CHEMISTRY
METALLURGY
RESEARCH
REPLACEMENT

CMRR Public Meeting, October 6, 2010

Volume 10

Los Alamos National Laboratory
Los Alamos, New Mexico

Los Alamos
NATIONAL LABORATORY
EST.1943

National Nuclear Security Administration

LA-UR 10-08363

TABLE OF CONTENTS

I. Agenda

CMRR Public Meeting

Wednesday, October 6, 2010

Hilltop House, 400 Trinity, Los Alamos, NM
6:30 – 8:30

6:30 – 6:40	Welcome	B. MacAllister
6:40 – 6:50	Supplemental Environmental Impact Statement	R. Snyder
6:50 – 7:10	CMRR Project Presentation • Project Overview and Background • Project Update	S. Fong R. Holmes
7:10 – 7:30	Questions	B. MacAllister
7:30 – 8:00	Interested Parties Presentation / Comments	Interested Parties
8:00 – 8:25	Questions	B. MacAllister
8:25 – 8:30	Closure & Adjourn	B. MacAllister

II. Transcript

TRANSCRIPT
of
Public Meeting

Chemistry and Metallurgy Research Replacement (CMRR) Project

October 6, 2010

[The meeting was called to order at 6:30 p.m. in the Hilltop House, Los Alamos, NM, by Meeting Facilitator Bruce MacAllister.]

[LANL Slide 1]
[BRUCE MACALLISTER, FACILITATOR]
Good evening. Can we go ahead and get settled in here, and we'll get started, try to start the meeting as quickly as possible, and as promptly as possible. And we'll also try to, um, well we will do more than try. One of my firm commitments and something I've built part of my reputation on is landing meetings on time. We do need to close this meeting promptly at the 8:30 mark. Uh, we have to be out of the building soon thereafter, based on the room rental agreements. And, uh, just our own commitment to keeping things on time.

[BRUCE MACALLISTER, FACILITATOR]
My name is Bruce MacAllister. I've been your local facilitator for these meetings now for the last several meetings. Um, I'm a[n] organizational consultant and meeting facilitator based in Tesuque. In New Mexico. And, uh, if anybody has any questions in terms of contacting me for follow up or anything like that, there are some business cards back there.

[LANL Slide 2]
[BRUCE MACALLISTER, FACILITATOR]
Tonight's meeting, as usual, is based on the agreement between the parties. The scope of this discussion, as usual, is around the status and progress on the current construction progress—project for the CMRR. And, uh, we will have a, as you can see in the agenda, a, a supplemental, a bit of an insert into the agenda to explain the process for discussing things outside the scope of this meeting, in terms of the supplemental environmental impact statement, ahm, and the process for that.

[BRUCE MACALLISTER, FACILITATOR]
There are materials and information about that process, about the supplemental environmental impact statement, agendas, other materials, back on the desk, and so if anybody has any questions or information about that, or needs information about that, it's on the table. You can see our list of speakers tonight.

[LANL Slide 3]
[BRUCE MACALLISTER, FACILITATOR]
I will quickly go through the ground rules and the content for the, the meeting, and the basis for the meeting. As you all will probably recall, there was a settlement agreement entered into which allowed for these public meetings, or provided for these public meetings. And these meetings have been held now for several years, biannually. This is the second meeting for this year. These are the parties that were original participants in that agreement. And again, these meetings are held roughly every six months within a thirty-day window, depending on the mutual convenience of all the players. So.

[LANL Slide 4]
[BRUCE MACALLISTER, FACILITATOR]
As far as ground rules—there are a couple of things that are really important. Lemme start with—because these are recorded, and because these meetings are then subsequently documented, it's really important that every time you speak you give me the opportunity to get the mike to you so that (a) everybody can hear you, but (b), we can get the content of your question or comment into the record for, that we've recorded.

[BRUCE MACALLISTER, FACILITATOR]
Secondly, it's also really important in that process that each time you speak, because when we are [transcribing] this we won't have the pleasure and benefit of seeing your face, will you please start your question or comment with your name? Okay? That's been the case. I will be as liberal as we can in terms of allowing questions while keeping that balance with understanding that we have the agenda and that we need to land the meeting on time. Another thing that is really important, because we are recording this, and all of us here, especially myself, are trying to follow the content of the meeting, if we can speak one at a time, and speak respectfully, understanding that what you say is gonna be recorded and will be in the record thereafter, that will be very much appreciated. So, no personal attacks. Let's not personalize the issues. We are all here to, to uh, to address the issues as productive citizens.

[BRUCE MACALLISTER, FACILITATOR]
Cell phones, please—just a reminder to put them on mute now. And, um, if there are requests that you want for content to be included in the next meeting, or in future meetings, or there [are] things that we can't get to tonight, consistent with the scope of this meeting, consistent with what we cover in these meetings, I will be boarding that on the flip charts as we encounter that.

[BRUCE MACALLISTER, FACILITATOR]
Let's see. Have we covered every thing? I will be trying to keep a balance in terms of input, giving everybody an opportunity. So, if you will raise your hand I will note it and get to you just as quickly as I can. If it looks like I'm missing you, please, people in the audience, point to someone that I seem to be missing or if I forget to get back to you, don't be shy about being insistent so that I can stay on top of making sure that everybody has the opportunity for the input.

[BRUCE MACALLISTER, FACILITATOR]
So, um, without further ado, I'll turn this over to—you're gonna go ahead and kick it off?

[LANL Slide 5]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Yeah.

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Do I need this with this?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
No, I don't.

[BRUCE MACALLISTER, FACILITATOR]
I'll keep this with this.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
There you go.

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Uh, welcome everybody to our tenth meeting. I appreciate everybody coming on out. I know it makes for a long day, and uh, but we'll make sure that we, uh, make sure that we transfer as much information as possible. You are gonna hear a lot of acronyms today. CMRR, Chemistry and Metallurgy Research Building Replacement Project. We'll be probably saying CMRR, or LANL or DOE. LANL is the Los Alamos National Laboratory. DOE, Department of Energy. So on and so forth. I'll be sharing the presentation tonight between Rick Holmes [Richard A. Holmes, CMRR Division Leader, Los Alamos National Laboratory] and myself. I'm part of the CMRR federal team and Rick is part of the contractor, and he's division leader for CMRR. With that, we'll be splitting up this presentation.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
But first I wanted to make sure that we, uh— I want to introduce Roger Snyder [Deputy Site Office Manager for Business, Environment, and Security, LASO, NNSA] who is the deputy site manager for the Los Alamos Site Office to give a few words about the supplemental environmental impact statement.

[LANL Slide 6]
[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
I'll try to stand outside of the eyeshot here. First of all, welcome. Good evening. I think— How many people saw the announcement for this meeting in the *Monitor*? Okay. Not very many, apparently. How many people saw the notice of the intent filed for the supplemental EIS [environmental impact statement] in the paper? Okay. A little bit more, little bit more. Okay.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
So they are two separate activities. And so, we, since the last public meeting, we did take on, and opt to do a supplemental EIS on the CMR nuclear facility. This is not atypical for the Department [DOE] for large projects. Large projects have long evolution and maturation cycles. It takes— you have to go through the design process, and you learn a lot through that, as you've learned in these public meetings. So projects like WIPP, the National Ignition Facility in California, large complex jobs have had these types of supplementals. So you see the schedule up here. We get published October first, and there's a copy in the back. Ahm, and so that laid out our intent and kinda the initial scoping of the process. We do have public scoping meetings. Pretty similar to this, if you haven't participated in the past, except the focus is entirely on the supplemental EIS and the focus on the construction of the CMRR nuclear facility.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
We have one here, in the county in White Rock, and then we have another down in Pojoaque.
Since we have this separate EIS process going on, I wanted to draw the distinction between the two meetings. And so in this process we are recording it for the purposes of the agreement here. But this is separate, then, the supplemental EIS where we record and respond to your comments for the purpose of scoping the CMRR nuclear facility. And so, and the environmental impact statement process. And so, there's two separate meetings. We are looking forward to you participating in the one of the scoping sessions when it comes up. But I wanted to encourage, and also, maybe suggest, that if you really want to

be heard it on that topic, that's the forum for, for your comments, because they'll be part of the record and we will respond.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
And so, uh, I also wanted to introduce John Tegtmeier. John will be document manager for the supplemental EIS, so you have a face with the name. And so he will be managing the supplemental EIS process. And, as it unfolds in the coming months. Okay. And so, the focus tonight, as Steve Fong here represented, is really a focus on the rest of the project. We're gonna talk mostly about the RLUOB and the REIS [radiological equipment installation] since we are still seeking input on the CMR[R] nuclear facility.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
Are there any questions about that? I'll stay for the rest of the meeting if there's any questions that come up along the way. Otherwise, I'm gonna let you get on with it and hand off to Steve [Fong].

[LANL Slide 7]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Just a little further on, is that when we all agreed, as interested parties, we thought about this ahead of time. We wanted to make sure that we did not combine meetings, that we keep things separate. We have things for this meeting as well as the things such as the, uh, things such as the SWEIS [Sitewide Environmental Impact Statement] that will be going on, or the supplemental EIS. So we wanna make sure that we have distinction and stick to our agreement. Thank you.

[LANL Slide 8]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
So, there's the word "replacement." We are a replacement, uh, this, project. What are we replacing? We are replacing the existing CMR facility that's located in TA-3. It's an old building. It's in operation about 60 years. As you can see, it was built in the late 40s, went operational in the early 50s. It's at the end of its design life. And there's a real significant need to upgrade and replace those capabilities within Los Alamos. Uh, NNSA, has, has a firm commitment toward modernization, and through that modernization, we have the real opportunity, that endeavor that we are about to go on. We have an opportunity to modernize the facility so that we can have— ensure the operators can do their work efficiently. We can modernize to actually reduce the security costs in our security posture by consolidating all of this, of the replacement facilities into a single area. Modernization will help us bring in and use the latest, install the latest safety controls for the protection of the public and the worker[s].

[LANL Slide 9]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Modernization will also provide us, allow us to install and incorporate the latest in environmental sustainable design attributes for our facilities. So these are sustainable facilities that we are gonna try to be building, albeit nuclear. CMR is gonna be, uh, basically that building is gonna be replaced by two— two facilities: the Nuclear Facility, and the Radiological Laboratory Utility Office Building. Sometimes we call that as RLUOB, uh, sometimes we just call this the Nuclear Facility.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
The Nuclear Facility is a Hazard Category 2 facility, which means it is the core facility. That's where all of the, uh, the core operations for actinide chemistry and materials characterization will be performed. It has the ability to house six metric tons. It has about 22,500 square feet of laboratory space, operational space. That's where the, the operators will actually be in gloveboxes performing the chemistry operations.

Uh, it is going to be within a security envelope, or what we call the Security Cat I envelope. It's just the highest pedigree of security for that facility to make sure that, that those assets are secure.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
This is only in design. We've been in design for quite a number of years and we still have a way to go on design of the nuclear facility. The rad lab, or RLUOB facility— the shell of that facility has actually been constructed. That was 164 million, and we brought that in, in time, in terms of accordance with the performance parameters that we agreed to and we outlined with Congress. It provides a radiological space, about nineteen five— 19,500 square feet of radiological space. And the radiological category just means we are allowed to bring in about 8.4 grams of 239, uh Pu-239 equivalent, which is not a lot. It's kinda like, if you would, the size of a quarter, as opposed to the six metric tons that is allowed, and we are designing for in the Nuclear Facility.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
We centralized what we could. All of the centralized utilities, everything that we could, draw out of the laboratory into the rad lab. We are providing the workers, 350 offices and we're gonna actually have, we have consolidated training space on the top level of the floor.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
We are in the midst of, now, of outfitting that facility. We are making that operational. We plan to move in the folks at about this time next year, the workers will show up. And about a year following that, in 2013, which is our performance agreement, is, that's when the radiological operations will start. Again, the REI portion, the radiological equipment installation portion of this work is currently on-going. A lot of work is, is going around at the site.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
So both of these projects make up the CMR[R]. The workers that go to the rad lab are the same workers that go to the nuclear facility. Okay.

[LANL Slide 10]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
This is the layout. And I think some of you are new and perhaps are not familiar. This is Technical Area 55. There is currently, [which] currently contains our existing plutonium facility known as PF-4, or TA-55. The rad lab is now constructed. The nuclear facility will be adjacent. There is currently a security perimeter fence that goes all the way around, kinda out and about right now, of the, [points with laser along the security perimeter] that surrounds the 360° around the plutonium facility. Once the nuclear facility is built, that security perimeter fence will be moved around the nuclear facility. The rad lab will be located outside of that perimeter, of that security perimeter, perimeter fence. Um, there is a tunnel between the rad lab and the nuclear facility as well as a tunnel between the nuclear facility and the plutonium facility that's planned. Uh, we are going to—

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Let's see, what else to say. Well, this is basically looking north. There is the Parajito Road. We may have to shift this road later in the construction of CMRR. And there's gonna be also some batch plants and other things that are located in support of construction of the nuclear facility, located down, down the road. [Points to the upper right corner of the slide.]

[LANL Slide 11]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Last year— We just ended the fiscal year, ended in September, but we received 97 million [dollars] of that, some of that went to the rad lab equipment installation, and some of it went to design. This year's

request is for 225 million for this fiscal year. [The US] Congress has not passed the budget, and it's simply a request. So we are waiting, and we're in a time frame known as "continuing resolution," so we get monthly allotments until Congress passes the budget. So we have not received authority for that 225 [million dollars] yet. Again, our charge is to move forward and complete the rad lab, and we just did that this year. And I think towards the last part of the, the last public meeting I think we announced that we've actually constructed the facility shell. And so far, the performance on the equipment installation is going on very well. We are well ahead of schedule and Rick's [Richard A. Holmes, CMRR Division Leader, LANL] gonna talk about that a little bit later in the presentation.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
One of the things that is key in terms of the nuclear facility design is that in late last year, we had to certify to the safety adequacy of the facility, of the design of the facility. No only NNSA had to do that, but the Defense Nuclear Facility Safety Board, which is a, it's a separate agency that reports directly to Congress, which is an oversight committee. Very technical, that looked at our design in great detail. This was a, an arduous process. A lot of work has been done. A lot of detailed review has been done. But after all said and done, everybody certified, and, uh, we, uh, basically went through the rigor to demonstrate that indeed we had integrated the right safety controls necessary to protect the public and the environment.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Also last year, we, uh, on sorta the programmatic side of that side, the administration of, and the Congressional reviews were held to look at whether or not the nuclear facility was the still capability that is required for the nation and the defense of this country. That was validated in 2009 by a Congressional committee and then finally with Secretary [Robert] Gates review of the uh, the uh, our designs and what we are going provide in terms of capability. They issued the Nuclear Posture Review, which says that, the nu— the CMR nuclear facility is indeed what is necessary for the Complex.

[LANL Slide 12]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
A little of, sort of well it is, a high-level schedule of where we've been. One of the things that ya' know, we go through, and the project basically started in the 2002 time frame. At that time, we steadily tried to bring in the rad lab first, which is what we've done, but we've also conducted our first initial EIS in a 2004 time frame. Uh, things have trans— gone by, there's more in terms of, of environmental impact statements that were done in terms of a complex nature, or at the sitewide level. We had the certification, which is a big deal. But the main thing that I really wanted to show here is that we've been through multiple administrations. We have bipartisan support for this project. It's been through not only the Bush years but the Obama years. There is strong Congressional support for the CMRR. And uh, we, we now sit in the 2010, into, starting up in the 2011 fiscal year, which we plan to, again, bring in the rad lab. That's when it'll be occupied by staff. And then radiological operations in 2013.

[LANL Slide 13]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
A little bit about, uh, what we've always— a lot of interest about where we're at in terms of schedule. Um, uh, there's a couple of things. Well, first of all, the operating permit. The operating permit is for the laboratory as a whole. It's where all air requirements are captured for the laboratory as a whole. It's gonna take our permit that we have the rad lab, permit conditions, and incorporate those into an operating permit. That's going on right now as we speak. And basically it just rolls up what our permit is into a master permit and it provides the regulator with a much bigger hammer. They have much more, there's much more enforcement capabilities in the operating permit. So that's on-going. Our permit is basically being rolled into the institutional operating permit. We do have a need for a pre-construction, or a permit for the nuclear facility. And we are gonna be going through that, so by March of next year, when we have

our next public meeting, we'll probably be coming closer to that and we can probably estimate exactly where we are at, but we hope to start preparing that in the summer time of next year.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
We also will need a batch plant. We'll need a batch plant permit for the concrete necessary for the construction of the Nuclear Facility. As well as, we need a pre-construction application by EPA, which we will also be in development in, I guess, the start in development of application of late next year. But that will be required before we actually put the concrete in the hole. So that is the current schedule. And I think by our next public meeting time frame, and then you probably will get information from the supplemental [EIS], we'll be able to hone in [in] greater detail exactly where we're at in the preparation. And we have, again, conditions within our agreement, that we will notify all parties when we actually do apply. And there'll be time for public comment on those permits.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
I'm gonna' turn it over to Rick [Holmes] right now.

