaho
Rebecca Casper, Mayor of Idaho Falls
Jarrett Rice, Bechtel
Susan Stiger, Bechtel
Chris Henvit, Naval Reactor Facility (NRF)
Bob Mansell, Studsvik
Jordan Davies, ICP CAB Support Staff
Kelly Green, ICP CAB Support Staff
Geoff Asmus, Jacobs
Ty Sanders, DOE
Nathan Loftus, Fluor Idaho
Schyler Walker, DOE-ID
Sara Schmieg, TetraTech
James Alexander, Energy Solutions
Robert M.
Tami Thatcher
James Simmons, HII
Joel Case, DOE
Erik Simpson, Fluor Idaho
Brian Summers
Kyle Morison, DOE
Laurie Hernandez, Shoshone-Bannock Tribes
Susie Barna, Moxie Endeavors
Samantha Carver, U.S. Senator Risch
Mark Chadek, North Wind
Mary Woollen
Bill Badger, Amentum
Jim Malmo, DOE
Erik Whitmore, Fluor Idaho
Tammy Monday, Studsvik
Kathryn Hitch, U.S. Senator Crapo
Bryant Kuechle, ICP CAB Facilitator

Opening Remarks

Facilitator Bryant Kuechle began the meeting at 3:00 p.m. He reviewed the agenda and noted that the public comment periods would be held at 5:15 p.m. and 7:15 p.m. He reminded attendees of the process for public comments during the meeting, time permitting, or via question cards.

Trilby McAffee (CAB Chair) welcomed everyone to the meeting and noted that it had been a while since the CAB's October 2019 meeting in Teton Village, Wyoming. She reported that in the interim, the board had formed a Snake River Plain Aquifer subcommittee and said that group brought a recommendation to this meeting for consideration by the full board. McAffee also commented that at the end of October, the Idaho Site hosted an EM Site-Specific Advisory Board (SSAB) meeting in Sun Valley. During the three-day event, chairs and vice-chairs from the seven other SSABs across the complex toured the Idaho site, received briefings from DOE-EM leadership, and drafted recommendations for local board consideration. She said the Idaho Site received excellent feedback on the meeting from the other sites, which made her feel proud.

Connie Flohr (DOE-ID) introduced herself as the new Manager of the Idaho Cleanup Project, having assumed the position following Jack Zimmerman's recent departure. She welcomed everyone to the meeting and said it was nice to see it so well attended. Flohr acknowledged that this would be Federal Coordinator Brad Bugger's last CAB meeting. She thanked him for his service to the Department, ICP, CAB, and tribes. She lauded Bugger as a great asset to DOE and said he would be greatly missed.

Mark Clough (State of Idaho Settlement Agreement Coordinator) introduced himself and said he was glad to participate in the meeting. Like Flohr, he noted that the meeting was well attended and said he was excited about the new evening format. Clough commented that he toured the site the previous day, the Radioactive Waste Management Complex (RWMC) and Accelerated Retrieval Project (ARP) specifically. He said he was pleased with the progress being made at each. He concluded by saying that he looked forward to working with Flohr in her new role and congratulated Bugger on his retirement.

Pete Johansen (Idaho DEQ) introduced himself as the Federal Facility Act/Consent Order Supervisor for DEQ. He thanked DOE, Fluor Idaho, and the Naval Reactors Facility staff for their site visit the previous day and said there is a lot of great cleanup progress happening in Idaho. He noted that the tour was really an orientation for Lynne Hood, who would fulfill the role of EPA liaison to the CAB. He added that Hood has a remedial project management background and has been splitting her time between EPA's Boise and Hanford offices. He welcomed her to the CAB.

Lynne Hood (EPA) introduced herself to the CAB. She commented that she had been with EPA for quite a while, having resided in EPA's Boise office for several years. She agreed with Clough and Johansen that the site tour the day before was very valuable. Hood commented that she was new to this project and still learning, but that she was excited to be EPA's liaison to the CAB.

Fred Hughes (Fluor Idaho) said he appreciated the opportunity to be part of the CAB. He reported that DOE and Fluor Idaho continued making great progress in all areas across the project which Flohr would cover in detail during her overview presentation. He added that Fluor had the previous week announced it would not be selling its government group.

Recent Public Outreach Activities

Brad Bugger (DOE-ID) reviewed recent public outreach activities. The document is available on the ICP CAB website: https://energy.gov/em/icpcab.

