



INL Site Environmental Management

C I T I Z E N S A D V I S O R Y B O A R D

Meeting Minutes

March 13, 2013

The Idaho National Laboratory (INL) Site Environmental Management (EM) Citizens Advisory Board (CAB) held its quarterly meeting on Wednesday, March 13, 2013, at the Hilton Garden 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

Willie Preacher, Chair
Bob Bodell
Herb Bohrer
Harrison Gerstlauer
Harry Griffith
Kristen Jensen
Mark Lupher
Betsy McBride
Bill Roberts
Tami Sherwood
Teri Tyler

Members Not Present

Nicki Karst, Vice Chair
Sean Cannon

Deputy Designated Federal Officer, Federal Coordinator, and Liaisons Present

Jim Cooper, Deputy Designated Federal Officer, U.S. Department of Energy Idaho Operations Office (DOE-ID)
Bob Pence, Federal Coordinator, DOE-ID
Dennis Faulk, U.S. Environmental Protection Agency (EPA)
Kerry Martin, State of Idaho
Daryl Koch, State of Idaho
Dave Hutchison, Idaho Cleanup Project (ICP)

Others Present

Robert D. Capp
Bruce Larue
Ken Harrawood
Chris Henvit
Roger Turner
Susie Barna
Mark Hutchison
Preston Abbott
Erik Simpson
Curtis Roth
Barbara Beller
Amy Taylor
Danielle Miller
Nolan Jensen
Ken Whitham
Nicole Brooks
Kelly Galloway

Lori McNamara, Support Services
Bryant Kuechle, Support Services Facilitator
Peggy Hinman, Support Services

Opening Remarks

Willie Preacher, Chairman of the CAB, welcomed the CAB to the meeting. Jim Cooper extended his thanks and appreciation to the CAB members and members of the public in attendance at the meeting. He noted that he was proud that the DOE cleanup program was able to survive the second actions on sequestration with minimal impacts to the budget. The next issue will be the continuing resolution on the budget at the end of March.

Dennis Faulk, EPA Region 10, commented that in addition to the CAB meeting, he is visiting INL to discuss buried waste and the desire to restart the project. With regard to EPA and sequestration, employees will be furloughed for four days between April and June. There may be more furlough days. Things are not going well at Hanford. His biggest fear is that money will go from the other sites to help Hanford. He thinks it is a priority to clean up INL. There are just a few things left to be done at INL and they should be done sooner rather than later. It is not good for the taxpayers to delay this work. Anything the CAB can do to secure the funding to do this work is appreciated.

Preacher asked if the tanks that are leaking are existing tanks or newer tanks. Dennis replied that there was a leak in the annulus between the single shell and outer shell of a double shell tank. The other leaks were from single shell tanks. The leaks are minimal. Most of the issues are related to past discharges to the soil column.

Kerry Martin expressed her appreciation for the tour of the ICP and Advanced Mixed Waste Treatment Project (AMWTP) facilities that was provided to the governor. Daryl Koch noted that the state was not facing furloughs but that the state's funding depended upon a grant from DOE. It was not clear if this funding would continue at the planned level. He also commented on the good tour with the Governor.

Dave Hutchison, CWI, provided some highlights on the ICP. He noted that CWI has passed 1 million man hours without a recordable injury. CWI is proud of its employees and their safety both at work and at home. CWI also felt it was good news that there were little impacts from the sequestration. He noted that it has been a challenge to repurpose Accelerated Retrieval Project (ARP) V for use as a Resource Conservation and Recovery Act (RCRA) treatment unit. They are working to enhance the throughput of the sludge treatment. The Integrated Waste Treatment Unit (IWTU) remains a top priority. CWI is working diligently toward IWTU becoming operational.

Herb Bohrer asked if there was a date when the Hanford vitrification plant was to start. Cooper replied that there were still technologies to be developed to treat the waste, so it may be premature to start building facilities. The suggestion is to take money from the project and provide it to other site offices to complete actual work while Hanford works to resolve its technology issues. Faulk commented that the official start date is 2019; however, the project is severely underfunded and likely cannot accomplish this date with the level of funding. It could be past 2019 even if funding is received. Cooper asked if Hanford had started re-baselining the project to determine exactly what needs to be done. Faulk thought that they had. He also commented that Hanford is planning to designate 6 tanks as containing transuranic (TRU) waste that can go to Waste Isolation Pilot Plant (WIPP). He feels that the TRU waste at the other sites needs to be taken care of before funding is spent on the TRU waste at Hanford.