[LANL Slide 14]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
For those of you who don't know me, my name is Rick Holmes. I'm the program director, project manager, person responsible for CMRR for the Laboratory. Have been here four years now just this month, working on this project.

[LANL Slide 15]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
I'm gonna talk about principally the work that's been accomplished on the rad lab facility itself and then where we are in the equipment installation phase. And some of this you may have seen before, but for those of you who are new, this is the completed exterior for the laboratory. It's the rad lab. It's built in two sides. There's an uncleared side, so if you have a new worker coming into the Laboratory, while they are getting their security clearance, they can actually do beneficial work and do some things. That uncleared and cleared side goes all the way through the building, through office spaces and on the laboratory floor itself. The equipment is in the basement. The first level, which is mostly underground, is the laboratory space, and then there's two floors of offices and then a central training space on the fourth floor so that the workers who work at TA-55 don't have to go somewhere else to go to training that they have to go to.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
A number of pretty significant accomplishments: Over two million man-hours worked without a lost-time accident. That's, that's a good safety performance. The building is going to be LEED—that's Leadership in Energy and Environmental Design—at the silver level. That final paperwork will be submitted probably within the next few months for actual authorization and approval of that process. This is the first building of the Laboratory that is actually been LEED, or will actually be LEED certified. There's been buildings that have been built that were capable, but not actually gone through the certification process.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Uhm, recently the project was awarded the highest level that DOE has for pollution prevention, the DOE EStar award, which will be awarded by Secretary Chu on Friday in Washington, and was built to— using the NQA1 program. In a graded approach. Obviously if you are doing work in an office you don't need the stringent work that you are doing necessarily for a laboratory space.

[LANL Slide 16]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Some of the pictures that are on these slides— I think some of these show up better on the handouts that you have. This is a conference room that's up on the upper floor. The atrium and a lot of use of the glass for natural light leads to LEED points because you don't need to use as much energy. Go to the next set of charts.

[LANL Slide 17]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Some of the equipment that's inside of the building— Both these projects, the rad lab in particular that's built, and the nuke facility are very large in terms of the ventilation system requirements. And that's, and that's on purpose so there's flexibility in terms of capacity for changing probably from gloveboxes to more open-front hoods. As science gets better and better, more and more you would use an open-front hood as opposed to a glovebox for particular work because the sample size that you need will get smaller and that capacity is built in, to go from gloveboxes to open-front hoods. Let's go on to the next chart.

[LANL Slide 18]
[LANL Slide 19]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So on the RLUOB equipment installation activity, we've been— and you've seen this chart before— and one of the things that's happened over the last few months is a number of things that have started that weren't planned to be done just yet. In TA-50, right near to where my office is, there's a parking lot that is to be built for the workers who are in TA-55 whose parking spaces have been taken up by the security fence project. We started that work within the last two weeks and it will be completed by December, and that's part of how we get ahead of schedule, is by starting work earlier. On the laboratory floor, all the walls are built out and we've awarded the mechanical, the piping and electrical subcontracts for construction and those contractors have started to work against the, against the baseline. So, when Steve [Fong] talks about the 199.4 million dollars, that is a commitment that's been reviewed, it's a commitment by the Laboratory and the Site Office to deliver on time, again, by the end of, by 2013, and within that 199.4 million dollars. And a vast majority of the contracts that need to be awarded for that work to be completed have been awarded and are actually working ahead of plan. Let's go to the next chart where you can see some that progress that's going on. There's some of the gloveboxes that are in fabrication in Idaho, um, you can see different viewpoints of those.

[LANL Slide 20]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Go on to the next chart.

[LANL Slide 21]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
This person is taking measurements of the dimensional tolerances for, this is an open-front hood that will go, ultimately after it is coated, if it needs to be coated, to go into the laboratory itself. The first of the gloveboxes should start to arrive some time later this year. And over the next six to eight months all come into the site. Piping and, and all the mechanical work get started in the laboratory floor so therefore it'll be ready for when the gloveboxes come in and to just get installed.

[LANL Slide 22]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
And again, some of the other pieces of equipment. Integration of the ventilation system—this is one of the fans that tie in and exhaust out from the laboratory spaces. All that equipment that was installed as part of the facility needs to be integrated with the gloveboxes themselves as part of this overall process.

[LANL Slide 23]
[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
And as Steve [Fong] said, workers will occupy the office spaces, meaning they will move in from somewhere else. There's not new workers who are hired that go into the rad lab. They're gonna move from somewhere else. They'll move into the office spaces a year from now, and then sometime, because we are working ahead of plan, sometime in Calendar Year '12, we will turn over to the readiness review process to validate that, "yes, work can go on inside the laboratory spaces," and then work will start in those laboratory spaces. [Pause] Over to you.

[LANL Slide 24]
[BRUCE MACALLISTER, FACILITATOR]
Okay. This is Bruce MacAllister speaking again. We have time now for questions. Remember, when I pass the mike to you, or when you have a question, give me time to pass the mike to you, and then start with your name. Okay? Sir?

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
I'm Jay Coghlan, with Nuke Watch New Mexico. Steve [Fong], uh, two questions for you. Do you have a total cost for the total project yet?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
No we don't have.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Okay.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Okay.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Second question. If we can go back to page 11—

[LANL Slide 11]
[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
I'd like to focus on that business where you say, or this presentation says, that work scope remains unchanged over the years. And that's actually kinda my point, is the Laboratory attempted to have approval for expanded plutonium pit production and that hasn't happened. Uh, you talked about the Nuclear Posture Review, which definitely states that there's a production capability that's required, but it doesn't prescribe at what level. So, this gets to the purpose and need for the nuclear facility, which the nuclear facility's express purpose is to be able to create that expanded pit production capability up to 80 [pits] a year from today's 20 per year. So, again, this hasn't happened.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
And to add to this, the NNSA administrator wrote in response to the Defense Nuclear Safety Board that materials characterization had been moved out of the old CMR Building into PF-4. And, I would contend that analytical chemistry could be moved there as well. But, in short, given the lack of expanding pit production, what's the true need for the nuclear facility?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Well, the project has got instructions from the program and we are responsible, the project, we get those instructions from our program side of the house. We have— CMR provides the capability for actinide

chemistry, materials characterization, for the whole site of Los Alamos. When we are not doing either pit surveillance or supporting pit manufacturing, it's open to a wide range of other capabilities that are in high demand. For instance, a lot of nonproliferation work, a lot of sample work that's being done for, let's say, environmental restoration, a lot of advanced fuels. Basically, all of the capabilities have been validated and are needed, not only by Los Alamos, but by the Complex. So, uh, the range of capabilities which the project provides is vast and it just does not support only weapons manufacturing, but it supports basically everything nuclear at the entire Laboratory. So, the CMRR, it is a capability that allows nuclear work to be performed throughout the Laboratory. Okay. So, in terms of, of what the ranges are and that sort of stuff, in terms of the capabilities, and what are the levels, I don't know about that. I, in terms of— we have those program folks that, that have had the need, that have looked at our, at our capabilities, and have validated that "yes, it is, if anything, a minimal set of, of capabilities being performed." They in some instances, want a great— a larger, but we are set, we are set at twenty-two five, and whatever we can fit, 22,500 square feet, and whatever we can fit in that space. That's what, that's what I'm saying. We have not been given any other requirements basics to change anything else or additional capabilities than what is being performed in the CMR facility.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
That's the best I can do for you Jay.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Thank you.

[BRUCE MACALLISTER, FACILITATOR]
Next. Question here?

[LISA PUTKEY]
Yeah. My name is Lisa Putkey. I'm gonna think outside the bomb. And I am from Chimayo. And I notice that in your presentation you said that you contact interested parties. And I'm a resident around here, the communities around here, and so I would think that all residents are interested parties being the nuclear, plutonium, plutonium, that you are working with here. So, can, do you, or will you, mail all of the residents around here to let them know when you have these public comment periods? And being that it's a public comment period, and you are expecting lots of people from the public, can you get bigger rooms next time for the public comment period? And, lastly, just to know, um, I really, really don't understand why we need new capacity to make new plutonium [pits] and, um, more capacity seems to me like very hazardous use of substances that you are bringing into our community and, um, yes, I really think those letters should go out to all the residents.

[BRUCE MACA LLISTER, FACILITATOR]
[Starts to hand mike to someone else.]
You have a comment?

[LISA PUTKEY]
I'd like my question to be answered about, um, if people are gonna be mailed, [notice to] residents about public comment periods or if we can get a bigger room.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Well, I understand the bigger room question because it looks like we're near capacity, so we gotta make sure that we accommodate, especially when the issue comes up, when we'll have the NEPA process going on, so there might be actually more interest in the future, so I'll keep— thank you for that suggestion. I also see the need possibly coming up pretty soon. Near capacity.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
In terms of the interest— "who's an interested party?" Uh, that's the term coined by the groups that we all came together early in about, I think it was, what was it Joni [Arends]? about 2003, 04, 5-ish? It's just those parties, which we all got together and we worked together to try to come up with the, a reason, to come up with a format and a playing field of how we communicate information about our project to the public. And everybody, as you can see, the New Mexico Environment Department as well as the DOE and the Laboratory, as well as all the other interested party groups were all a party to this agreement that we hold these public meetings. And of course, these are interested parties, but I'm sure there's interest in the public, and I guess I'll look to Lori [Bonds Lopez]. Can you explain how we go about, in terms of the mailing, in terms of everything else we do in terms of announcements, as an institution and then for the public?

[LORRIE BONDS LOPEZ, OUTREACH AND PUBLIC INVOLVEMENT, BUSINESS AND PROGRAM SERVICES, LANL]
For these meetings, what we do is put advertisements in four different newspapers, *The Rio Grande Sun, The Santa Fe New Mexican*, *The Journal North,* and *The Los Alamos Monitor*,
and so, if you can keep, stay tuned, then you'll see that. We also have a website, and we can put the announcements on our Website so that you could look at that. So, we do try to get ahold of as many public as we can. And one of the things that we haven't done is put something on our front page of our Website or— but that, y'know, that's a possibility because I think that people go to the Web more often than the newspapers these days. In terms of the public comment period for the air permit, that will follow the New Mexico Environment Department's instructions.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
It also, is it correct that if we— if you leave your name in the, I guess, in the front here, the sign-in, do we have addresses?

[LORI BONDS LOPEZ, OUTREACH AND PUBLIC INVOLVEMENT, BUSINESS AND PROGRAM SERVICES, LANL]
We do have addresses.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Okay, so we can contact you in the future, definitely, let you know. And we appreciate your comment. So, thank you.

[BRUCE MACA LLISTER, FACILITATOR]
So Lori [Bonds Lopez] confirmed that there [is] a record of addresses as well. So.

[MARIAN NARANJO, HONOR OUR PUEBLO EXISTENCE]
Good evening. I'm Marion Naranjo. Director of Honor Our Pueblo Existence based out of the Santa Clara Pueblo. I have a couple of questions. One is when, Steve [Fong], you were talking about the air quality in the RLUOB, you mentioned the regulators. Who [are] the regulators for that permit?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Sure. Okay. Can we go to slide, uh, I don't know what it is. It's further on at the end of my presentation, the green slide with the permits.

[Discussion off-mike about getting to selected slides.]
[LANL Slide 13]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
For the operating permit, that is a New Mexico NMED permit, okay, for the operating permit. And that, again, is the institutional Laboratory permit. So that's known as the "operating" or "Title V" permit.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
The, as well as the permits for non-radioactive air emissions. Uh, this NSR permit for the nuclear facility as well as the batch plant are permits that we have to get through the New Mexico Air Quality Bureau. Okay. New Mexico Environment Department.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
The radionuclide emissions that, and the pre-construction approval that we'll need to obtain before construction starts is received out of EPA's Region VI out of Dallas. Okay. So, it's both EPA for the radionuclide emissions and then for the non-rad emissions or basically our criteria pollutants, things of that nature, we'll have to go through New Mexico.

[MARIAN NARANJO, HONOR OUR PUEBLO EXISTENCE]
Thank you. And then my second question is, ah, who provides the gloveboxes and the open covers to the Lab.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Well, uh, fabrication of the gloveboxes, uh, are currently being fabricated for the RLUOB. What we do is, we have an open bid process. We go through, try to qualify those vendors throughout the country that are available and can do this sort of work. We go through a standard procurement process. We go through competition. As long as they're qualified, then we go through, and we do a qualification check to make sure that before these folks can actually bid on our work that they are qualified and capable too of actually performing them. So it's an open competition. So this work right here is being done up in Idaho. Premier is our subcontractor in Idaho. When we go to the nuclear facility, that's gonna open up, and we may look at multiple fabricators for that number of gloveboxes that we will need. But we are far from that right now, Marion. That's much, much later, and again, it will be open for bid. The nuclear facility is gonna be quite sizeable, it's gonna be employing a lot of folks. We are gonna have a lot of industry in the, being provided, we're gonna have a lot of workers coming on up, all trades, that will be here. We're gonna need those guys who use heavy equipment, those masons, carpenters, things that, uh, manufacturers of equipment, and also the specialty equipment that actually go[es] inside the gloveboxes. So the nuclear facility is a whole different magnitude in the terms of the needs and the amount of folks that we are going to have to employ and the number of, of business partners we're going to have to bring on in to build the nuclear facility.

[MARIAN NARANJO, HONOR OUR PUEBLO EXISTENCE]
Thank you.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Sure.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
I'm Susan Gordon. I'm with the Alliance for Nuclear Accountability. And Steve [Fong] I have a couple of questions back to Slide 11. When you started your presentation this evening you said that LANL has been given a firm commitment for modernization. And I wanna know who it is that gave LANL a firm commitment for modernization.

[LANL Slide 11]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Well, it's a commitment that's looking at the entire complex, the Weapons Complex throughout the US. Tom D'Agostino has been our champion in terms of modernization. These are things that, that we are living with old infrastructure. What we are trying to do is consolidate operations where we can and become proficient. Become more economical and become safer. So, that is a modernization initiative at the top level. Roger [Snyder], I don't know if you want to add anything to that? Okay.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
Okay. So I would say— Again, Roger Snyder. I would say a couple of things that I would point to from the administration standpoint, the NPR, I think, clearly talks about one of the avenues, or elements that it's based on is a modernization of the existing complex. And then I'd also look to the decisions and the votes that Congress has had leading up to a budget and now the continuing resolution that also support where the administration is heading and reaffirms. So, in terms of a LANL commitment, CMRR isn't mentioned explicitly in the NPR, and as is UPF, the facility at Y-12, and in terms of other avenues at LANL, I would look at, to the budget, and where that's heading and get a sense of ramp-up. It's not just on the NNSA and the side of the equation that's the weapons side; the science side is also ramping up.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
Okay. The, um, my second question is that, ahm, again Steve [Fong], you said that the president's request was for 225 million [dollars] for Fiscal Year '11, but the continuing resolution actually has an additional 625 million [dollars] for modernization, and since the continuing resolution is only until December, I'm wondering what portion of that money is coming to LANL and what it's gonna spent on.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
The, uh, the figure that we are working on is one-twelfth. We get monthly allotments to continue with, that much is allowed or appropriated from Congress to allow us, and give us authority. So we're about a twelfth of our requested budget. We haven't received anything this year, but I think it's a twelfth or thirteenth— is that—?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
It's gonna be— This is Rick [Holmes]. It's gonna be a twelfth of 200 million dollars for the project. So the part of that plus was, to get CMRR to, it's 199 and change. But close to 200 million dollars of which a quarter of that would flow during the first quarter of the year.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
So how much of that, I mean, ya'know, a quarter is how much money? I wanna know a number.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
A quarter of 200 is 50 million, roughly.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
And what is that going to be applied to?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So the money for this year flows to—

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
So you get 50 million for each month?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
No. You said a quarter of 200. A quarter of 200 million dollars is 50 million dollars. So the first quarter of the year, during the period that the continuing resolution is in effect, minus a few days, because I think it ends December third, it doesn't go all the way through the quarter.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
Right.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Okay. Well, we will get that in monthly allotments. So a piece of that will come in each month as NNSA authorizes it. That money is used for both the continuation of the rad lab equipment installation activity as well continuing design on the nuclear facility.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
Okay.