Prior to reviewing DOE's recent public outreach activities, Bugger reiterated that this would be his last board meeting. He commented that serving as Federal Coordinator for the CAB was the most enjoyable duty he had in his 30 years at Idaho National Laboratory (INL). He said he would miss it and the board. Bugger

introduced the CAB to Danielle Miller (DOE-ID), who would be taking over as Federal Coordinator upon his retirement.

Fiscal Year (FY) 2021 Budget Priorities

Schyler Walker (DOE-ID) provided a presentation on FY 2021 budget priorities. The presentation is available on the ICP CAB website: https://energy.gov/em/icpcab.

Lawrence Schoen (CAB Member) commented that it would be difficult for the CAB to follow this budget discussion without understanding implications for the budget number. The number included in Walker's slides still represents an $80-$100 million difference even after adding back in $80-$100 million between the presidential request and Congress approval, which he said is alarming. Schoen noted that site activities will obviously happen more slowly with $100 million less in funding. He asked Walker to explain how money is carried forward, and how much is spent in a typical year. Walker responded that the Idaho Cleanup Project typically costs between $400 million and $430 million. Right now, DOE-ID estimates $130 million or more in carryover.

Flohr added that the Department is fortunate to have what is called no-year money. DOE-ID does not have to cost its money off in any particular timeframe. Some funds have been sitting on the books for up to five years due to the Department's inability to spend it for a variety of reasons, such as contracting or permitting. Flohr commented that DOE-ID is in a very fortunate situation, given the current climate. She reminded the CAB that this is just the beginning of a process and that historically, year-long continuing resolutions are common in election years. The $270 million number discussed during Walker's presentation is merely a point in time and the start of the process. In the event of a continuing resolution, the prior year's enacted value is distributed across the current year.

Walker noted that in a departure from previous years, DOE-ID will need recommendations from the CAB pertaining to FY 2022 priorities no later than March 12 of this year. Flohr explained that DOE would normally brief the CAB in April on that piece of the budget but said she had received guidance the previous day that the timeline had been moved up for the FY 2022 budget cycle.

John Sigler (CAB Member) asked, hypothetically, what DOE-ID would do with funding in excess of the budget request and if it would translate to quicker, more efficient, or additional work. Walker responded that the magnitude of the increase would drive the response, but that additional funding would likely result in accelerated Resource Conservation and Recovery Act (RCRA) closure activities at RWMC and additional work related to the Calcine Disposition Project.

Flohr added that to some degree, certifying and shipping waste has limitations outside DOE-ID's control. The Waste Isolation Pilot Plant (WIPP) can only take so much in, and Idaho can only get so much waste through the certification process in a given period of time. Throwing money toward those activities literally does not help. Applying additional funding toward the Integrated Waste Treatment Unit (IWTU) would not help either, as that facility is already very sufficiently funded. Flohr agreed with Walker that additional money would, however, allow DOE to begin moving through the RCRA closure process at the ARPs and unnecessary Advanced Mixed Waste Treatment Project (AMWTP) facilities and accelerate construction of the Subsurface Disposal Area (SDA) cap.

Schoen asked what happens with material that results from the IWTU process and if that is part of DOE-ID's costs. Flohr responded that after treatment through IWTU, the material goes into cannisters that are stored on site in concrete vaults pending ultimate disposition.

Idaho Cleanup Project Overview

Connie Flohr (DOE-ID) provided a presentation on the status of cleanup at the Idaho Site. The presentation is available on the ICP CAB website: https://energy.gov/em/icpcab.

Keith Branter (CAB Member) referred to the second slide of Flohr's presentation and asked her to expand on the two Occurrence Reporting and Processing System (ORPS) reportable injuries from November 2019. Flohr responded that the first involved a fractured finger injured while working on some rotating equipment. The second was a letter from DEQ to Fluor Idaho discussing some violations of a RCRA permit. Some of those violations were related to administrative errors, such as failing to do a fire protection safety check on a glovebox.

Public Comment Session #1

Tami Thatcher, Idaho Falls, commented on the 2019 Sheep Fire at INL, which burned many square miles of the site's dessert. She noted that EPA's nationwide environmental radiation monitoring system, RadNet, classifies Los Alamos's and Hanford's site fires from 2000 as radiological events. She said it is interesting that the 2019 Sheep Fire in Idaho would be a no-never mind, especially given that INL has released millions of curies of radiation since 1952.