Public involvement

Jim Cooper provided a briefing on recent public involvement interactions. He noted that an important event was receipt of a permit modification for the sludge treatment at ARP V. This was received following the close of the public comment period. Bohrer commented on the Defense Board visit. He noted that three CAB members attended a meeting with the Board. The CAB asked how the Defense Board's dealings with the INL compared with the dealings at the other sites. The Board indicated that it was very satisfied with the level of support at INL. She also asked about the public notice of the permit modification and whether the CAB should have up front information on this. Cooper replied that he would identify those items coming up for public comment at the

meetings. McBride said she was not sure if the timing of the CAB meetings was a fit with the public comment period on the permit modifications. However, she noted it seemed that some interaction with the CAB was desired. Hutchison noted that there was a public mailing list that people could sign up to be on in order to get notice of the opportunities for public comment. Cooper agreed to provide information to North Wind so North Wind can distribute it to the CAB members. The CAB members can coordinate among themselves to coordinate a response to the permit modification.

Tammy Sherwood provided information about an upcoming trip to Washington DC planned by members of the public from Idaho Falls. She noted that in addition to issues such as spent fuel storage, the group was going to discuss the impacts on the airport and other effects of sequestration. Cooper commented that the Governor wants LINE Commission 2.0 to look at the differences between the types of waste at the INL and the disposition plans based on DOE's response to the Blue Ribbon Commission recommendations.

INL Cleanup Status

Jim Cooper provided a presentation on the status of cleanup at the INL. . The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Preacher asked if ICP was planning on taking down the stack at the New Waste Calcining Facility (NWCF), and asked what would be done with the monitors on the stack. Cooper replied that it would be taken down when liquid waste treatment was completed. There is a smaller stack associated with laboratory activities. The monitoring devices from the NWCF stack may be moved there.

Regarding the information presented on safety performance, Bohrer asked if the issues related to the Level B protection were related. Cooper replied that they were related, and that AMWTP was looking into the issues with the manufacturers. ICP uses different equipment from AMWTP. However, Cooper noted that ICP and AMWTP were working very well together and cooperating on problems like this. Bohrer asked if the measures for monitoring heat stress were in place when the incident arose regarding the occurrence of heat exhaustion and dehydration. Cooper indicated that due to the winter weather, the contractor may not have thought it was needed. Bohrer asked if this was a failure to identify and mitigate the hazards. Cooper replied that individuals always worked in teams and this situation did not get communicated sufficiently between the team members.

Teri Tyler asked about the reportable occurrence regarding the sludge. Cooper replied that the sludge was transuranic waste with liquid. The operators have to remotely open the drums and repack with absorbent. In this situation, when the drum was opened, the sludge leaked out because the drum had been overpacked. Faulk commented that in June the CAB will be interested in seeing the operation at ARP V. It is fascinating to see how things are handled under RCRA as compared to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The drum in question here spilled out of the secondary containment and that is why it was reported. Cooper noted that the spill happened where there were two trays to capture the waste. The liquid spilled out, missing the trays. Hutchison clarified that this was the organic sludge from Rocky Flats that contains TCE and radiological components. In this case, none of the constituent released exceeded the reportable quantities.

McBride asked why the safety goals increased from Fiscal Year (FY) 12 to FY 13. Cooper replied that DOE and the contractors sat down and negotiated the goals based upon the work that they were facing in the upcoming year. At AMWTP, it is felt that high risk activities are going to be encountered, and adjustment of the goals was desired. Hutchison noted that ICP's safety goals have gone down over the last several years.

Harrison Gerstlauer asked about the plans for Los Alamos National Laboratory (LANL) to send its waste to AMWTP for treatment. Cooper replied that if LANL pays to get the waste to AMWTP, it will not take much time or money to process this waste as processing is ongoing. Therefore, the waste processing could be covered by INL.