[LORETTA MENDOZA]
Yes. My name is Loretta Mendoza. And I wanted to know that, y'know we live here, I live from Chimayo, here in the Valley, we get the newspaper, when, we wait. So like, if we got it today, we won't hear about this meeting until next week. So, is there any way that we can get it out to the public sooner, like over radio stations, local radio stations, something like that? 'Cause that's usually what happens. That's why we never hear about these. We get 'um next week.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
What is that paper that you—

[LORETTA MENDOZA]
The Sun.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
The Sun. Okay. Yeah, we could—

[UNIDENTIFIED PERSON]
Down in the Valley we [unintelligible words off mike].

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
There's always, y'know, communication, how we communicate, and how we get everything out is always an area that we can improve, and we will look forward to that. And I appreciate your comments. So, that's, that's good— How'd you hear about it, I guess?

[LORETTA MENDOZA]
I heard it from a friend.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Friend. Okay. So we'll—

[UNIDENTIFIED PERSON]
From a friend.

[UNIDENTIFIED PERSON]
[Unintelligible words off mike.]

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Got it. Okay.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Thank you.

[BRUCE MACALLISTER, FACILITATOR]
Other questions?

[BEATA TSOSIE, TEWA WOMEN UNITED]
My name is Beata Tsosie. I'm with TEWA Women United. Um, wondering, I guess, the, how they justify classifying the building as a sustainable building when the activities taking place in that building are anything but sustainable? It's one thing, y'know, like the energy to run the utilities, but, it just seems like kind of a contradiction there. And also, how can we find out what is going to be released into the environment from this building? And how much? And what levels of those releases are, um, safe levels to be exposed to for infants. I have two daughters and I'm really, I live twenty minutes from here. I'm really concerned what they are gonna be exposed to. And how much they are gonna be exposed to and if it's been determined that it's safe for them to be exposed to that? And if not, how is it even able to go forward with this project when that hasn't been determined? Um, so I know you mentioned that there's exhaust out from some of those gloveboxes into the air. If you would just kind of talk about what is being released from this building?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Sure. So, first of all, thanks for the comment, uh question. Uh, all of the emissions in terms of impacts from what it takes for the construction of the facility as well as what is going to be, in terms of our expected operational emissions or releases, are all going to be detailed in the supplemental environmental impact statement. So we are gonna go through that and those things will be detailed at that point. As well as, any time we go for a permit, in terms of an application, we have to go through and make sure that, we estimate those emissions, we, we lock down the controls that we need to make sure that any emissions that we do release are far within codes and standards. Okay. And after, just for the nuclear facility, y'know, and the rad lab, we have number of redundant controls, in terms of emissions.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
So, all the codes and standards that we apply, and everything in terms of our design basis, that is the utmost of importance, to make sure that, that any actual emissions from this facility are, are well within any applicable regulatory requirements. Uh, for instance, in terms of, the sister facility that's up, PF-4, we monitor that facility for its radionuclide emissions. And we basically see "non-detects." No emissions detected out of that facility. As well as that information is confirmed through a whole network of environmental sampling stations. So we always know where we stand in terms of our impact to the environment. These facilities, as being designed, are, will have all those controls. That's what we are going through, to make sure that under any postulated accident, our routine operations, that not only we have the proper controls, that we have redundant controls in many cases.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
So, yes, it is very important that we do build this thing to the current codes and standards. Those current codes and standards do look at the core, the effected populace. So they look at those folks, and a lot of the emission standards are health-based standards that they go through and they actually look at, and they are derived based on public, those folks that are sensitive, those that are elderly or young, etcetera. So those are how, those standards are, are promulgated, not by us, but by external regulatory groups such as NMED, or EPA, or so on and so forth. So, uh, we are, it is our mission and it's our duty to build safe

facilities, not only to the public, but to the environment. So, uh, please look at, and please be involved with our supplemental [environmental] impact statement. There you'll actually get the details of what the estimates are.

[UNIDENTIFIED PERSONS]
[Unintelligible words off mike.]

[BEATA TSOSIE, TEWA WOMEN UNITED]
My name is Beata. What code of standards are you referring to?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Well, there's a whole variety. There are codes and standards that are applicable to air emissions. So if you go to the, for instance, the radionuclide air emissions is 40 Code of Federal Regulations Part 61. That governs radionuclide emissions from DOE facilities. If you go to New Mexico Air Quality Control Regulations 2 point something or 'nother, 2.6 something, I can't remember what it is, you'll find the regulations for non-rad emissions for the facility, the standards that we have to meet. And that's just air emissions. You take water. You take the RCRA [Resource Conservation and Recovery Act]. You take, "what does it take to build the facility?" There are many, many applicable codes and standards that we all have to, as we design the facility, make sure we validate that we conform to those regulations. It's uh, the list of regulations and standards is, if you stacked and wrote 'em— They'd just cover the floor if we tried to lay them all out.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Good evening. My name is Joni Arends. I'm with Concerned Citizens for Nuclear Safety. So, Steve, it may be helpful, because the New Mexico regs— Let me back up; the EPA regs for radionuclides are pretty clear in terms of what's required. But once you get into the New Mexico air quality regs, you have construction permits, you have Title V permits, and so it may be really helpful for our meeting in March to have a, maybe a one-hour training session ahead of time, so that people could, maybe the NMED folks could come up and we could have a discussion about these various permits. Because the batch plants are under a different permitting section than the Title V, and that's different than, ahm, for the new source review. So it would be really good if we could work with the NMED to, uh, have a training before our meeting in March.

[One person applaudes.]

[BRUCE MACALLISTER, FACILITATOR]
Other questions? Yes sir?

[ROGER SNODGRASS, SANTA FE NEW MEXICAN]
I'm Roger Snodgrass with the Santa Fe New Mexican. Um, couple of questions about the design of the building. The design contract. Wonder if you could tell me what stage that's in? Do you have contractor, or you're about to get a contractor? When do you expect to have one? And, um, also, how can you design the building without knowing the outcome of the environmental impact process because there's significantly different places where that building might go or some version of that building might go?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So. This is Rick Holmes again. We've been in design since before I got here. We are awarded continuing design contracts, so we are under extensions of those vehicles that have been in place for a number of years. The principle designer for the facility is Sargent-Lundy, which is in Chicago, which has a lot of nuclear reactor design experience. The laboratory gloveboxes and laboratory layouts are being designed by Merrick, which is here in town and in Denver. And part of the overall process for design is, is there is

some continuity between the nuke facility and the rad lab itself. Merrick also did the glovebox design and the laboratory layout design for the rad lab itself. So lessons get promulgated from one to the other as we execute the rad lab itself.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
As far as what can we, what can we design, there are a lot of things that are common for this building whether you put it, where it's gonna sit or whether you decide to put it somewhere else. The only thing that might not be common is if you said "stop," and then you would then stop at a stopping point.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
We need to further the discussion of the safety basis to make sure that that's done-done and complete and reflected through the design as we go through this time period of study. And there is currently an option that the Defense Depart—, or the DOE has said, to support the overall mission, we've got some alternative that needs to go and continue on as we go forward. And so, there's a lot of things that we can do that don't prejudice either the outcome on paper in terms of how you go forward with this. A lot of things, if you decided to put it somewhere else, if that is, and I'm not presupposing any of the outcome, that would be useful in that whole case. We did something similar during the overall process for the complex transformation environmental impact stuff. We thought about whether or not that should, we should continue with where we are going, and what's common, and those kinda things. And so the project itself, at the project level has already done something very similar to this phase when the Department [of Energy] went through the complex transformation studies to make that overall decision back a couple of years ago.

[ROGER SNODGRASS, SANTA FE NEW MEXICAN]
Thank you. One follow-up question, which has to do with the gloveboxes. There was a notice, I think you probably know what I'm talking about, in the DNFSB report a couple of mon—maybe a month ago, but it comes out a month late, so having to do with a couple of months ago, talking about a really significant increase in the cost of the gloveboxes. It was going to drive the price from, I'm gonna say, 45,000 to 700,000 dollars a glovebox. Um, something like that. The numbers may be a little off, but not too far off. Can you, it seems hard to understand that kind of increase in cost, although I know that there are a lot of extra safety requirements. But can you explain what that's about?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
No I can't 'cause I don't know, I'm not aware of that report from the DNFSB. I don't— I'm almost certain it's not written about CMRR because if it was I would have seen it certainly.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Rick [Holmes], Dr. Nelson would like to add in—

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Okay.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Okay.

[TIM NELSON, PROJECT DIRECTOR, INTEGRATED NUCLEAR PLANNING, LANL]
Hi. Tim Nelson. So, Roger [Snodgrass], that's actually a different project. That's not this project. It had to do with reinvestment. Project at [TA-] 55. Had to do with glovebox standup grades.

[ROGER SNODGRASS, SANTA FE NEW MEXICAN]
[Unintelligible reply, off mike.]

[PETER NEILS, LOS ALAMOS STUDY GROUP]
Thank you. My name is Peter Neils. I wanna follow up on a question that was asked previously by a member of the audience, and it was in reference to the increase in funding for the nuclear complex of 640 million, plus or minus, that is in the recently passed CR [continuing resolution]. And I think, Rick [Holmes], her question was how much of that money is going to come to LANL. And you narrowed your response down to what is going to be invested in the CMRR. So how much of that is coming to LANL? Because I thought it was on the order of 85 percent.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
And I don't know what the total number is coming through.

[PETER NEILS, LOS ALAMOS STUDY GROUP]
I think it's like 530 million—

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
I don't know. I know—

[PETER NEILS, LOS ALAMOS STUDY GROUP]
[Continues]
—increase in LANL's budget, is what my understanding is.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
The reason I didn't talk about everything at LANL is I know what's coming to CMRR, and that, that's it.

[PETER NEILS, LOS ALAMOS STUDY GROUP]
Right. Well, I'd just like for you guys to address our questions as clearly as you can.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Yeah. Okay. I didn't mean to evade. I just answered on CMRR.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
We— This is Steve. To answer that a little bit more is: the request is 225. And what source that comes from, either it comes from the 600 million or through NNSA itself. We don't know what the project receives, what we've requested, and where that source comes from, it may be a variety of sources, and we just don't know the splits right now. But we'll try to bring that, bring that up for the next time. That's a fair question.

[BRUCE MACALLISTER, FACILITATOR]
We have time for one more question before we move into the next presentation. This will be the last question for this round. We do have another window for questions.

[ERICH KUERSCHNER]
My name is Erich Kuerschner. I didn't realize, I could've I suppose, held off, but I've got one quick question on page 9 of that eight tons of nuclear material, how much is plutonium?

[LANL Slide 9]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
This six metric tons?

[ERICH KUERSCHNER]
Right.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Six metric tons of plutonium.

[ERICH KUERSCHNER]
It's all plutonium?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
I would say "plutonium equivalent," I guess, is probably the safer term.

[ERICH KUERSCHNER]
Then my main question is a little bit, is asking a little bit more of what somebody in the audience asked about the need component. How can I, because you made a statement that said there's strong congressional support for the CMRR. And I remember not in the too-far past that the house appropriations committee didn't want to fund the CMRR. In fact they said unless you are contemplating building, designing a new weapon and having new pits, they don't see any reason to build it at all. So, I'm just wondering where in the supplemental EIS can I find what that reasoning is, what changed, or how I can reconcile what the need for this facility is?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
You are not going to find the need in the supplemental EIS. You are gonna find the base information in, there's a slide that shows the schedule, entire schedule of, from 2002.

[LANL Slide 12]
[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
The NNSA Complex Transformation Supplemental EIS, I think that's a good starting point for understanding what we are trying to do in terms of a complex. I think if you searched on this, if you basically googled it, you would find a lot of the discussion that, and the debate about, within that complex transformation as we are going through that discussion. Also, the Nuclear Posture Review, the debate whether or not this is the right infrastructure for the country, was discussed in the Nuclear Posture Review. And also, this also, is a good one, the Schlesinger Report that was in May of 2009 on the strategic posture.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Now those are basically studies. In terms of Congressional debate, that's what we'll all read in terms of the bills that were passed. Okay. And yes, they've been back and forth. And been through many administrations, but [there's been] continuation on funding.

[BRUCE MACALLISTER, FACILITATOR]
Okay. Thank you. Uh, it's time to shift gears. It's time for us now to hear the presentation from the Interested Parties. So we'll take a second to

[Missing words as the tape is being turned over and people are talking off mike while setting up for the Interested Parties presentation.]

[Interested Party Slide 1]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Good. Welcome everybody. Thanks Steve, for your presentations. Um, next.

[Interested Party Slide 2]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Oh, my name is Scott Kovak, with Nuclear Watch New Mexico. We're one of the interested parties. Tonight we're gonna do things a little differently. We're gonna have Joni Arends from Concerned Citizens for Nuclear Safety give part of this presentation also. Next.

[Interested Party Slide 3]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
We're gonna cover a few things tonight: design cost, the new supplemental environmental impact statement, accidents, concrete, seismic, water, and a reason for the CMRR. Next.

[Interested Party Slide 4]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
This, this shows a snipet of a, the page out of the Fiscal Year 2011 budget request. This is for the nuclear facility and the design of the nuclear facility. The first chunk of numbers here is the preliminary engineering and design at 65 million. You have to add extra zeros to all these numbers. And, to date, this is the, if in fact the Lab receives this request, the total of these numbers gets me the 420 million. The total that's been estimated so far is the 580 million. All the numbers on this chart. The original design estimate was 55 million in 2003. The total design costs are still to be determined. Next.

[Interested Party Slide 5]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Ahm, the design continues on. Ahm, there is no urgent need for the NF. There are no reliable replacement warheads, no new designs coming down the road. Ahm, I don't even believe, I'm not even sure the Lab made any pits, or has plans to make any pits next year. It's unclear. They've been doing six or so a year. Thousands of pits in storage and the existing stockpile is certified annually.

[Interested Party Slide 6]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
The size of the CMRR is, uh, replacing the old CMR Building. The, the, which is, currently only half is being used approximately. Three out of the six wings are not being used out of the old CMR, which by my estimates is somewhere less than 300,000 square feet. The new planned facility is 600,000 square feet.

[Interested Party Slide 7]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
This is a budget, other budget sheet representing the last three years. The budget request, appropriations for the last couple of years. Showing the last budget is overwhelmingly weapons related, 65 percent. Ahm. I just thought of a question: Does the Lab at the NF, is doing AC or MC for environmental operations, does that come out of the environmental budget? I'll save that one for later? Or is that still weapons related? Is it by, by who the Lab, who the NF is doing, the analyzing, the whatever they are analyzing, or is it just all weapons related? Is the question I thought of. Okay. Next.

[Interested Party Slide 8]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, thanks for those pictures. The first phase of the rad lab equipment installation is still out. I ran across some RFIs for some contracts that were just pretty current. I mean, they were probably due in September, unless they were extensions. Ah, I was just wondering how the fidelity of this current budget estimate was for the equipment of the rad lab. I believe it's okay. We, these, I believe our presentations cross here in Ethernet space, so I don't really get a chance to check in, but, um, it just seems like, ah, maybe, there's, this seems like there's a large number of projects still out for an estimated completion of 2013 to me is what I was thinking. Y'know, and maybe we could have some discussion on that next time.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Or today.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Or today. Maybe later. Okay. Thank you.

[Interested Party Slide 9]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
On May 4, Nuke Watch asked NNSA to prepare a supplemental analysis of the old 2003 CMR[R] EIS. Ahm. On June 4th, we received in writing, that the NNSA would review the old CMRR environmental impact statement for current relevance. During the spring the rest of the interested parties and some other community groups were collecting signatures for a new EIS. And in July 9th, CCNS delivered 85 signatures to the congressional delegation. We did actually get a letter from Representative Heinrich sent to Senator [Stephen] Chu, requesting a new EIS.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
So now it is concluded, NNSA has concluded that a supplemental EIS is needed. Thank you. Okay.