Thatcher commented that the last three 2019 quarterly environmental monitoring reports for the Idaho Site, which are put together by DOE's monitoring contractor, Environmental Surveillance, Education, and Research Program (ESER), were not available to the public. While the annual report is not typically released until mid-year the following year, Thatcher asserted that DOE is very tardy in making the quarterly environmental monitoring reports available, which she said is troubling. She summarized some of the tritium information included in 2019's first quarter report: levels in Idaho Falls in January 2019 were 22 picocuries/liter in drinking water, which is on par with the environment, and 112 picocuries/liter at the end of February and March, which is also below the EPA limit.

Thatcher referred to tritium data from 2006 and noted that Idaho Falls had 734 picocuries/liter in the drinking water. She said ESER tried to aggressively smooth this data at that time. Thatcher commented that when looking at years of EPA data, it is easy to spot periods of "black out" or a lack of information. Those periods normally help trace where problems are coming from. She said the ESER data shows INL as not being particularly hot with cesium-137 immediately following the Fukushima event, which she said was very curious. Fallouts such as Fukushima do not know bounds.

Finally, Thatcher remarked that some data from 2019 shows figures such as negative 224 plus or minus 112. She told the CAB that radioactivity does not come in negative amounts and that it is deeply concerning to hear that upper levels are being lopped off and negative numbers in air and air filter data embraced.

Discussion of agreement with the State of Idaho

Jim Malmo (DOE-ID) provided a presentation on the 2019 supplement to the Idaho Settlement Agreement (ISA). The presentation is available on the ICP CAB website: https://energy.gov/em/icpcab.

McAffee asked where the 300 pounds of special nuclear material (plutonium and uranium) referenced on the fourth slide are going. Malmo responded that the Byron Nuclear Generating Station shipment will leave the state and go to another DOE facility where it will be used, but said he was not allowed to share exactly where.

Schoen also referred to the fourth slide of Malmo's presentation. He asked why treatment of Experimental Breeder Reactor (EBR) II fuel was included in the supplemental agreement. He also asked why EBR-II fuel should be treated, what its use will be, and where it will go. Malmo responded that treatment of EBR-II fuel was included in the supplemental agreement through negotiations with the State of Idaho. It was offered up by DOE in return for the state changing the ISA requirements for IWTU from completion of operations to commencement of operations. DOE needs to show that it can process and/or move out of the state at least some fuel.

Flohr added that the EBR-II fuel will be put through the Fuel Conditioning Facility making it into different fuel that the DOE Office of Nuclear Energy (NE) will use as feed stock for micro and small modular reactors over the next several years. It will be reused on site.

Schoen asked for clarification, then, that the EBR-II fuel was considered in the 1995 ISA. Malmo clarified that it is indeed covered by the ISA because it will need to be moved from wet to dry storage and is part of the spent nuclear fuel (SNF) that must be road-ready by 2035. He added that much of the EBR-II fuel still has quite a bit of life left, so it makes sense to reuse it if possible.

Clough added that any high-level waste (HLW) generated during treatment of EBR-II fuel falls under the same requirements as the ISA. It takes SNF and changes it in form, making it safer for the environment. In the end, anything to come out of that process must leave in the same way the other waste does under the ISA.

Schoen commented that the supplemental agreement will not add to the amount of waste material in Idaho but noted that there does not appear to be any language dictating the timing of these actions and counter-actions. Malmo responded that the conditions are laid out on page four of seven of the supplemental agreement.

Bugger explained that the 55 metric ton limit was imposed when the ISA was negotiated in 1995. Fifty-five metric tons is the maximum amount of SNF that DOE can bring into the State of Idaho over the life of the agreement. DOE has never come close to hitting that 55 metric ton limit throughout the entire life of the program. He added that there are also limits on the amount of SNF that can come into the state in any given year, and DOE has never come close to those limits either. In the big picture, the Byron Nuclear Generating Station shipment, at just 110 pounds, is a very small quantity. DOE agreed in the supplemental agreement to ship 300 pounds of special nuclear material out of the state in return for the 110 pounds that is coming in from Byron.

Bugger added that the supplemental agreement says very specifically that whatever comes into the state from commercial sources over the life of the program will count against that 55 metric ton limit imposed in 1995 with the commencement of the ISA. When people say they are not going to be bringing in SNF, what they are really saying is that DOE has the right and the ability to bring in 55 metric tons of SNF over the life of the program and that any incoming SNF will not exceed that limit. Bugger also reminded the CAB that the ISA requires that *all* SNF leave the state by 2035. All of it.