Griffith asked what kind of waste was planned for shipment. Cooper replied that the details on the waste were being provided this week. It is waste that was stored above ground in an area very close to an area burned by fire. The desire is to remove this waste from where it is threatened by fire.

Regarding shipments of remote-handled TRU, Gerstlauer asked if the waste from LANL would be processed in a hot cell. Cooper replied that the LANL waste was similar to the TRU waste at AMWTP and did not need to be managed in a hot cell.

Mark Lupher asked about the size of the bombing range and the density of the munitions expected. Cooper replied that the ordnance resides over 4,400 acres. The density is unknown. The ground shifts and there are no records to indicate what is located. Cooper indicated that there was more than just navy testing; there was bombing as well. Faulk indicated that the munitions were low risk compared to other sites of this type. The eventual goal is to clean up the ordnance so the area can be turned over to DOE Nuclear Energy (NE). Harry Griffith noted that the technologies for ordnance detection had improved over the years. Faulk commented that based on the type of ordnance, the best way to find it is to put people on the ground. However, he does work with some interesting detection technologies at other munitions sites.

Griffith asked about the ARP structures and whether the equipment used inside was shifted from one facility to the next. Cooper replied that each time a new facility is built, improvements are identified. However, to the extent possible, the exhumation and sorting equipment is shifted. There are no plans to have to purchase additional heavy equipment. CWI has maintained the equipment in excellent working fashion. They have been able to rebuild an engine and do other maintenance to make sure the reliability is sufficient to complete the work. The CAB discussed the amount of equipment needed for the different operations and the extra steps needed to modify the equipment so that it could work in an enclosure and in a radiation environment. Faulk observed that the CAB should look into ARP VIII if it has not started up when the CAB tours in June. It is an impressive construction job. Cooper commented further that the sorting lines in ARP I was used in ARP VI and now has been provided to AMWTP for use in its sludge treatment processing. In response to Griffith's question, Cooper noted that it costs \$1.4M per month to run a crew for exhumation. There are about 80 folks associated with an exhumation activity. This includes the excavators, spotters, sorters, waste characterization people, radiological control technicians, etc. It is mostly labor cost.

Gerstlauer asked if any additional shipments of foreign fuel were expected. Cooper indicated that receipt of fuel was suspended until the sodium bearing waste treatment was completed in 2014. Cooper noted that spent fuel could be received at Savannah River Site as well. Savannah River is planning to treat spent fuel for disposal. If that happens, then all of the aluminum clad fuel would be sent to Savannah River for treatment. The treatment would be some sort of encapsulation or other treatment to prepare the spent fuel for final disposal. There is no value to the material; it is parts and pieces.

Sherwood asked about the receipt of waste from LANL. She asked what the overall cost savings would be to treat the waste at Idaho. Cooper replied that there are cost savings because LANL does not have a treatment facility and would have had to build one. He believes that this saves millions of dollars and also helps LANL meet its regulatory milestones so that fines or work suspension is avoided. He has not direct answer on the savings.

Sherwood indicated she was disappointed to hear there were no changes in the Test Area North groundwater. Faulk noted that the test was still ongoing. They are trying to get smarter about how they accomplish the treatment. She asked how failure to meet the milestone for sodium bearing waste impacted INL ability to pursue changing missions. Cooper indicated that INL had been looking at bringing in commercial fuel for research, but no one has signed up to send their fuel here; until the issue are resolved, no one from the commercial industry will sign up. When sodium waste processing is completed, then the suspension of shipments will be lifted. Fuel for research can

be received on the NE side. The new date for completion of the sodium treatment is December 31, 2014; the heels in the tanks are to be treated in 2015.

Public Comment

No public comment was offered at this time.

Integrated Waste Treatment Unit

Curtis Roth provided a presentation on IWTU startup. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Griffith asked about the issue of the feed nozzle not working and whether this was related to the event that occurred during startup or was it something else. Roth explained that this was an additional item. A ceramic tip was added to the nozzle to prevent erosion. Griffith noted that fluidizing rails exist in many types of systems around the world. He asked if there were some special considerations involved in the final design that might be entirely innovative and could be considered intellectual property. Roth replied that this was something that DOE would be interested in sharing with others. Preacher asked if the fluidizing gas was hot during operations. Roth replied that it was. He described the process and the location of the rails for the fluidized gas. They are evaluating ways to position the rails to keep them from plugging with material. They are moving forward with two designs that they will install in a vessel to simulate the process in the denitration demineralization reformer (DMR) to see which works best.