[Interested Party Slide 10]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, we had a reason, I won't go over all these, but uh, y'know, we all know what the reasons were from our last meeting. Increased concrete, increased excavation, and updated seismic hazard analysis. Okay.

[Interested Party Slide 11]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
And I forgot to say, there is a handout. Does everybody have a copy of this— I'm sorry. There may be some left. If you don't have them, raise your hand.

[Pause]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
I hope I made enough. There's a couple up here too, Lorrie [Bonds Lopez]. Yeah. Might have to share. Okay.

[Pause as handouts are distributed.]

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Thank you. Um, the new EIS has three alternatives. The main one, and the preferred alternative, and the, which is now called the "no-action alternative" is to proceed with construction as currently planned. Um, the other two alternatives are to build the nuclear facility and use the old CMR Building without upgrading it. And, the same but with upgrading the old CMR Building. To sustain operations for twenty to thirty years. This is kind of an on-going question and problem, because even if the nuclear facility is built, the, um, it still won't be built for twelve years at the minimum and, um, they still need to do these operations somewhere. So, um, we suggest another one. We, we— If in fact the old CMR is as dangerous as we've been led to believe, um, I don't see how we can put that in there, how we can continue operations in there. So our fourth alternative that we will argue for in the next, in the supplemental environmental impact statement meeting will be to, no expanded plutonium pit production and cease operations and use the facilities you have.

[Interested Party Slide 12]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Ahm, this is just some information on the public scoping meetings, October 19th and 20th, White Rock and Pojoaque.

[Interested Party Slide 13]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Ahm, in my searching I ran across some other procurement documents for the CMRR nuclear facility and they, for different types of machinery, there was four or five different requests, heating and air conditioning, other things. And they all have this, this one caught my attention, the equipment had to be able to withstand a 27,000 rem accident. And they are estimating, and they're just saying one over the course of the fifty-year life of the facility.

[Interested Party Slide 14]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Doses of more than a 1,000 rem are almost invariably fatal. Less is also fatal. Ahm, we were wondering why this equipment is being spec-ed to withstand 27,000 rem. Do the next one.

[Interested Party Slide 15]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
And this is another example of something called a bubble-type isolation damper. Also, accidental radiation environment, 27,000 rem. Can do the next one.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
And, the air handling units also needed to withstand 27,000 rem. So we were wondering what the design basis accident was that would, could possibly release 27,000 rem, which is a huge amount. Um, and what the offsite doses might be, and what the containment plan is. I mean, it's, it's a big—y'know, the fact that you are figuring that in is, is a good thing. So, that's, y'know, it's, you are looking at it, it's amazing that there would be machines or electronics that could have survived that. Thank you.

[Interested Party Slide 16]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Another question we had was, we are still unclear about the large vessel clean-out capability proposed for the NF. It's our understanding that TA-15 has the vessel prep building that serves to clean up six-foot and eight-foot vessels used in explosive hydrodynamic testing. And is there a need for both, or will the TA-15 be closed down? is one of my questions.

[Interested Party Slide 17]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, back to the concrete. I looked it up. One cubic yard of concrete weighs approximately one ton. So, y'know, there's a range. For easy estimating, one ton. So, what are the effects of the extra weight on the stability of the facility. I mean, why does the excavation stop at fifty feet below the proposed NF? These are some drawings, some older drawings from the 2007 probabilistic seismic hazard analysis, and it's hard to see, but the faults under the lab are not straight up and down; they are at angles, and so some of the faults cross each other at weird angles, there's different pieces of triangles that are sitting in there. This is why, all of this—next one please.

[Interested Party Slide 18]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
In addition, in addition to that, the, the geology under the lab is very complicated with different lava flows and ash falls, and— Next one please.

[Interested Party Slide 19]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
And so this is, so the whole plan, of that is, this is driving the concrete, y'know, requirements at the lab under the NF. This is a, kind of a picture representation of the angles of the faults as they intersect each other and the total distance is like eleven kilometers. You can see these, this is the Parajito Fault, the main fault, the Rendija Canyon Fault. All around there. And so, you can see, no matter where you put a building up here, if you go down deep enough, there will be a fault under it. This is from the probabilistic seismic hazard analysis update prepared by URS.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Another question I had is: Are there plans for demolition of the CMRR project at the end of its lifetime.

[Interested Party Slide 20]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, back to the PSA, which is the main reason for this, these slides and main reason for the PSHA, and for the new extra concrete and extra excavation. Um, it showed the 2000 PSHA, showed increased motion and activity. Also made recommendations for future studies. The PSHA was done by URS. I think it took them several years and they published it in 2007. But now, URS is one of the operators, co-operators of LANS, the, the LLC that runs Los Alamos National Laboratory. So there were some recommendations made. We are hoping that URS will now follow its own recommendations.

[Interested Party Slide 21]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
And this is some of the recommendations. Basically, do some more seismic studies, some more trenching. Ahm, y'know, it's all very technical, kinda over my head. But, it's very important. And especially these recommendations may drive future additional concrete, maybe there's too much concrete, maybe it needs to be deeper—but until these recommendations are completed, we don't know the exact answers.

[Interested Party Slide 22]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
At this point I will turn it over to Joni [Arends].

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Good evening. My name is Joni Arends. I'm with Concerned Citizens for Nuclear Safety. First of all, I would like to thank the Laboratory and the Environment Department for recognizing the fifth paragraph of our agreement that says that this is gonna to be a single-subject meeting and recognizing that. Thank you.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Number two, Mr.— how do you pronounce your last name?

[UNIDENTIFIED PERSON]
[Unintelligible response off mike.]

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
No, Mr. T.

[JOHN TEGTMEIER, LASO-NSM]
Tegtmeier.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Tegtmeier? Mr. Tegtmeier. Okay, so we have two requests: one is an extension of time for the comment period for the scoping. We'd like to ask you that publicly. And number two, is that, for Northern New Mexico, there's a lot of interest for more scoping meetings. One in Taos, one in Santa Fe, one in Albuquerque. So,

[UNIDENTIFIED PERSONS]
[Unintelligible voices off mike.]

[MORRISON BENNETT, TRANSCRIBER]
[I'm not getting any of that.]

[JOHN TEGTMEIER]
Yeah. John Tegtmeier. There's, point out to Joni, in the Federal Register notice, for the notice of intent that came out October 1st, there's many avenues in there for providing input on the scoping and also for people to add their name to the mailing list for the supplemental EIS. So, I encourage people to look at that. I've got extra copies here also. And, uh, I encourage everybody in the public and other effected parties to, uh, partake in that process. Uh, thank you.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay, great. So my part of the presentation is about water usage. And specifically, in 2008, uhm, the Executive Order 13423 was signed by President Bush, and this talked about strengthening federal environmental, energy, and transportation management. It asks for federal agencies to reduce water consumption intensity through life cycle cost effective measures relative to the baseline of the agency's water consumption in FY 2007 by two percent annually through the end of 2015 or 16 percent by the end of 2015. So, the Laboratory has some more to do with respect to meeting that requirement.

[Interested Party Slide 23]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So, in January 2008, DOE released its guidance with regard to complying with the executive order. But unfortunately in the 2008 final environmental impact statement, there was no reference to the guidance nor to the executive order. Next.

[Interested Party Slide 24]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
In 2001, DOE reported that it used about 344 million gallons per year, or approximately 1,057 acre feet per year at LANL. Um, DOE has a site capacity of 4—excuse me, 542 million gallons per year or 1,662 acre feet per year. And the way that I remember that 1,662 acre feet per year, is that it's really close to their mail box number, which is 1663. And this amount is equivalent to DOE's leased water rights. Um.

And, what I'd like to do now is pass out a fact sheet that I have with regard to the reduction.

[Pause as sheets are passed around.]

[Interested Party Slide 25]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So, um— So, in the 2003 final EIS for the CMRR, DOE stated that the CMRR project would use 10.4 million gallons per year, or approximately 32 acre feet per year. And an acre foot per year is the volume of water needed to, um, to cover an area 66 feet, which is sometimes called the chain, by 660 feet, which is ten chains, which is a furlough. So it's a chain by a furlough to a depth of one foot. And in Santa Fe

that would provide enough water for four houses. So, it's a lot of water in terms of consumption. And that's for an entire year.

[Interested Party Slide 26]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So, just to give you some history about LANL, or DOE, water usage, um, in 1998, the Department of Energy transferred the operation of the water production system, which is a series of deep wells, um, and the accompanying infrastructure from DOE to Los Alamos County under a lease agreement. And under the lease agreement, DOE retained responsibility for operating the distribution system within the LANL boundaries, whereas the County assumed full responsibility for operating the water system, including ensuring compliance with federal and state water, drinking water, regulations.

[Interested Party Slide 27]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
In 2001, DOE completed the transfer of the ownership to the County along with 70 percent of its water rights. So this figure here is the, 70 percent is 3,879 acre feet. And then when you add that to the 30 percent of the water rights, the 1,662 [acre feet], you get a total of 5,541 acre feet per year. And that's the combined water rights for the Parajito Plateau. So, um, DOE, in the lease agreement, it's a ten-year lease agreement, with options to renew the lease for four additional ten-year terms.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
But then, there's something else. There's something more. DOE has a contract with the U.S. Bureau of Reclamation for 1200 acre feet a year, um, of San Juan-Chama water to be able to take that out of the Rio Grande. Um, and if you saw the paper this morning, you can see that the Rio Grande isn't doing very well. And, specifically, in Albuquerque, it's hardly flowing. So I'll pass this around, if folks wanna look at this, if they missed the paper this morning. It's a sad situation. Okay, next slide.

[Interested Party Slide 28]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So, um, oh, forward. Oh, no, no, no, never mind. Um, okay, I think we need to go forward. Yeah. There.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay, so around the same time, 2001, DOE reported a drop in the water levels in the Los Alamos County well fields of about one to two feet per year. And so this is a significant usage. And there's articles around this period of time where DOE and the County were saying that they were very concerned about the level of drop in the regional aquifer.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
In 2006, during the final sitewide environmental impact statement for LANL, the people asked, questioned DOE about the amount of water that DOE was proposing to use for continued operations, and DOE said that LANL combined with the larger and growing demands of other Los Alamos County users would require up to 80—, 98 percent of the current available water rights. So when you have dropping water levels in the regional aquifer where the water rights exist, this is a big concern.

[Interested Party Slide 29]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
And then, to go on, in 2008, DOE reported using 380 million gallons of water, which is an increase of about 36 million gallons per year over the 2010 levels of 344 million gallons. So there was an increase of about 110 acre feet per year over that seven-year period.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
At the same time, um, DOE again proposed to expand manufacturing capabilities at LANL through the consolidated nuclear production center. And at that time they said that they would increase groundwater use by 104 percent and that LANL groundwater use would exceed water rights by approximately 133 million gallons a year, or almost 715 acre feet per year.

[Interested Party Slide 30]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So, with that, the next steps. So in July, lo and behold, the Los Alamos County attended the Buckman Direct Diversion meeting with a proposal to be able to use the Buckman Direct Diversion project, which is a project of the City of Santa Fe and the County of, Santa Fe County, to divert about 5000 acre feet per year of San Juan-Chama water into the Santa Fe drinking water supply. Um, Los Alamos County proposed to use the Buckman Diversion Project and divert the water through that system on the east side of the river. Have a pipe that goes over to the west side of the river around the White Rock area and lift this water, 1200 acre feet per year, um, up the canyon about a thousand feet to the White Rock water treatment facility. Um, 300 acre feet of that would go to DOE; 900 acre feet to Los Alamos County, um, under the lease agreement.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
And so, we are wondering what that 300 acre feet a year would be used for. And that is in contradiction to the executive order and the DOE guidance. So, CCNS understands that Los Alamos County has an RFP out right now for engineering work to be done on this project.

[Interested Party Slide 31]
[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So the latest annual progress report on DOE implementation of the executive order indicates that DOE and LANL have not done anything to reduce its water usage, and in fact, every indication is that LANL plans to increase its water usage at the expense of farmers and ranchers, fish and aquatic life, and for those living downstream who drink water. Thank you.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Oh, so my handout is, it shows the 2001 DOE usage. It shows the base for compliance with the executive order. And then what I did is use my high level calculation skills to calculate that in October 1st, 2015, LANL should be using about 991 acre feet per year in order to meet the requirements at 16 percent reduction. Thank you.

[Interested Party Slide 32]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
All right. A couple of more here, and I'll hurry through. I was, um, got the idea to do some calculations of my own, and the, I came up with the water usage, um, for the 225 thousand cubic yards of concrete would be about 6.75 million gallons of water, and I hope to be, to get the correct number sometime, [when] we get a chance. This would be added to the other 130 thousand cubic yards of structural concrete, which would 3.9 million gallons of water as compared to [that in] the original 2003 EIS that estimated 3.75 million gallons of water for construction.

[Interested Party Slide 33]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, I'm calling this slide the— There's a word missing at the top, the, it was doing that to me too— reworking the titles, but this one's called "The Concrete Monument to Ransom the Ratification." The ratification of the new START Treaty is being held hostage for the modernization of the Nuclear Weapons Complex. Um, in order to, in order to eliminate— and this is not, this is done by Congress, this

is being done by lots of people outside of New Mexico. Seems like Los Alamos will, will get a windfall from the START Treaty. In order to eliminate nuclear weapons as Obama pledged in the Prague speech a year and a half ago, must we increase production capacity? Ahm, CMRR NF would provide a capacity of 80 pits, but the actual number produced every year would be a small fraction of that. And we are still kinda looking for that number also. But, we are spending money we don't have on a capacity we don't need.

[Interested Party Slide 34]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, because of the Consent Order, which is the cold war legacy clean-up agreement between the State Environment Department and the Lab. The Lab must complete clean up by 2015. Clean up is undefined. It is different for different sites. We are making those decisions as we go along. It's a public process. Please join us. Help us make the decisions on what is considered clean up at the Lab. Um, the Lab estimates the total remaining costs to be around 1.7 billion for the type of clean up it feels necessary. But, looking at the, y'know, the reports, one option, the removal of all the waste for one site, Area G, the largest site, is estimated at, at least 9 billion dollars.

[Interested Party Slide 35]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, this is another typo. Many feel that the completion of the consent order by 2015 is at risk. They also feel that many of the milestones and, ah, may start being at risk also. The Lab must put construction of new projects, including the CMRR, on hold until the requirements, until all the requirements of the consent order are met. Clean up, don't build up. Thank you.

[Applause]

[BRUCE MACALLISTER, FACILITATOR]
Thank you. We have about twenty-five minutes for additional questions of both parties. Sir?

[PETER NEILS, LOS ALAMOS STUDY GROUP]
Thank you. My question is for Scott [Kovac]. I'm Peter Neils. Um, I wanna thank you and Joni as well. I particularly liked your analysis of the water consumption. Um, I'm just curious about something. Slide 9 in your presentation, Scott. Um, interesting chronology of events you note there. And I wonder, did anything else happen during that period prior to NNSA concluding that it needed to do a SEIS that isn't there.

[Interested Party Slide 9]
[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Um, maybe you can help us out.

[PETER NEILS, LOS ALAMOS STUDY GROUP]
I'm just curious. You seem to be a pretty smart guy—

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
There's been several things. I didn't know that group, I believe you're a member of the board of the Los Alamos Study Group?

[PETER NEILS, LOS ALAMOS STUDY GROUP]
Yes.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Yeah. I believe that the Los Alamos Study Group filed this lawsuit for a new EIS also. And we thank you for that, too.

[BRUCE MACALLISTER, FACILITATOR]
Other questions? Comments?

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Could we go over some of my— Did you have a question or two, I mean an answer or two, for my questions?