Clough reiterated that the 55 metric ton limit imposed by the ISA will not be exceeded and that the limit is in no-way revised by the supplemental agreement. He encouraged the CAB to look at these numbers in total. For example, the second page of the supplemental agreement shows that 330,000 pounds of heavy metal, such as uranium and plutonium, has left the state since December 31, 2014. That's about 165 metric tons, compared to the 55 metric ton limit being discussed. A whole lot of this material has already left the state.

Integrated Waste Treatment Unit (IWTU) Update

Joel Case (DOE-ID) provided an update on IWTU. The presentation is available on the ICP CAB website: https://energy.gov/em/icpcab.

Talia Martin (CAB Member) referred to the first slide of Case's presentation, specifically the reference to 850,000 gallons of highly radioactive liquid tank waste (sodium-bearing waste). She noted that DOE and the CAB have been talking about 900,000 gallons of sodium-bearing waste for years and asked what happened to the other 50,000 gallons. Case responded that past references to 900,000 gallons have always been accompanied with the words "about" or "approximately" and DOE has just decided to be precise moving forward. It has essentially been a rounding error all this time.

Martin noted that issues with the the Process Gas Filters (PGF) have been a topic considered worthy of conversation with the CAB for nearly two years. Looking at the phases, Martin concluded that the issue was identified in Phase 2 and that it appears DOE and Fluor Idaho are completing phases without addressing this recurring issue. She asked for confirmation that the PGF will be tested and operational prior to conclusion of Outage J. Case confirmed that the PGF will be verified and validated during an upcoming 50-

day confirmatory simulant run. Flohr added that the issues with the PGF were not identified sooner because the plant had never run long enough to test down-system components.

Branter commented that it seems the addition of cannister decontamination and wet/dry systems to IWTU would constitute significant modifications. He asked why IWTU does not have to undergo another full Operational Readiness Review (ORR) prior to hot operations. Case responded that there are criteria for determining whether an ORR or a readiness assessment is necessary, and the two systems added to the facility do not necessitate, using those criteria, another ORR. However, he said he would consult Mark Brown (DOE-ID Nuclear Safety) for a more in-depth response to Branter's question and report back to the CAB.

Flohr explained that Brown had recently led an ORR for the Salt Waste Processing Facility at the Savannah River Site. He has strong expertise in this area, is embedded in the process, and bringing lessons learned back to IWTU from that project. She also said there are many people at DOE-HQ involved in these decisions as well.

Branter asked if the Defense Nuclear Facility Safety Board (DNFSB) was still regularly visiting IWTU. Case confirmed that they still visit the site but said they have not provided feedback on the readiness assessment. He added that the two additional systems are not related to the main operational flow of the facility. Case said he is confident in IWTU's operators as they have successfully passed two or three ORRs and stated that they are likely the best prepared operators in the DOE complex.

Schoen referred to the fragility of the PGF and asked what happens when filters break and if there is a redundant system. Case responded that up to 10 percent of the filters can break before the plant suffers. At that point, the facility will need to be shut down so broken filters can be replaced during an outage. He added that the goal is to operate at least 50 consecutive days between outages.

Schoen asked if cannister contamination occurs during the filling process. Case confirmed and explained that a pixie dust test indicated that some material was getting stuck in the crevices at the top of cannisters during filling. In response, they are attempting to improve the mating and the vacuum system so it is more localized in the actual plug. The robotic system is designed to catch anything that escapes, so it's a two-fold approach: minimize contamination escaping the vacuum system and then robotically wipe down what does escape.

Wildfire preparations and post-fire restoration

Eric Gosswiller (Battelle Energy Alliance) and Amy Forman (Environmental Surveillance, Education, and Research Program) provided a presentation about wildfire preparations and post-fire restoration. The presentation is available on the ICP CAB website: https://energy.gov/em/icpcab.

Cathy Roemer (CAB Member) referred to the second slide of Gosswiller's presentation and asked what the relationship is between the June 2000 DOE moratorium on prescribed fires and the fires that were experienced. Gosswiller responded that the 2000 Cerro Grande Fire was a prescribed fire that went wrong. It jumped its prescription. As a result, DOE shut down that type of activity on all reservations.