Roth described the treatment process and noted that an interim milestone had been accomplished to reassemble the four vessels. Luper asked about the carbon reduction reformed and where the material from the carbon reduction reformer went. Roth replied that the material from the carbon reduction reformer goes to the off gas. It is not expected that anything other than combustion products would flow to the off gas filter from the carbon reduction reformer. The main product is generated from the DMR. Preacher asked what would happen to the system if it was shut down and whether the system would get plugged up as it cooled. Roth indicated that there was an auger grinder designed to break up chunks of material that may get into the system.

Bill Roberts commented that it would be difficult to make sure that every risk had been identified during startup and cautioned the group that more problems could be encountered. He felt that DOE was doing a great job in looking for issues and fixing them. Sherwood noted that the Defense Board was very supportive of the efforts of DOE to start IWTU. Turner asked if the Consent Order regarding the change to the schedule for the IWTU is on the CAB website. Hutchison clarified that this was on the state website as a modification to the Notice of Noncompliance Consent Order. Faulk asked what type of material was being used in the testing. Roth explained that a synthetic material was ordered. In addition, the material left over from the initial startup events is available for use.

Hutchison explained that a performance test would be conducted on the actual material. McBride asked if the briefing on RCRA would cover the steps needed to change a consent order. She also asked about whether the consent order affected fuel coming into the state. Hutchison clarified that there were two agreements affecting the calcine — the Notice of Noncompliance Consent Order (NON CO) and the Settlement Agreement. Both had milestones. The milestones for the NON CO were modified. The Settlement Agreement was not modified. McBride asked if there was a feel for what the project cost. Cooper indicated that the project was costing about \$12M more this FY than what he had planned.

DOE Implementation of Blue Ribbon Commission Recommendations

Barbara Beller provided a presentation on DOE's plans to implement the recommendations made by the Blue Ribbon Commission. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Lupher asked what was meant by the term 'mutually agreed upon off ramp.' Beller explained that as a state went through the process of hosting a plant and then discovered that it was not technically feasible, that would be an example of an off ramp. Lupher asked if other countries were moving forward with long term storage facilities. Beller replied that Canada was working toward a repository date but had pushed the date out so that citizens could learn more before initiating the siting process. Other nations have set a milestone to revisit the issue in a number of years.

McBride asked about the meaning of multiple jurisdictional consent. Does this mean that state, local and congressional support the project? Beller replied that it really means that the community is supportive of siting the facility. You cannot force a facility because of the technical adequacy of the site. McBride asked how consent would be measured or determined. How do you know consent when you see it? Beller replied that DOE anticipated that a state or region would unite and provide a plan to the DOE for siting a facility.

Bohrer commented that multiple jurisdictional approvals means regional and national agreement. It means that everyone must agree. Beller agreed, because the transportation routes fallout from the location of the facility. DOE needs to move forward in a smart fashion and needs to avoid circumventing the process.

McBride related her experience with the past efforts for transportation and indicated that costs and realities of shipment routes are important factors. Beller agreed and indicated that lessons learned from the past experience would be applied.

Roberts commented that where we are is without a repository, having spent billions of dollars. He feels we are not any farther along than we have been for years. Beller replied that DOE has learned that the previous approach did not work. DOE is working with communities now to educate them and encourage them to host a site. Bohrer noted that under the current strategy, eight years is planned for a pilot interim storage facility. He felt this was very optimistic. He asked what was in the DOE budget to start this process off. Is DOE moving forward and what is happening now? Beller replied that there would be no formal request for proposal for siting. DOE is working on a technical basis for a pilot facility and establishing a generic set of requirements that are independent of a location. This is moving forward.