[Laughter]

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
This is Rick again. A couple of things. One is the 27,000 rem. As we put together data sheets, for solicitation of interest, or to think about buying equipment, you have to put in place some of the things that you don't know enough about yet to postulate the bounding conditions for that piece of equipment. So the 27,000 rems comes from a criticality, unmitigated criticality accident right next to the piece of equipment and is likely to be reduced because of the criticality controls that are inside the facility. And I'm not a criticality expert nor do I pretend to play one in the public, but I'm told that this does not go outside of the building, even if you put it right at the piece of equipment. So, as we go to buy the final piece of equipment, this number will go down, based upon the criticality controls that are inside the structure and where the piece of equipment is. Some of this equipment, these air handling units, is, are in the auxiliary building. So there's a lot of, there's no nuclear material inside the auxiliary building, so this number will be substantially less when we go, when go forward ultimately with the specification to buy that piece of equipment. Comes from the criticality, unmitigated, unclearly defined, worst case that anybody can ever think of, right next to the piece of equipment, that does not leave the building boundary because of the way criticality works. That's where that comes from.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Thank you.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
You asked about concrete and water usage for concrete. I know that we are in the, in the data, as part of this process for NNSA making the decision, we looked at the extent that the new construction that would be done, or the magnitude of it, we gave them that data in that report, which I think has been delivered to some, or it certainly will be in the, I'm sure it has to be considered in the supplemental, is the water usage. I think some of the numbers might be a little higher than others because the twenty-two—the fill underneath the building, and we're doing the mix designs as part of the design work we are doing now, will be a stiff mix. So, very, very little water in it. We'll have some, but very little water. Thirty gallons of water in a yard of concrete, probably on the higher edge, 'cause you're talking about fifteen percent, which would be like, a milk shake, which is— But there will be water usage and that will be factored into the analysis, 'cause we've already done that data look at one time. Final, final numbers will be in the mix designs are those are finished up over the next several months.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Could you say that again?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Scott [Kovac] had in his chart 30 gallons of water in a cubic yard of concrete. And if you think about it, 'cause I actually looked, 200 gallons of water is a cubic yard of water. And so, 30 gallons of water in a

cubic yard of concrete that's got stone and everything else, that's a lot of water in a, in a concrete, in a concrete mix. Um, so, but there will be water used for concrete. Okay. Whether it's in this magnitude, or whether it's less than this magnitude, or more than this magnitude, it is part of the data set that is provided to be included in the analysis of the building as we know it today.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay, so has the mixture of—Joni Arends with CCNS— Has the mixture of concrete changed? Because last time it was lean concrete.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So this is— "lean concrete" is a term that has a very, very broad definition. Where I think we are going to head for the 225 thousand cubic yards of fill below the building, which is put in place partly to mitigate the seismic event, and stop the transmission wave coming up to the building itself—and I'm not going to go into the seismic design. We can have a long, long discussion about that later. Right now I think that this will likely be a low slump concrete, very, very stiff. Probably with very large stone in it. Maybe up to four inches of stone in it. And part of the reason for that is, it is very efficient to place, and will cure timely, so that you don't have to wait long, long periods of time to get that fill put back into, back into the hole. And as I said, we are going through that mix design—we have a contract out, the designer is doing the mix design. We are gonna prove those out, make sure it give us the properties that we are looking for, for not only this material but the material for the structure. It does meet the definition of a lean, of a lean mix, which is a pretty, pretty broad term.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
So, on a previous construction project, the concrete didn't meet the NQA requirements. So, your folks that are looking at it, are they making sure that it's gonna meet the NQA requirements?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Yes. So we've been doing this, y'know, we started with this on the rad lab itself. Remember a number of years ago we talked about how that contractor was performing, doing concrete work. We were all over them, doing what we are paid to do, and made sure that it got done right for that particular building. We've actually been through all the documentation for the, can't remember the number, but the hundreds of concrete placements that are in the rad lab and have all the right documentation to make sure the rebar is in there and that all met that design. The concrete design itself is done by an NQA-1 qualified contractor. They will prove out and demonstrate that that concrete meets the design properties that we are looking for. All done in an NQA-1 environment.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay. So, now my memory's been jogged. How did that go Scott [Kovac]? Austin, Austin was your design build on the RLUOB, is that correct?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
Yes it is. This is Rick, still.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Are they still around?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
No.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
And they are not doing any work. Austin's doing no work on the nuclear facility. And I— They are not doing any work on the—I don't think they are doing any work at the Lab right now.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay. And then, with regard to this cement pour, something this big, we were up at Hanford when they poured the, ah, when they were starting to pour the foundation for the waste treatment facility, and it was 110 degrees out there and they just did everything wrong. What kind of quality assurance requirements do you have in place to ensure that, if concrete, y'know, this huge block of contract—

[Voices off mike.]

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
[Continuing]
—concrete, if it's gonna be poured, um, will be able to cure properly?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So, Engineering— This is Rick again. Engineering [LANL Engineering Division] defines the requirements. Maximum temperature, 'cause concrete when it cures, gets warm. Does, right? Okay.

[UNIDENTIFIED PERSONS]
[Unintelligible responses off mike]

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
I like the interaction. [Chuckles] They specify the strength properties that you must achieve in a break test at a certain number of days after, after placement. They will also specify slump and other material properties that must be met for the concrete placement itself. We will qualify whoever, whatever company is the concrete provider to demonstrate that they can meet those standards and as Engineering has defined quality control personnel with oversight by quality assurance personnel will ensure that the concrete that is placed meets those requirements as defined by Engineering.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
And that was part of the process that's our oversight that saw what Austin was doing and said, "Stop. You need to fix this and do it properly." And ultimately, it was. So, there is that process that already is in place. And that, and that similar process, Engineering defining what the requirements are, oversight by Quality Control, with oversight of the whole process by Quality Assurance, is what occurs for everything that is ultimately constructed, whether it's install a pipe, place concrete, or test out a ventilation system.

[BEATA TSOSIE, TEWA WOMEN UNITED]
Hello. My name is Beata. Um, I'm wondering what's the soil that's getting removed for where this concrete is gonna be placed? Has that soil been tested for radionuclides and if so, what was the results of that? And also, um, where is the soil gonna get moved to and how?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So before— This is Rick again. So before the initial excavation, 'cause part of the site has been excavated, uh, down to do geologic studies, there was characterization done to say that that soil was clean. And, from any contamination or anything that was present. The stuff that we're doing is further down than almost mankind. It's, it's hundreds of thousands of years away in terms of time. The plan to use that is for other needs at Los Alamos, whether it's for landfill capping or other things. We did a lot of work with the excavation that came out of the RLUOB construction 'cause part of that is under, is buried

inside of the hill. Some of that went to the County landfill for cap; other went to other places where soil was needed at Los Alamos to be reused. But it has been tested. Before it came out it was tested, and it was clean.

[PETER NEILS, LOS ALAMOS STUDY GROUP]
Peter Neils again. Is this 225 thousand cubic yards a continuous pour?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
No, it won't be. If you did it and as a continuous pour, our grandchildren would be there when it was cured.

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
Okay, Rick, so one of the issues that came up during the RLUOB, — This is Joni Arends again. Um, was the concern about MDAC being located across the driveway—across the road from the site. And MDAC was used prior to MGA, or Area G, as the waste dump. And one of the concerns was that digging a big hole is gonna create a pump that will draw the VOCs and the other contaminants towards the hole. And so, what precautionary approach is being put into the plan, um, to address VOCs, because there are a lot of VOCs in that dump. We know that.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
This is Rick. I'm not exactly sure what the mediation, remediation strategy is and demonstration is for MDAC. I do know there's doing a lot of characterization around the site today. And I only know that 'cause I see it 'cause my office is right across the street. So, I'd have to ask, defer it to them, to fully answer that question.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
[Unintelligible words off mike]

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
Come on. Here I am. I was gonna' confirm what Rick [Holmes] says, there's a lot of drilling and a lot of characterization right outside my window in my trailer between my office, between the construction site and MDAC. So there's a lot of characterization on-going. There's a lot of borehole data that's been taken, soils testing data taken where the site's at. Uh, I don't know specifically about the potential going on over from that MDAC site to the facility. So, I can't give you a definitive answer. I'm not sure if there's anybody in the crowd that knows that. No? I'm sorry. Joni? But we'll register that as a comment. Thank you.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
This is Rick. Scott, I don't know if there's others in here that you want to— I try to go from memory.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Thank you. I was just refreshing my memory. How about the large-vessel clean-out capacity at two separate buildings? Is that still gonna be needed?

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So, this is Rick. And I'll talk just from what the requirements are for CMRR, what we are doing, and then somebody can talk about, if they want to add onto, what's going on over at TA-15. So, I'll preface that up front, 'cause I'm only gonna talk about one piece.

[RICHARD A. HOLMES, CMRR DIVISION LEADER, LOS ALAMOS NATIONAL LABORATORY]
So the nuke facility design requirements says we must have a capacity for the potential to do a large-vessel handle and clean out. And, and the definition of that, in meeting that requirement is have some floor space that is rated to handle the weight of a large vessel, somewhere near an elevator that has the capacity to bring the large vessel into the building, and have utility piping potentially to the wall with no equipment inside the room. So CMRR nuke facility, as it is designed today has the potential, meaning it has real estate that is sized and appropriately designed to handle the weight of a vessel and the various utilities that might be needed to the wall of that room, to perform a large-vessel clean out. The footprint in the building for that is a couple thousand square feet. It's not a lot in terms of the total. And we'd have a whole big square foot discussion if we ever wanted to about where it all it is and why it's there and that kind of thing. But, so, we just have the capacity in the nuke facility. I don't know if it'll ever be used. And I don't know, if somebody wants to add, whether or not TA-15, what they are doing, what they are doing there?

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
It's beyond the project, so we don't know, we don't have the subject matter expertise on that.

[BRUCE MACALLISTER, FACILITATOR]
All right. Thank you. I heard somebody say they had a question, and I was pouring something, so—

[JONI ARENDS, CONCERNED CITIZENS FOR NUCLEAR SAFETY]
I have a question for Roger [Snyder] I guess. Joni Arends, CCNS. So, Roger, what are the Labo—, what is the DOE's plan to comply with the executive order to reduce water usage?

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
Is this on? Okay. Thank you for the question Joni. I think there's a couple of things that play into the discussion on water that maybe not have come up at this point. For instance, we are using water today at CMR. And so this facility replaces CMR. And so you just can't add the water cumulatively. Two, we have efforts underway for reduction of water at the site. We have been looking minimizing waste generation and that includes water use and then the water-into-waste-generation activities. And so there are plans in place to evaluate and to look at how, where we can save. Also, going back to Beata's [Tsosie] question earlier: in terms of LEED; part of the LEED criteria is looking at water use in the facility. And so we'll be looking to minimize that in terms of its design, construction, and in operation.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
And so there are several avenues. We actually are looking at developing what I'll call sustainability plans for the site in this FY. And part of the sustainability plan will be how we meet energy and water goals. Realizing it's a long journey. You just don't do it overnight. A lot of the water demands are connected with our science facilities. Not necessarily our pit production. Cooling is a principle use for water. The water also presents itself for recycling in quite a few areas. So those are the kinds of things we are looking at. And so, the supplemental EIS, at least for the nuclear facility, will look at those in an updated light. Keep in mind, LEED came out since the 2003 EIS. So that's a new feature that will be evaluated in the EIS structure.

[BRUCE MACALLISTER, FACILITATOR]
Other questions? Comments? Stories?

[Laughter]

[BRUCE MACALLISTER, FACILITATOR]
Okay.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
Jay Coghlan, with Nuke Watch New Mexico. I guess, this is for you Steve [Fong] or NNSA anyway. Um, I've always thought that one of the principle drivers for the nuclear facility is the Lab's need for a new vault for special nuclear materials. Y'know, I've always been fond of poking fun of the Lab for the way it screwed one up back in the eighties, and never could use it. But, has LANL and NNSA considered building a dedicated stand alone vault in order to consolidate its special nuclear materials? I believe it would also aid in being able to de-inventory the old CMR Building. But as yet another alternative: has it been considered to, again, build a dedicated vault, consolidate, and make secure plutonium and forego the rest of the nuclear facility? Basically I would like to see the need for a possible need for a vault de-linked from a five billion dollar facility.

[STEVE FONG, PROJECT MANAGER, LOS ALAMOS SITE OFFICE (LASO), NNSA, DOE]
This is Steve again. Am I on? I think I'm on. Okay. You're right. The CMR facility is replacement of capabilities from the old CMR facility but it also, the other component is, is providing that vault space. So you are absolutely correct. So the core missions for CMRR is to provide that vault mission in CMRR. So you are correct. In terms of looking at a separate vault, y'know, I don't know if it was looked at. I've not seen anything proposed, or heard of anything proposed, that just looked at a vault by itself. For many a year while we went through Complex Transformation, we were looking at what if type of things. Can we make, can we squeeze everything into a smaller facility? Can we put in the rad lab all operations? And a lot of those things. And everybody was saying, "What about the vault? And what about the other operations and programs that we needed to support?" And, I never did see anything that just showed a vault by itself or anything that was proposed programmatically just for a vault space by itself. And Roger [Snyder], I guess I'll look to you, to say, have you seen anything as a stand-alone vault by itself?

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
Roger Snyder. In terms of— I was familiar with that old facility, the PF-41 materials storage facility that no longer is on the TA-55 mesa. And so, from that standpoint, there have been studies looking at vault sizing. But, we, in terms of the total mission assigned to the project, the vault is integral. Now in terms of bringing this up in the scoping session, that's certainly something that could be discussed in scoping. But I also note that in this process, it's, it's a complex undertaking to build a vault. And so, all the support systems, this facility that we are talking about today provides us 22,500 square feet of space for lab operations and a vault. And that's really what it does. Everything around it wraps that into the sausage to make it safe. And so from that standpoint, if you are just building the vault, you've still got an appreciable amount of infrastructure to make it safe, to make it accessible, to make it usable as a vault. The only vaults I can think of would be actually on foreign soil. Mayak would come to mind, in Russia. And so, you'd look at a large vault with large capacity. And with this type of intended purpose, there is an appreciable cost involved. And so those are the kinds of things I would offer for your consideration as you think about it.

[UNIDENTIFIED PERSON]
[Unintelligible question or comment off mike.]

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
The question was, uh, or the statement was, that PF-41 was much smaller. PF-41 wasn't sized for modern requirements. That's why we tore it down. Two, it wouldn't hold five metric tons, because of the size of the vault that it had. And it would, it was not built to the current seismic requirements. It was built in the

1980s. And so the wall structure— It was primarily a staging type vault with no ventilation. It was a very small, comparative, facility. And there were aggressive efforts to look at if you could modernize it before it was demolished. And the cost to bring it into code compliance was exorbitant at the time. So that was about ten years ago. And that was last looked at before it was deemed untenable.

[BRUCE MACALLISTER, FACILITATOR]
We have a comment here?

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
I have a request for some, maybe some next meeting questions. Ahm, guys, I'd like to see a little more NF on your presentation, including, we used to get plans for the NF. And I notice that the NF is not included on the high level schedule. So, ahm, could you get that back on there next time? Thank you.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
This is Roger Snyder again. Just like we discussed at the beginning, the challenge there is with the EIS process underway, and the scoping process underway, at what point we'll be ready to discuss preferred alternatives, seems a little premature for March. And so from that standpoint, we don't want to preempt the process. We wanna get the input. There's the draft pro—, the comment on the draft, etcetera. So there will be information in the public domain. Probably much more in depth than what we would discuss here. But, in trying to keep the two meetings separate is the intent.

[SCOTT KOVAK, NUCLEAR WATCH NEW MEXICO]
Okay. Thank you.

[BRUCE MACALLISTER, FACILITATOR]
Yes ma'am?

[BRUCE MACALLISTER, FACILITATOR]
We have about two minutes left, so this should be about the last question.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
Susan Gordon with the Alliance for Nuclear Accountability. So Roger [Snyder], you just said, scoping was going on, so that this thirty-day comment period is scoping for supplemental environmental impact statement? Or is it just the supplemental impact statement process?

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
This is Roger. I'll see if— If I get out of line, I'll look to John Tegtmeier to correct me. So I understand the process we have elected, 'cause it's an option within the process, to have a public scoping input at the front end of this supplemental. And then, after that process, then there's the analysis the dra— the defining of those alternatives into impacts. And then there's a draft. And then there's another comment period, that roughly we're looking— And so from that standpoint, this is the front end helping us define the alternatives for the construction of this mission, or addressing the need for this mission, in terms of constructed space and the options laid out, and how we implement that mission in physical space.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
So this is the scoping?

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
It is a public scoping session on the 19th and 20th.

[SUSAN GORDON, ALLIANCE FOR NUCLEAR ACCOUNTABILITY]
Okay.

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
This period of time is public scoping comments.

[BRUCE MACALLISTER, FACILITATOR]
Back here?

[BRUCE MACALLISTER, FACILITATOR]
All right, I've got a question here, and we're, the clock is ticking down here. So, pretty quick.

[ROGER SNODGRASS, SANTA FE NEW MEXICAN]
Is there a schedule for how long the whole thing is gonna take?