Teri Ehresman (CAB Member) referred to the eighth slide of Gosswiller's presentation and asked for an explanation of the acronyms. Gosswiller explained that EIIFC stands for Eastern Idaho Interagency Fire Center, which is the Bureau of Land Management and United States Forest Service dispatch agency in Idaho Falls. He said that HEO stands for heavy equipment operator. HEOs respond with INL assets, such as bulldozers, to support fire suppression operations.

Schoen asked if they would create their box by cutting a fire line. Gosswiller responded that they absolutely would. He said that minimum impact is their goal. Most often in June, before the fuels are prone to extreme fire behavior they are very effective with direct tactics. In the July and August timeframe, however, fires can be explosive and the only way to fight them safely is to build dozer lines.

Roemer asked if a direct minimum impact approach involves water. Gosswiller responded yes, and said it involves trucks and water. Roemer then asked what the source of water is and if lack of water is ever an issue when using this approach. Gosswiller responded that they use the same equipment the rest of the industry does. Each fire truck can carry 800 gallons of water and must be re-watered every hour to hour and a half during a fire fight.

Clough asked about the chemical makeup of the red fire retardant they drop from airplanes. Is it dangerous if it touches skin, for example? Gosswiller responded that it is not dangerous and that rain washes it away. He added that INL uses the industry contemporary standard out of the Pocatello air base. It is the most pedicured certified retardant available.

Sigler clarified that the Cerro Grande Fire did not start on Los Alamos ground. It started on Bendelier National Monument. He asked Gosswiller if they have had time and/or the necessary information to sort out the economics of prevention mechanisms, such as painting the poles. Does that effort save time and money overall? Gosswiller responded that it is about $150 to paint a pole and nearly $1 million per mile to replace structures, so painting the poles is very cost effective.

Ehresman asked Gosswiller to elaborate on the safety component. Gosswiller responded that the INL campuses are very well-protected, but that employees are able to shelter in place if needed. He said INL has good defenses and a notification system for workers in the field. Regarding first responders, Gosswiller said it's all about training, a robust incident command system, good communication, and making conservative decisions when fighting fires.

Roemer asked what the percentage of success is with aerial sagebrush seeding. Forman responded that they have used aerial sagebrush seeding only once before on the Idaho Site, in 2002 and 2003 following the 2000 Tin Cup Fire. Unfortunately, they did not see a lot of sagebrush come back after that. In years when it does work, there is a cost benefit to aerial seeding, though. Right now, this effort looks to be in good shape. The conditions are great and INL was able to procure a fairly local seed. With the current snowpack, soil moisture should be good moving into spring. Forman said she'd like to think there will be good germination but noted that it has to make it through summer. Provided all the conditions are right, as far as the right rainstorms at the right interval, she believes they will cover a significant amount of acreage.

Sigler asked why the seed mix will not include forbs in addition to grass. Forman responded that this decision was informed by previous revegetation efforts. Any time INL has ordered forbs in a mix, the resulting plants are from different ecotypes. She said they are worried about introducing ecotypes from the commercial seed source that are not native to the area.

Martin noted that the Tribes consider themselves stakeholders to the INL as the land is ancestral to the Shoshone-Bannock and other indigenous people. She commented that the Tribes were involved. Tribal cultural resources worked with INL and did some of the survey lines.

Schoen asked if Forman's program includes seed collection on the site. Forman responded that it has been a point of discussion over the last couple years through the Candidate Conservation Agreement. She said it would be excellent to have that kind of local seed available, and that it was one of the recommendations that went into a lessons learned with the Wildland Fire Committee. Forman said she believed it would continue to receive some consideration.

Schoen referred back to Malmo's earlier presentation and asked if interrupted shipments to WIPP would affect the importation of SNF under the new supplemental agreement. Malmo responded that the Idaho Cleanup Project is not penalized if WIPP is down. When WIPP is operational, Idaho must maintain 55 percent of available shipments to WIPP complex-wide over a three-year running average. If Idaho fails to meet that requirement, SNF would indeed be impacted.

Public Comment Session #2

Thatcher commented that the wildfire presentations, while interesting, did not provide specific information on radiological levels. She said that a fire like the 2019 Sheep Fire would result in a radiological event felt around the globe, with airborne gross alpha and gross beta many times the normal levels. Thatcher said that when DOE and its contractors talk about monitoring and protecting people out in the field, it is important to recognize that the inhalation of alphas and gammas is what really matters. Urine testing is the only way to truly identify those dose rates in field-based employees.