Preacher asked about used nuclear fuel versus spent nuclear fuel. Beller replied that the Code of Federal Regulations uses spent nuclear fuel. When NE took over operations, it coined the term used nuclear fuel to indicate that there is a residual value to the fuel. Spent fuel is more aligned with waste. Willie commented to McBride that the stakeholder forum is now called the National Transportation Stakeholder Forum. Changes from the Office of Civilian Radioactive Waste Management (OCRWM) days are that now there is more than one potential facility where the waste will be sent. The Tribes believe that the location needs to be known before the Tribes' views on the plan can be established. Preacher also emphasized that the DOE is now recognizing the importance of the Tribes in terms of consent and notification of what is taking place.

Gerstlauer asked who would be in charge of this issue. There are many different agencies with an interest. There are also politics. He felt that if no agency stepped forward, no resolution will be reached. Beller explained that the theory of going forward is to have an independent group manage the project to insulate it from the changes that occur in the system over the years. Beller explained that DOE had requested that the license application be withdrawn from the Nuclear Regulatory Commission (NRC). She explained that the role of NRC is as a regulator.

She indicated that there a host of issues involved in the situation. Beller explained that Congress was charged to appropriate money from the Nuclear Waste Fund to fund a repository.

Sherwood indicated that New Mexico and South Carolina were actively seeking interim storage. As compared to the process of siting Yucca Mountain, the new process that is planned should be more open to the public.

Public Comment

No public comment was offered at this time.

RCRA Permit Process

Nicole Brooks provided a presentation on RCRA and the permitting process. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

McBride asked about the areas operating under interim status and whether they would ever be required to have Part B status. Brooks replied that the tank farm facility is under interim status but is also operating under a consent order for closure. The TRU storage area is also required to be closed. Brooks explained that Part B permits are required for units but that the two units under interim status could not meet the Part B requirements. Instead, the State and EPA decided to regulate the units under a consent order. McBride asked how the level of modification of permits was determined. Brooks replied that the state Department of Environmental Quality (DEQ) would make the final decision on this.

Gerstlauer asked who pays for the RCRA permit procedures, including the reviews and the hearings. Brooks replied that the state DEQ is funded to implement the RCRA program, and this pays for the public meetings and notices that the state is required to conduct. He also asked how it is determined when the public has requested a meeting or hearing. Brooks indicated that it could be just one member of the public.

Koch clarified that DEQ foots the bill when DEQ is responsible for the hearing. When the contractor is responsible, then DOE pays for the hearing. Gerstlauer asked what happened in an emergency situation. Brooks replied that DEQ will grant authority to implement a change if there is an immediate need. Martin pointed out that RCRA is costly but that it has had a huge impact in improving waste management practices.

Personal Protective Equipment 101

Ken Whitham provided a presentation on the types of personal protective equipment (PPE) used at INL. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

McBride asked how the PPE was disposed. Whitham indicated that it depended upon the contamination encountered when the PPE was worn. He also explained that the preference was to protect the material from exposing individuals instead of protecting the individuals. Mark Brown, DOE, explained that some of the suits are one time use. The workers are cut out of the suits, with the suit being turned inside out as much as possible. Workers within the bubble type suits have another layer of PPE underneath. The process goes from 'dirty' to 'clean' in terms of doffing the PPE. The length of time a worker can be in a suit is calculated based upon the amount of heat stress the person is exposed to while in the PPE. Sometimes production time can be limited to a half hour.

Bohrer asked if the bubble suit PPE was what was worn when there was a reportable occurrence. Brown indicated that this was the type of PPE. Both radiation control and fellow workers help with the doffing of the PPE. Preacher

asked if there was a color coding system for the waste. Whitham indicated that the INL had moved away from the color codes.

Preacher asked about heat stress and claustrophobia and how that was addressed. He felt that workers should be assessed for their capability to work in these environments before starting to work. Preacher recalled difficulties working with PPE in the past. In addition to PPE, workers had to work in confined spaces. Bohrer commented that the use of PPE has allowed cleanup to be conducted efficiently. It has been shown that a totally remote operation is not feasible. The techniques were not in existence 20 years ago. The workers are very serious about the protection and how it works. They are trained and careful to watch for conditions and look out for other workers.

Sherwood commented that it is striking how workers can never get comfortable with what they do because they are so careful. Whitham agreed that he fears the routine. It is important not to take the thinking out of the process. They truly want the workforce to stop if there is an issue.