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
We wouldn't be good proj— I'm sorry, this is Roger [Snyder] again. We wouldn't be good project managers if we didn't put at least schedules into our planning space. There is a notional process that's laid out by the regs, and the sequence of events. I will tell you that our record in the Department is probably on the order of nine months. We have a much longer record on the other end of the scale. And so from that standpoint, we lay it out in sequences based on the, the degree of activity, the public comments, how long it takes to analyze. One of reasons, Roger, you asked earlier about design, is that we have a lot of issues that we have to work through to scope this like the concrete mix, that feeds the water analysis. And so we need that design to continue to get those elements so that we can feed this supplemental EIS. So there are those kinds of linkages back into the design phase that also drive the schedule. And so I don't have a—other than what was published in the notice of intent, I don't have a definitive schedule.

[JAY COGHLAN, NUCLEAR WATCH NEW MEXICO]
[Unintelligible question or comment off mike]

[ROGER SNYDER, ACTING DEPUTY SITE OFFICE MANAGER FOR BUSINESS, ENVIRONMENT, AND SECURITY, LASO, NNSA]
And that's a forecast. And so that's, that's just laying out all the box and the design inputs that we would have.

[BRUCE MACALLISTER, FACILITATOR]
Okay, we've reached the end of our time frame, just when the questions are getting good. Um, so we'll plan on catching up with those questions next time. And, ah, meanwhile, there are the routine channels for getting information: the Website and other sources, and of course, the points of contact within Los Alamos, within LANL. And I thank you very much coming tonight and thank you for your civility and your adherence to the ground rules. It was a very pleasant meeting. And I enjoyed working with you. I hope we'll continue in this vein next session. Thanks much.

[The meeting then adjourned, but a substantial number of the attendees remained afterward talking in the room.]

CERTIFICATION

I hereby certify that the foregoing is a true and correct transcription of the audio recording of the public meeting on the Chemistry and Metallurgy Research Replacement project at the Hilltop House, Los Alamos, New Mexico, on October 6, 2010.

/s/ Morrison Bennett
Transcription completed December 14, 2010

III. Presentation Slides – CMRR Project


UNCLASSIFIED
Chemistry and Metallurgy Research Replacement (CMRR) Project
Welcome
CMRR Project Update
Los Alamos, New Mexico
October 6, 2010
Bruce MacAllister, Meeting Facilitator
Los Alamos
NATIONAL LABORATORY
NNSA
UNCLASSIFIED
LA-UR 10-06560
CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Agenda

6:30 – 6:40	Welcome	B. MacAllister
6:40 – 6:50	Supplemental Environmental Impact Statement	R. Snyder
6:50 – 7:10	CMRR Project Presentation • Project Overview and Background • Project Update	S. Fong R. Holmes
7:10 – 7:30	Questions	B. MacAllister
7:30 – 8:00	Interested Parties Comments or Presentation (TBD)	Interested Parties
8:00 – 8:25	Questions	B. MacAllister
8:25 – 8:30	Closure & Adjourn	B. MacAllister

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Background and Purpose of Meeting

- Settlement allowed for air permitting to be tailored to match phased project-development and for public involvement
- Settlement required that public meetings be "single subject" meetings that will not be combined with other public meetings, including but not limited to the Sitewide Environmental Impact Statement for LANL (SWEIS)
- Parties include
  - New Mexico Environment Department
  - Department of Energy
  - University of California
  - Concerned Citizens for Nuclear Safety
  - Nuclear Watch of New Mexico
  - Peace Action New Mexico
  - Loretto Community
  - TEWA Women United
  - Embudo Valley Environmental Monitoring Group
  - New Mexico Environmental Law Center
- Meeting is held every six months to update the public on CMRR construction progress

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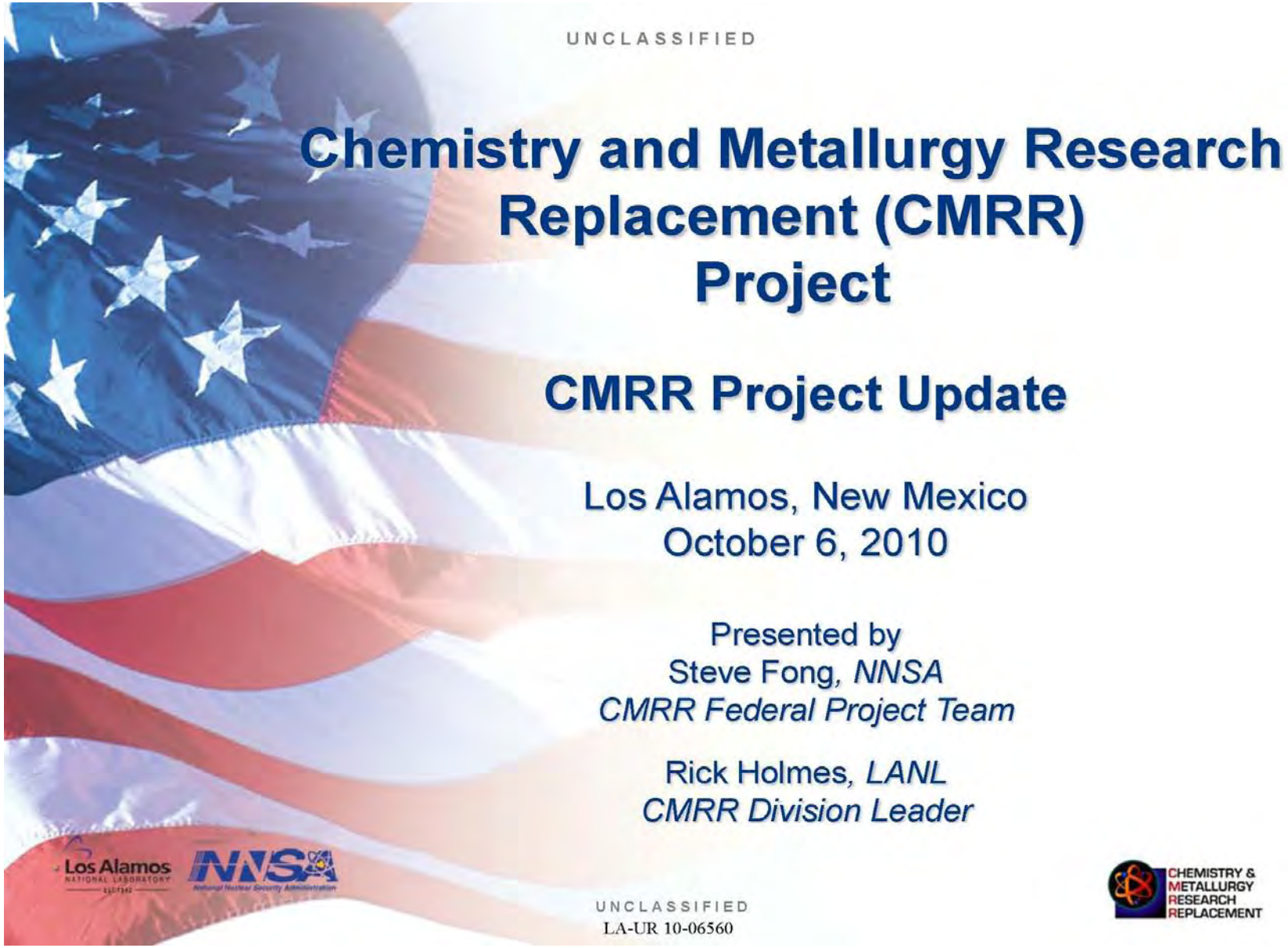
CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Ground Rules

- Listen respectfully
- Share the conversation time with other participants
- Turn cell phones off or place on mute
- No personal attacks
- Topic requests for future meetings can be left on the flip chart at any time
- Say your name each time you speak


UNCLASSIFIED
Chemistry and Metallurgy Research Replacement (CMRR) Project
CMRR Project Update
Los Alamos, New Mexico
October 6, 2010
Presented by
Steve Fong, NNSA
CMRR Federal Project Team
Rick Holmes, LANL
CMRR Division Leader
Los Alamos
NATIONAL LABORATORY
NNSA
CHEMISTRY & METALLURGY RESEARCH REPLACEMENT
UNCLASSIFIED
LA-UR 10-06560

CMRR-NF Update

- Supplemental Environmental Impact Statement (SEIS) underway
  - Notice of Intent Published October 1 in the Federal Register
  - Public Scoping Meetings
    - October 19 at White Rock Town Hall, 139 Longview Drive, White Rock, NM
    - October 20 at the Cities of Gold Casino Hotel, Pojoaque, NM

Public/CMRR Agreement

5. **CMRR Project Public Meetings.** The Applicants shall publish a public notice and mail notification to the Interested Parties about public meetings to be held at least once every six (6) months to discuss the CMRR Project until physical construction of Phases A, B, and C of this Project is completed; or, if a phase is cancelled, until the completion of the physical construction and turnover to DOE of the approved and funded phases; or until otherwise agreed by the Parties. The Applicants shall provide an opportunity for both written and oral public comment at the public meetings. **The CMRR Project meetings shall be single subject meetings in addition to, and will not be combined with, other public meetings the Applicants may hold, including but not limited to, the Sitewide Environmental Impact Statement for LANL (SWEIS).** It is understood by all Parties that security and procurement sensitive information cannot be briefed at public meetings.

CMRR Mission Need Statement

"The CMR Replacement (CMRR) Project seeks to relocate and consolidate mission-critical CMR capabilities at LANL to ensure continuous support of NNSA stockpile stewardship and management strategic objectives; these capabilities are necessary to support the current and directed stockpile work and campaign activities at LANL beyond 2010."

1949 CMR Construction Site

Existing Chemistry and Metallurgy Research Building

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

CMRR Overall Project Structure

CMRR Project

Two closely interrelated facilities in differing phases of development.

Nuclear Facility (NF)

- Baseline under Development:
- CMR Laboratory Replacement Capability
- Nuclear "Hazard Category 2" Facility
- 22,500 Net Square Feet Lab Space
- Special Nuclear Material storage (6M tons)
- Special Facility Equipment
- Robust "Security Category 1"

Radiological Laboratory/Utility/Office Building (RLUOB)

Building Shell

- Facility Performance Baseline ($164M TPC):
- 19,500 NSF radiological lab space (<8.4g 239 Pu equivalent)
- Centralized utilities/services for all CMRR facility elements
- Office space for 350 CMRR workers
- Consolidated training facility
- Facility incident command; emergency response capabilities

Status: Complete

Equipment

- RLUOB Equipment Installation (REI)
- Operational equipment to complete functionality of RLUOB

Status: Performance Baseline Approved – July 2009
TPC = $199.4M
Completion – 2013

One project on the Congressional Data Sheet – multiple efforts within NNSA/DOE.

UNCLASSIFIED

LA-UR 10-06560

CMRR at Technical Area 55

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Project Overview

- Program Requirements – Work scope unchanged over the years (i.e., same amount of lab space and functionality of CMR capabilities)
- Budget Authority – $97M for FY10
- President's Request – $225M for FY11
- NNSA Headquarters Program Direction
  - Complete RLUOB within approved performance baseline **– Complete**
  - Complete REI according to performance baseline **– Ongoing/Ahead of schedule**
- NF Design
  - NNSA and DNFSB validation of nuclear safety approach
  - Executive and Congressional support
    - Congressional Commission on the Strategic Posture of the United States – May 2009
    - Nuclear Posture Review – Issued March 2010

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

High-Level Schedule

Complete

- 2002 CMRR Critical Decision (CD)-0 (*Approve Mission Need*)
- 2004 CMRR EIS Record of Decision (ROD) signed
- 2005 CMRR CD-1 (*Approve Alternative Selection and Cost Range*)
- 2005 CMRR RLUOB CD-2/3 (*Approve Performance Baseline/Construction*)
- 2007 CMRR RLUOB Equipment, Final Design Authorization
- 2008 Site-Wide Environmental Impact Statement for Continued Operations at Los Alamos National Laboratory Records of Decision September 2008 and June 2009
- 2008 NNSA Complex Transformation Supplemental EIS ROD
- 2009 CMRR REI CD-2/3 (*Approve Performance Baseline/Procurement Installation*)
- 2009 CMRR NF Safety Basis and Design Integration, and Technical Reviews
  - NNSA & DNFSB Certification Safety Issues Resolved
- Congressional Commission on the Strategic Posture of the United States – May 2009
- 2010 CMRR RLUOB Facility (CD-4)
- 2010 Nuclear Posture Review (March)

Future Years (planned)

- 2011 CMRR RLUOB Staff Occupancy
- 2013 CMRR RLUOB Radiological Laboratory Operations

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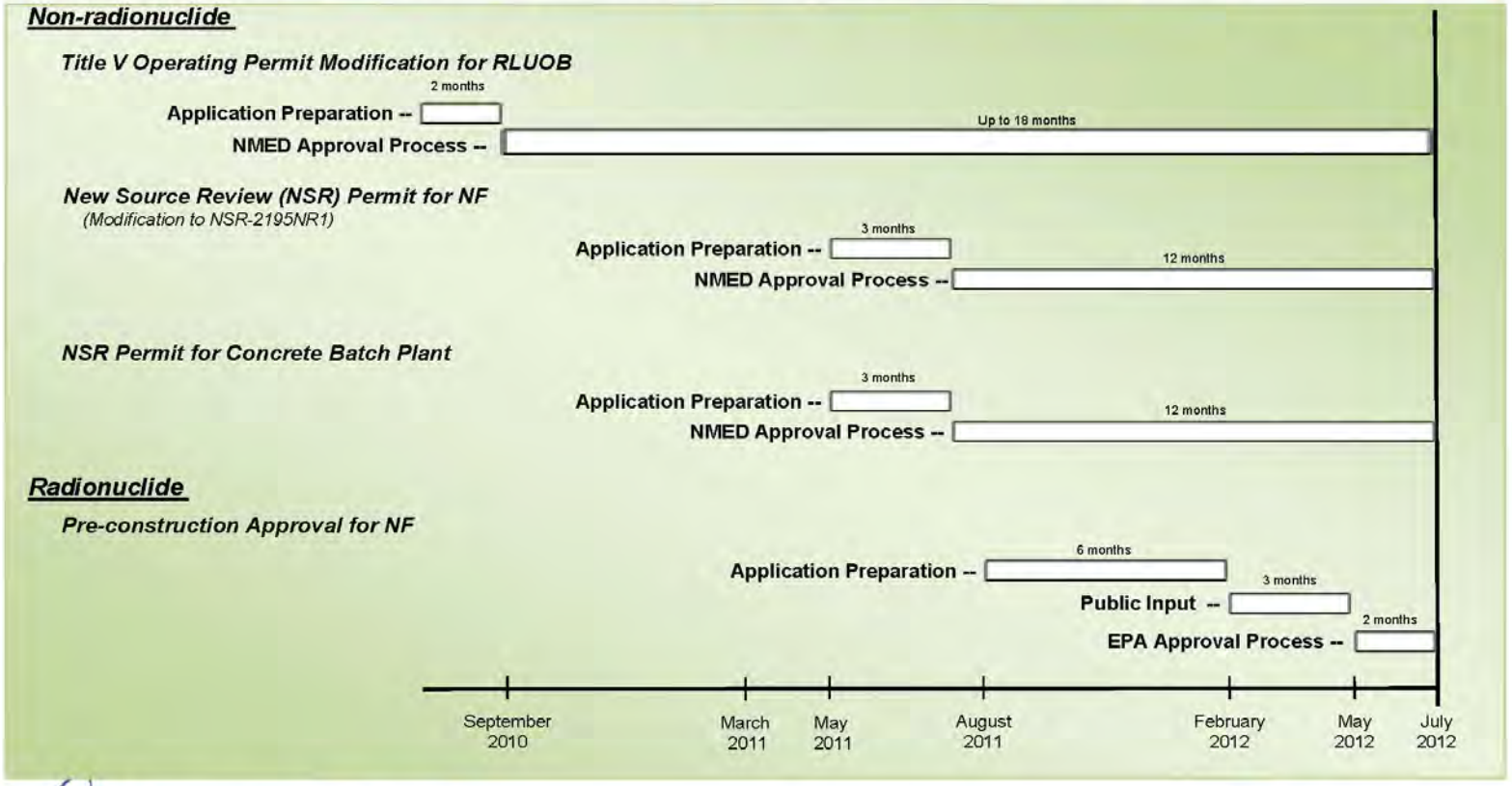
CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Tentative Air Quality Permit Schedule