Thatcher stated that INL is sprinkled with beryllium, cadmium, high levels of lead, lots of plutonium 240, 238, and 239, americium 241, and more. She said she would like to see exactly what INL monitored, what the levels were, and what they were comparing those levels to as she was not satisfied with that portion of the presentation.

Thatcher added that Idaho is heading into an era of significantly more radiological airborne contamination, especially when IWTU begins hot operations. She referred to the EBR-II fuel that they'll process at the Materials and Fuels Complex (MFC) and said there will be very large airborne releases far and above what the community surrounding the site has been accustomed to.

Thatcher again noted that the second, third, and fourth quarter monitoring reports from 2019 were not available to the public. She said it was a total blackout and expressed concern about changes to the cleanup administrative record. She encouraged the CAB to weigh in on the unavailability of these reports to the public.

Farewell to Branter and Bugger

Bugger thanked Branter for his service on the CAB over the last six years and announced it would be his last meeting. He recognized Branter for serving first as a CAB member, then Vice-Chair, and ultimately Chair of the board. He presented him with a plaque that read: Presented to Keith Branter for his leadership as chair and co-chair, as well as his insights on safety and worker protection during his six years of service to the Idaho Cleanup Project Citizens Advisory Board. Branter commented that he had a great time serving on the CAB over the last six years and said he enjoyed every minute.

Flohr commented that Bugger had been a true asset to DOE. He came to the Department with real public relations chops, having been a reporter beforehand. She presented him with a plaque in appreciation of his dedicated service to the CAB as Federal Coordinator, where he ensured the CAB complied with Federal requirements, and ensured that EM program expectations were met. Because of his direct contributions, DOE and the cleanup effort gained the trust and confidence of the CAB members and their constituency in the cleanup strategies and outcomes at the Idaho Site. Flohr said he would be greatly missed and thanked him for his service. Bugger said that this was the best job he'd ever had and that he thoroughly enjoyed it. He thanked the CAB members and told them he relished the relationships he'd developed with each of them.

Fluor Idaho presentation on AMWTP waste streams, challenges, and successes

Bryan Breffle with the help of Rick Hilath and Nolan Bjorkman (all Fluor Idaho) provided a presentation regarding AMWTP waste streams, challenges, and successes. The presentation is available on the ICP CAB website: https://energy.gov/em/icpcab.

Marvin Fielding (CAB Member) asked if it was typical for the reaction to take just a couple minutes and then hours for it to cool down. Breffle responded yes. Fielding asked if items aside from lathe cuttings were reactive as well. Breffle responded that most reactions come from metal shavings and fines. Surprisingly, larger uranium bricks were not reactive.

Sigler asked what is coming off the burn. Breffle responded fumes and the oxidation reaction of burning hydrocarbonate. He added that the December 2017 boxline fire showed that no uranium had escaped the trough.

Branter referred to the reaction video and asked if the material was all uranium-238. Breffle responded yes.

Consideration of EM SSAB chairs recommendations, board discussion, and subcommittee follow-up

During the October 2019 EM SSAB meeting in Sun Valley, Idaho, the chairs and vice-chairs from all eight CABs across the complex drafted two recommendations to be considered by each of the local boards. The first recommended improvements to EM SSAB and public engagement in the DOE EM budget process, while the second provided recommendations on the disposition and transport of nuclear material. The CAB reached consensus to support both recommendations.

The Snake River Plain Aquifer subcommittee members Talia Martin, Larry Schoen, Jackie Agenbroad, Josh Bartlome, and Trilby McAffee presented their draft recommendation regarding future presentations to the CAB related to the impacts of INL on the aquifer. Following CAB discussion, the board reached consensus in support of the recommendation with some very minor edits. This recommendation, and DOE-ID's response, can be viewed on the CAB website: energy.gov/em/icpcab/downloads/icp-cab-recommendations-pertaining-snake-river-plain-aquifer-presentations

The CAB worked together to draft an FY 2022 budget recommendation, which they ultimately reached consensus on before conclusion of the meeting. This recommendation, and DOE-ID's response, can be viewed on the CAB website: energy.gov/em/icpcab/downloads/support-proposed-budget-priorities-doe-idaho-operations-fiscal-year-2022

Conclusion

Flohr concluded the meeting.

Trilby McAffee, Chair
Idaho Cleanup Project Citizens Advisory Board