Gerstlauer commented that he has seen a great improvement in the practices. Gerstlauer commented that training and practice were important.

Roberts asked if people were encouraged to question what they were doing. Whitham replied that it was extremely important to encourage workers to ask what they were doing and why. Roberts noted that the PPE used was analogous to what was now being used in the semi-conductor industry. In reply to a question, Whitham explained that exposures in the ATR hot cell were upwards of 30,000 R per hour.

Integrated Safety Management System

Mark Brown, DOE-ID, provided a presentation on Integrated Safety Management System (ISMS). The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Preacher asked how workers were involved in the program. Brown replied that workers help to define the scope of work, do a walk down to see the field conditions and identify potential hazards, and develop the work steps.

Sherwood asked if the INL has used the Computer Assisted Virtual Environment (CAVE) at the Center for Advanced Energy Studies (CAES) to do simulations for safety exercises. Cooper explained that in the design phase for project such as the hot isostatic press unit in IWTU, it had been used.

Preacher asked if the fire department was involved in the work planning. Brown replied that the fire department worked with the project to assure that they could extricate workers from their work space if needed.

Bohrer noted that before ISMS was implemented, there had been some serious accidents at the site. He felt that safety principles were now embraced. For example, in the past, the facility manager may not have had control over all the safety disciplines needed to perform work safely. Now the facility manager has the responsibility and authority to carry out safety.

Gerstlauer recalled that the INL had the OSHA Star program in the 1990s. It seemed to be similar to the current approach, where all workers were assigned responsibility. He can see how progress in working safely has come about. Brown commented that the Star program is still part of the ISMS process.

Tyler asked if the workers attended weekly meetings on safety. Brown replied that when shift workers come back from their long days off, they have a safety briefing; they also have pre-job briefings and scheduled training. Brown commented that in the pre-job briefing at AMWTP, they use the question and answer method to review work so that each worker explains what he or she is responsible for.

CAB WORK SESSION

Herb Borher and Teri Tyler were elected chair and vice-chair of the CAB, respectively, for a two year term. Mr. Cooper recognized Mark Luper who is leaving the CAB and thanked him for his services. Luper thanked the CAB, DOE, and the staff for the great experience he had on the CAB.

McBride provided a summary of what has been done to look at public involvement. Jensen provided the recommendations of the public involvement subcommittee. First, they thought an electronic newsletter could be developed. Jensen discussed items that could be included.

On the call the group discussed receiving 'bottom-line' summaries of the presentations. There could be in the newsletter and also be available to provide to interested persons.

Cooper commented that the summaries would have to be reviewed by DOE. Griffith brought up the concept of a dash board, which would help standardize the information. Common questions are how the topic relates to the settlement agreement, how it relates to risk to the public. The goal is to make the technical information available to answer questions that public has about the INL and cleanup. The objective is to increase the relevancy of the information.

The CAB members discussed how they could serve as a bridge between their communities and INL on cleanup. The need to communications at a level of interest to the community was discussed. Cooper comments that he has been disappointed in how DOE's past efforts have been received in Idaho. There is little interest unless there are problems. Pence expressed that the CAB members can be a key to success in bringing people in their community together. This happened with Sean Cannon inviting DOE to BYU-I. The benefit of linking with another group, such as Rotary or Chamber of Commerce, was identified.

The CAB reviewed the meeting schedule and topics for the upcoming year. The CAB discussed the timing of a recommendation on funding for INL cleanup. The CAB felt a recommendation should be issued before the next meeting. Cooper commented on how the EM directors from around DOE met and felt that a 'good news' story was needed. WIPP was identified as one of those types of stories. If funding were focused on WIPP, this could change how EM funds are allocated, and INL's opportunities for funding could increase. The group discussed the problems at Hanford and the risks there. Bohrer comments that the risk is recognized, but can money solve the problem?

Regarding presentations at the meetings, the CAB would like to provide input on specific questions they have. This will be done for topics such as WIPP and Hanford.

The group discussed formation of LINE 2.0 and whether the CAB should make a recommendation regarding citizen membership. Cooper agreed to look into this.



Willie Preacher, Chair
Idaho National Laboratory Site Environmental Management Citizens Advisory Board
WP/ph