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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Radiological Laboratory/Utility/Office Building (RLUOB)

Radiological Laboratory/Utility/Office Building

- Over two million man-hours worked with no lost time accidents
- Leadership in Energy and Environmental Design (LEED) – "Silver" certification award anticipated
- FY10 NNSA Pollution Prevention Award, Best in Class for Sustainable Building
- Highest Quality Standards – Nuclear Quality Assurance (NQA-1)
- FY10 DOE EStar Award - RLUOB Integrated Planning, Design, Procurement and Construction

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

RLUOB Completion Photos

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

RLUOB Completion Photos

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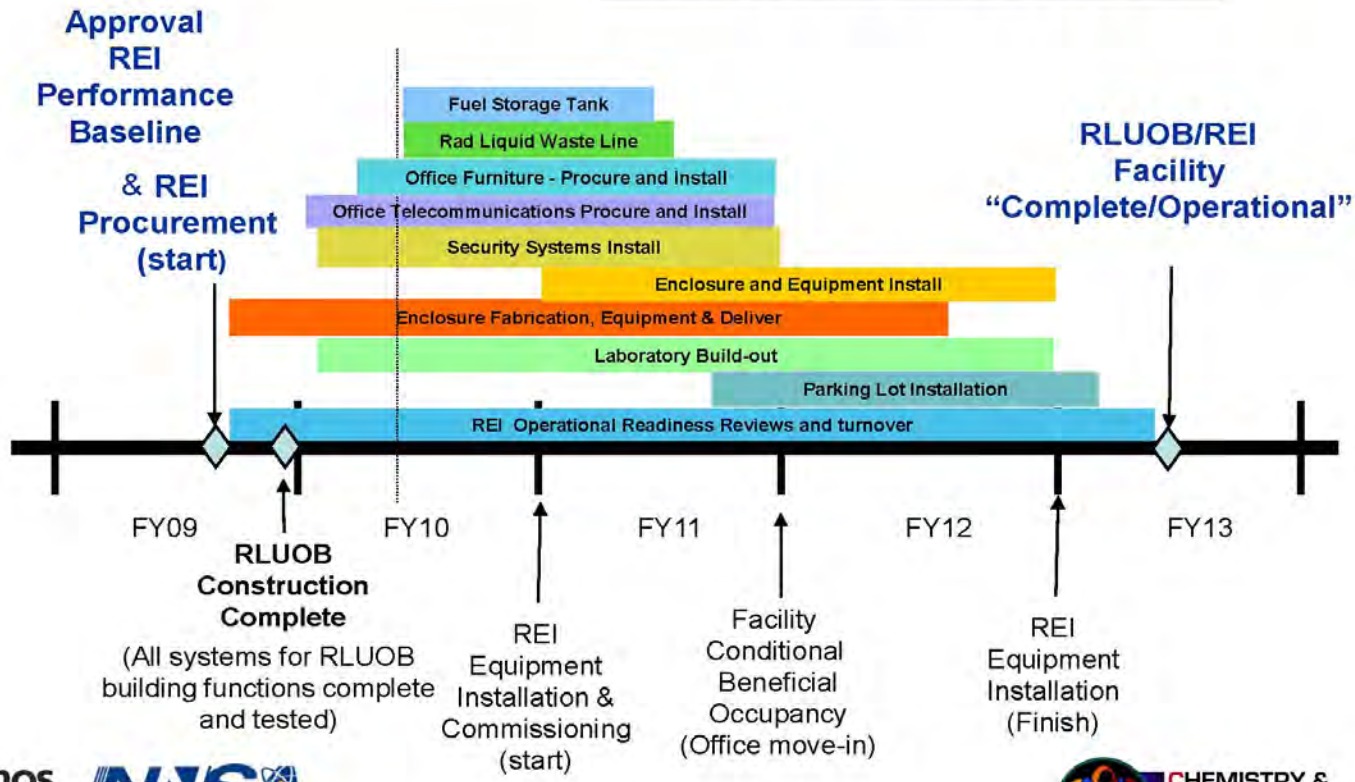
CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

RLUOB Equipment Installation (REI)

RLUOB Equipment Installation Plan

Total Project Cost = $199.4M



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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

REI - Gloveboxes

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

REI - Gloveboxes

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

REI – Laboratory Development

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

REI – Laboratory Development

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CHEMISTRY & METALLURGY RESEARCH REPLACEMENT

Chemistry and Metallurgy Research Replacement (CMRR) Project

Thank you for attending.

IV. Presentation Slides – Interested Parties

INTERESTED PARTIES CMRR PRESENTATION OCTOBER 6, 2010

1

WELCOME TO OUR 10TH MEETING!

- This is the 10th semi-annual public meeting required as part of a 2005 settlement between the Lab and an network of community groups:
- Concerned Citizens for Nuclear Safety
- Embudo Valley Environmental Monitoring Group
- Loretto Community
- New Mexico Environmental Law Center
- Nuclear Watch New Mexico
- Peace Action New Mexico
- Tewa Women United

2

WELCOME TO OUR 10TH MEETING!

- Topics to be covered in this Chemistry and Metallurgy Research Replacement Project (CMRR) presentation:

1. Design Cost
2. New SEIS
3. Accidents
4. Concrete
5. Seismic
6. Water
7. **C**oncrete **M**onument to **R**ansomed **R**atification

3

CMRR DESIGN COST

Including the FY 2011 Request, $420 million has been appropriated for the NF Design to date.
$580 million for Total Design planned through 2013.
Original Design Estimate was $55 million in 2003.

Nuclear Facility

	Appropriations
Total Estimated Cost (TEC)	
PED	
FY 2004	9,500
FY 2005	13,567
FY 2006	27,910
FY 2007	14,161
FY 2008	0
FY 2009	0
FY 2010	0
Total, PED (PED 03-D-103-01)	65,138
Final Design	
FY 2008	39,406
FY 2009	92,196
FY 2010	57,000
FY 2011	166,000
FY 2012	102,800
FY 2013	60,000
Total, Final Design (TEC 04-D-125)	TBD
Total, Design	TBD

4

YET NF DESIGN WORK CONTINUES

The Need for the NF is Not Urgent

- No "Reliable Replacement Warhead" or new-design warheads
- Lifetime study found plutonium pits last at least 85 years
- Thousands of pits in storage
- Existing Stockpile Certified Annually

5

CMRR SIZE

Only ½ of old CMR is being used now, which is ~286,000 square feet.
It is being replaced with a 600,000 ft2 CMRR.

Area	Gross Square Feet (gsf)
TA-55-400 (Radiological Laboratory & Office Building) TA-55-440 (Central Utility Building)	187,127 20,998
TA-55-500 (Security Category I/Hazard Category II Nuclear Facility)	406,000 (beneficial occupancy post FY 2018)
TA-3, Building 29 (CMR)	(571,458)
LANL "banked excess" necessary to offset one-for-one requirement	42,667

6

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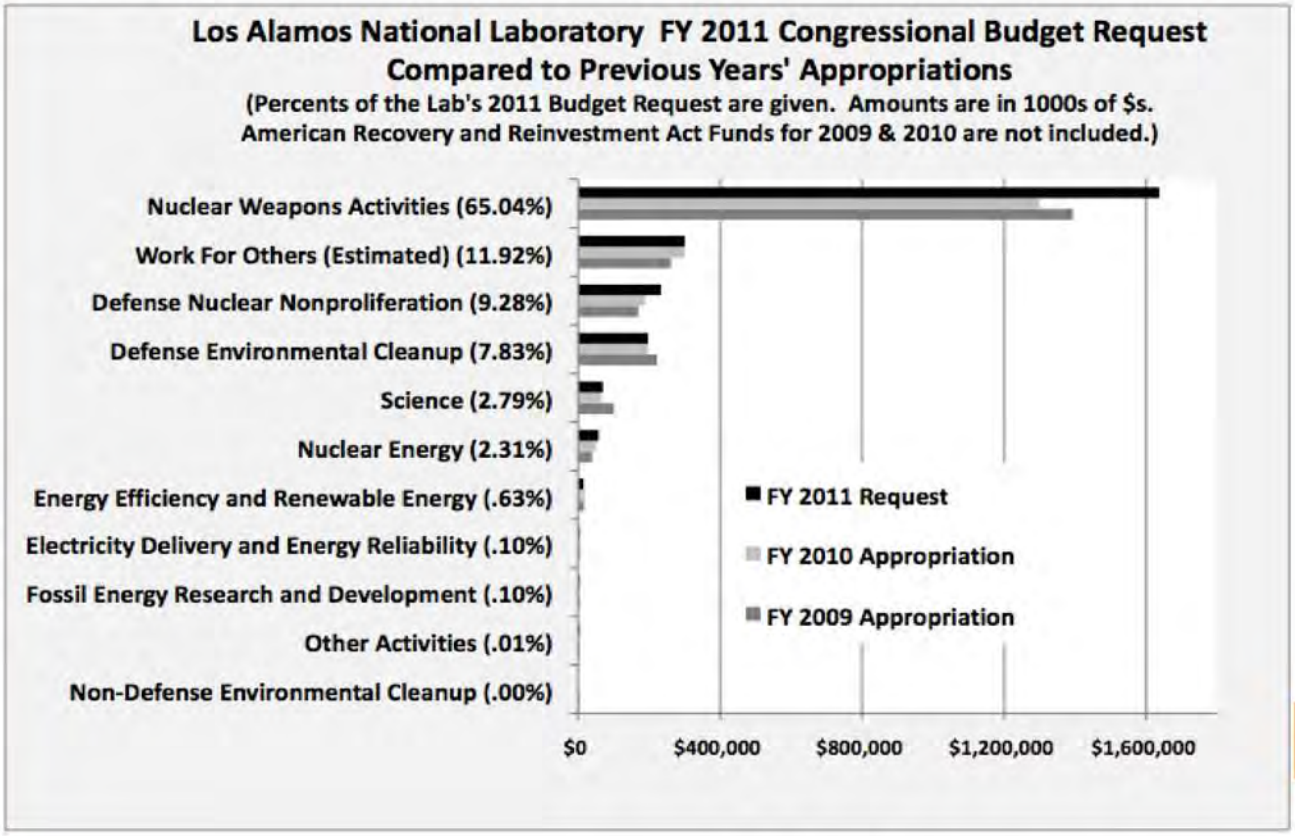
LAB BUDGET PRIORITIES



7

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FIRST PHASE "RAD LAB" EQUIPMENT INSTALLATION CONTRACTS STILL OUT

- Last equipment estimate was $199 Million
  - Rad Liquid Waste Tie-In: $3.5 million
  - Telecommunications: $7 million
  - Fuel Oil Tank: $700K
  - Architectural Finishes: $500K
- What is the current fidelity of this budget estimate?

8

NEW SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

- May 4 Nuclear Watch asked NNSA to prepare a supplement analysis of the 2003 CMRR EIS, which is required by the National Environmental Policy Act when "there are substantial changes to the proposal or significant new circumstances or information."
- On June 4 NNSA agreed in writing that it would review the old CMRR EIS for current relevance.
- On July 9 CCNS delivered 85 individually signed letters to the NM Congressional delegation with a request for a new EIS.
- NNSA has now concluded that a very substantial supplemental EIS (SEIS) is needed.

9

SOME REASONS FOR A NEW SEIS

- 1. It has been five years since the original EIS.
- 2. Current design for the Nuclear Facility is now 200,000 sq ft larger than original design.
- 3. Because of fragile volcanic ash under the site, current design calls for excavating 225,000 cubic yards under the site and filling with concrete.
- 4. The updated seismic hazards for the Lab need to be analyzed for the Nuclear Facility.
- 5. Increased construction impacts, including water usage.

10

NEW SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

- In its Notice of Intent the NNSA lists three alternatives for the Nuclear Facility:
  - 1. To proceed with construction as currently planned;
  - 2. To not build it and use the old Chemistry and Metallurgy Research (CMR) Building without upgrading it; and
  - 3. Not build the Nuclear Facility but upgrade the old CMR Building to sustain operations for 20-30 years.

  We argue for a 4th alternative:
  - 4. No expanded plutonium pit production, cease nuclear operations at dangerous old CMR, do not build Nuclear Facility, consolidate operations into Rad Lab and PF-4

11

NEW SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

- Public "scoping" meetings on the supplemental EIS
- October 19, 2010, at the White Rock Town Hall, 139 Longview Drive, White Rock, New Mexico from 4:00 PM to 7 PM.
- October 20, 2010, at the Cities of Gold Casino Hotel, Pojoaque, from 4:00 PM to 7 PM.
- We urge the public to attend.

12

27,000 REM ACCIDENT?

- Design Basis Accident Environmental Conditions – Why is equipment being speced to withstand 27,000 rem?
- Radiation Environment - One (1) accident estimated at 27,000 rem over the 50 year life of the CMRR-NF facility.
- Doses of more than 1000 rem are almost invariably fatal.

	Item	Maximum	Minimum	Notes
Design Basis Accident Environmental Conditions	Temperature, °F	104	5	Environmental conditions specified are the maximum and minimum abnormal indoor conditions in which the fan will be placed and operated. Temperatures are To Be Verified.
	Relative Humidity, %	N/A	N/A	
	Radiation Environment: One (1) accident estimated at 27,000 rem over the 50 year life of the facility			
	Other Conditions			

13

27,000 REM ACCIDENT?

- Accidental Radiation Environment – Why is equipment being speced to withstand 27,000 rem?
- Accidental Radiation Environment - 27,000 rem
- Bubble Tight Isolation Damper request -

General					
Safety Classification	SS	SS	SS	SS	SS
Seismic Classification	PC-3	PC-3	PC-3	PC-3	PC-3
Service Limits Level	B	B	B	B	B
Normal Radiation Environment	1,535 rem over 50 Year Lifetime	1,535 rem over 50 Year Lifetime	1,535 rem over 50 Year Lifetime	1,535 rem over 50 Year Lifetime	1,535 rem over 50 Year Lifetime
Accidental Radiation Environment	27,000 rem	27,000 rem	27,000 rem	27,000 rem	27,000 rem

Page 2 of 5

14

27,000 REM ACCIDENT?

- Abnormal Environmental Conditions – Why is equipment being speced to withstand 27,000 rem?
- Radiation Environment - One (1) accident estimated at 27,000 rem over the 50 year life of the facility.
- CMRR-NF HVAC and Air Handling Units -

AIR HANDLING UNIT (AHU) DATA SHEET

	Item	Maximum	Minimum	Notes
Abnormal Environmental Conditions	Temperature, °F	104	5	Environmental conditions specified are the maximum and minimum abnormal indoor conditions in which the fan will be placed and operated. Temperatures are To Be Verified.
	Relative Humidity, %	N/A	N/A	
	Radiation Environment: One (1) accident estimated at 27,000 rem over the 50 year life of the facility.			

15

LARGE VESSEL CLEANOUT

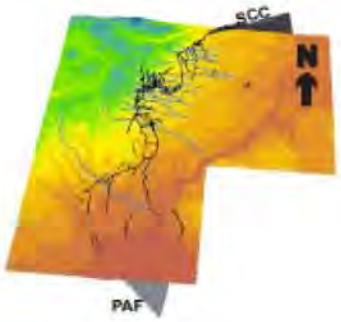
- Are there plans for large vessel cleanout in both NF and TA-15?
- Currently in CMR Wing 9.
- TA-15 has the Vessel Prep Building that serves to clean out 6 ft and 8 ft vessels used in explosive hydrodynamic testing.
- What's the need for both?

16

CONCRETE ADDED

- 225,000 cubic yards of concrete weighs ~225,000 tons.
- What are the effects of this extra weight on the facility stability?
- Why does the excavation stop at 50 feet below the proposed NF?

a) Bird's eye view (for reference)



b) View toward northwest

17

COMPLEX GEOLOGIC SETTING BENEATH CMRR

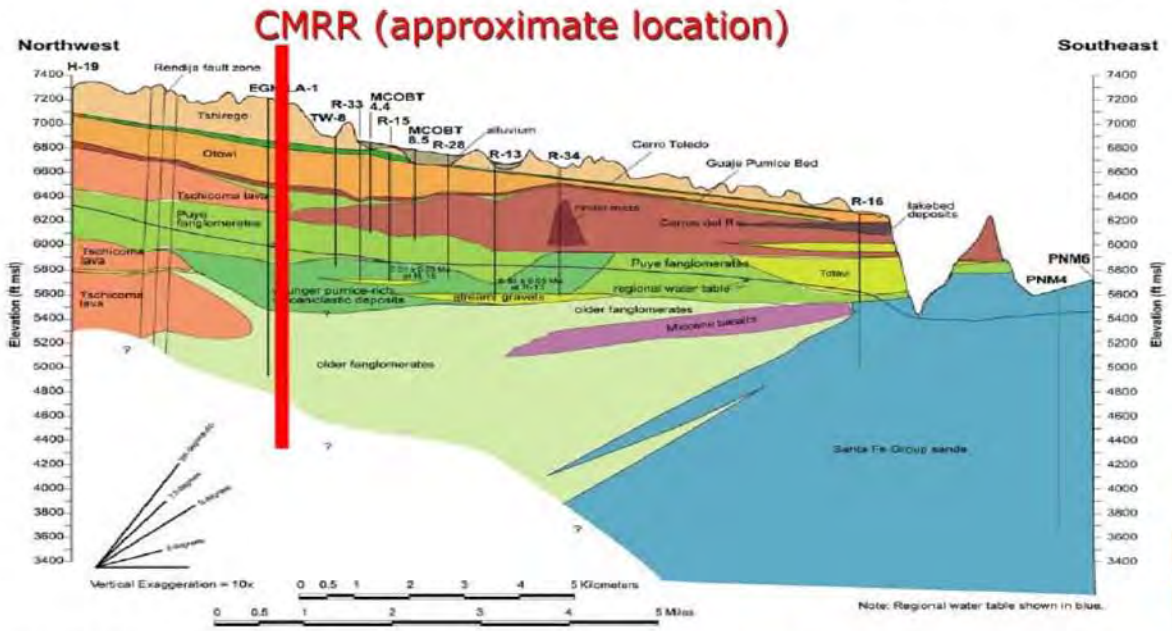
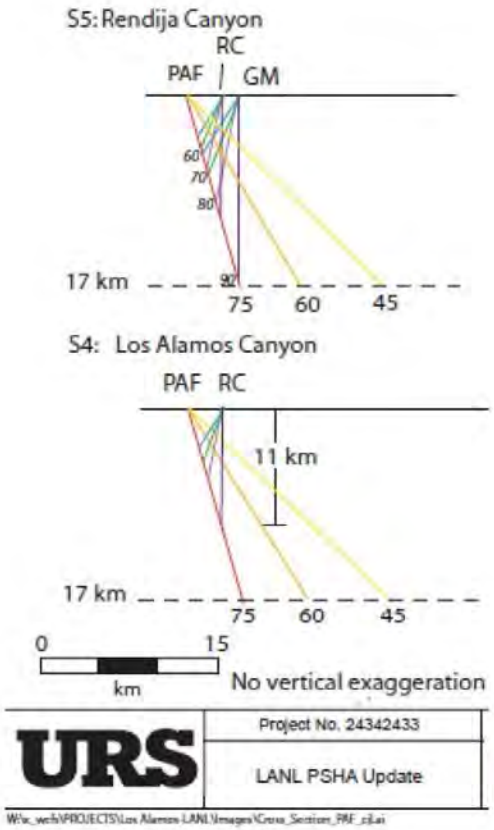


Figure 2-13. Conceptual cross-section for Mortandad Canyon. Regional water table is shown in blue.

CONCRETE ADDED

- What are the plans to demolish the CMRR project at the end of its lifetime?



19

UPDATED 2007 PSHA PROBABILISTIC SEISMIC HAZARD ANALYSIS

- The 2007 PSHA is one main reason for the new SEIS.
- PSHA showed increased motion and activity.
- Also made Recommendations for Future Studies.
- 2007 PSHA was done by URS.
- LANL is now operated by a team composed of Bechtel National, the University of California, the Babcock & Wilcox Company, and URS.
- URS now has corporate responsibility to follow its own recommendations.

20

PSHA RECOMMENDATIONS FOR FUTURE STUDIES

Page 10-1 of the recommendations includes:

- Recalculate the hazard with new ground motion relationships.
- Conduct additional detailed/high-precision mapping and displacement measurements.
- Conduct trenching studies.
- Conduct additional studies to better constrain kappa.
- Conduct shear-wave velocity measurements.

21

EXECUTIVE ORDER 13423 "STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT"

"Beginning in 2008, Federal agencies must reduce water consumption intensity through life-cycle cost-effective measures, relative to the baseline of the agency's water consumption in fiscal year 2007 by 2 percent annually through the end of FY 2015 or 16 percent by the end of FY 2015."

22

EXECUTIVE ORDER 13423 GUIDANCE

- In January 2008, DOE released "Establishing Baseline and Meeting Water Conservation Goals of Executive Order 13423," which provides specific guidance in order to achieve water reduction goals of the Executive Order.
- The May 2008 Final Environmental Impact Statement for Continued Operations at LANL does not reference the Executive Order, or the DOE guidance.

23

DOE/LANL WATER USE HISTORY

- In 2001, DOE reported that it used 344 million gallons per year, or approximately 1,057 acre feet per year (afy) at LANL.
- DOE had a site capacity of 542 million gallons per year, or 1,662 afy, which is equivalent to DOE's leased water rights.
- *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at LANL*, DOE/EIS-0350, p. 3-12.

24

LA-UR 10-08363

CMRR WATER NEEDS

- The 2003 Final CMRR EIS states: the CMRR Project would use 10.4 million gallons per year, or approximately 32 acre feet per year.

- An acre foot per year is a volume of water needed to cover one acre (measuring 66 feet by 660 feet) to a depth of one foot. It is equal to approximately 326,000 gallons, or enough water to supply four family households in Santa Fe.

25

DOE/LANL WATER HISTORY

- "On September 8, 1998, DOE transferred operation of the water production system from DOE to Los Alamos County under a lease agreement.
- "Under the lease agreement, DOE retained responsibility for operating the distribution system within LANL boundaries, whereas the county assumed full responsibility for operating the water system, including ensuring compliance with federal and state drinking water regulations.
- *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at LANL,* DOE/EIS-0350, p. 3-12.

26

DOE/LANL WATER HISTORY

- "On September 5, 2001, DOE completed the transfer of ownership of the water system to the county along with 70 percent (3,879-acre feet or 1,264 million gallons per annum) of its rights to water.
- "The remaining 30 percent (1,662-acre or 542 million gallons per annum) of the water rights is leased by DOE to the county for 10 years with the option to renew the lease for 4 additional 10-year terms.
- "A contract with the U.S. Bureau of Reclamation for an additional 1,200-acre feet per year of San Juan-Chama Transmountain Diversion Project water was also transferred to Los Alamos County."

27

- *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at LANL,* DOE/EIS-0350, p. 3-12.

DOE/LANL WATER HISTORY

- **Around the same time**, DOE reported a drop in water levels in the Los Alamos County well fields of about 1 to 2 feet per year.
  - *Water Supply at Los Alamos 1998 – 2001,* LA-13985-PR, March 2003.

- In 2006, when the public questioned the amount of water DOE was proposing to use for continued operations at LANL, DOE responded that "[w]ater demands at LANL combined with the larger and growing demands of other Los Alamos County users could require up to 98 percent of the currently available water rights."
  - *Final Site-Wide Environmental Impact Statement for Continued Operation of LANL,* DOE/EIS-0380, May 2008, p. S-26. Manufacturing rates were held to a maximum of 20 plutonium triggers per year.

28

LA-UR 10-08363

DOE/LANL WATER USE INCREASING

- In 2008, DOE reported "approximately 380 million gallons of groundwater are used at LANL," a increase of 36 million gallons per year, or 110 afy.
- At the same time, DOE again proposed to expand its manufacturing capabilities at LANL by constructing a Consolidated Nuclear Production Center (CNPC). DOE stated "[a]nnual groundwater use would increase by approximately 104%. LANL groundwater use would exceed water rights by approximately 233 million gallons/year," or almost 715 afy.
  - *Final Complex Transformation Supplemental Programmatic Environmental Impact Statement*, DOE/EIS-0236-S4, October 2008, p. S-71, p. S-80.

29

DOE/LANL WATER HUNTING

Next Steps – DOE is attempting to use of 300 afy of San Juan-Chama Water

- In July 2010, Los Alamos County made a presentation to the Buckman Direct Diversion Board asking it to consider the possibility of diverting 1,200 afy of San Juan-Chama water from the Rio Grande at the Buckman site and piping the water across the river. (300 afy to DOE; 900 afy to LA county)
- Los Alamos County and DOE propose to lift the water about 1,000 feet to the White Rock Treatment Facility.
- CCNS understands that Los Alamos County will soon release a request for proposal (RFP) for engineering studies.

30

DOE/LANL SEEKING, NOT REDUCING

- The latest annual progress reports on DOE implementation of Executive Order 13423 indicates that DOE/LANL has done nothing to reduce its water usage.
- In fact, every indication is that LANL plans to increase its water usage at the expense of farmers and ranchers, fish and aquatic life, and drinking water for those living downstream.

31

CMRR NEW EIS WATER USAGE

- How about a ballpark estimate of the amount of water to be used for construction?
- By our calculations, one cubic yard of concrete requires about 30 gallons of water per cubic yard of concrete.
- 225,000 cubic yards of concrete times 30 gallons each would equal 6.75 million gallons of water.
- This is in addition to the 130,000 cubic yards of structural concrete, which would require another 3.9 million gallons of water.
- The 2003 CMRR Environmental Impact Statement estimated that 3.75 million gallons of water (Table 4–7), total, would be need for construction, which is less than half of our new estimates.

32

MONUMENT TO RANSOMED RATIFICATION

- Ratification of the new START Treaty is being held hostage for "Modernization" of the nuclear weapons complex.
- In order to eliminate nuclear weapons, must we increase production capacity?
- CMRR-NF would provide a capacity of 80 pits, but the actual number produced every year would be a small fraction of that.
- Are we spending money we don't have on capacity we don't need?

33

MONUMENT TO RANSOMED RATIFICATION

- Because of the Consent Order, which is the Cold War legacy waste cleanup agreement between the Lab and the NM Environment Department, the Lab must complete "cleanup" by 2015.
- "Cleanup" is still being defined for each contaminated site – from 'cap and cover' to complete removal of the wastes and everything in between.
- The Lab estimates the total remaining cost to be ~$1.7 billion for the type of "cleanup" it feels is necessary, but one option (removal of waste) for one site (Area G) is estimated at least $9 billion.

34

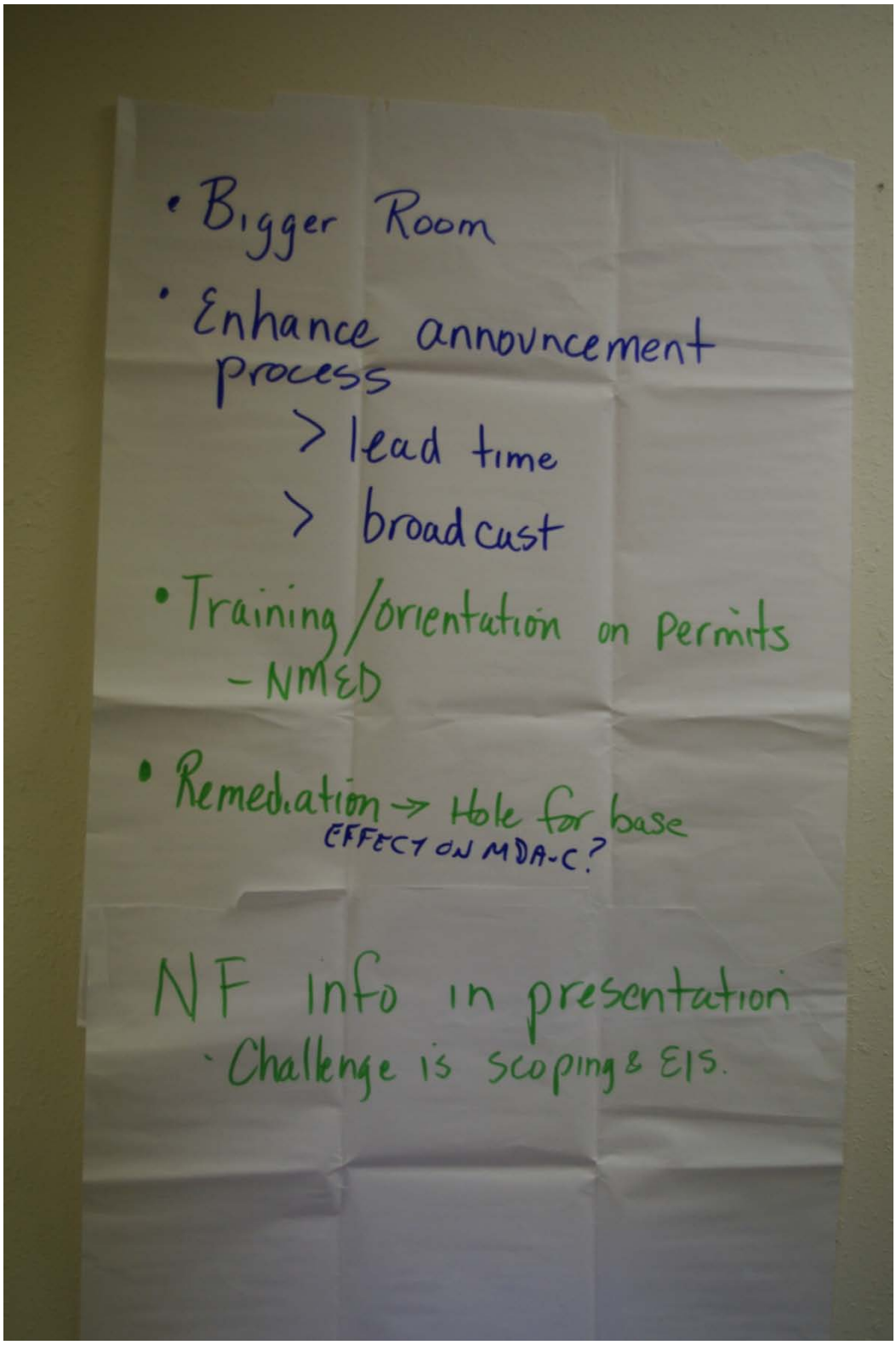
MONUMENT TO RANSOMED RATIFICATION

- Many feel that the completion of the Consent Order is at risk.
- The Lab must put construction of new projects, including CMRR, on hold until all the requirements of the Consent Order are met.

Clean Up, Don't Build up!

35

V. Meeting Flip Chart Notes



VI. Sign-In Sheet

Los Alamos
NATIONAL LABORATORY

Wednesday, October 6, 2010
CMRR Public Meeting @ Best Western "Hilltop House" – SIGN IN SHEET

NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
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Cindy Blackwell	MS A187 LANL 87545		clblackwell@lanl.gov
Tony Griego	LANL		
MORRISON BENNETT	P.O. Box 160 Los Alamos, NM 87544	667-3916	mbennett@lanl.gov
Bruce MacAllister	1473 Bishops Lodge Rd Santa Fe 87506	660-7800	Bruce@bizexteam.com
MICHAEL SKLENS	LANL	—	—
Steve Story	LANL	—	—
Taunia VanValkenburg	White Rock		tauniav@gmail.com

Page ___ of ___

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NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
Amy Wong	White Rock		
Joe Honea	820 Los Pueblos		Jhonea@yahoo.com
William Mel[illegible]	1805 Second St [illegible]		
Peter N[illegible]	62 [illegible] Dr NE		
KEVIN R[illegible]	LANL		
Scott Kovac	NWNM		
Susan Gordon	ANA		
Tom Gallegos	Nambe		tgallegos 2006@msn.com
Steven Wood			

Page ___ of ___

LA-UR 10-08363

The room is too small.

Los Alamos
NATIONAL LABORATORY

Wednesday, October 6, 2010
CMRR Public Meeting @ Best Western "Hilltop House" – SIGN IN SHEET

NAME (please print)	ADDRESS	TELEPHONE NUMBER	E-MAIL
Denise Thronas	PO Box 1663 Los Alamos, NM 87545	667-2989	thronas@lanl.gov
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JENI ARENDS	CCNS	986-1973	jarends@nuclearactive.org
Robert Gallegos	Citizen		8rsgallegos@comcast.net
Floyd Archuleta	Portage Inc	Los Alamos	farchuleta@portageinc.com
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Page ___ of ___