

MINUTES OF THE
THE CITY OF SANTA FE & SANTA FE COUNTY
BUCKMAN DIRECT DIVERSION BOARD MEETING

March 1, 2012

This meeting of the Santa Fe County/City Buckman Direct Diversion Board meeting was called to order by Rebecca Wurzbarger, Chair, at 4:10 p.m. in the Santa Fe County Chambers, 102 Grant Avenue, Santa Fe, New Mexico.

Roll was called and the following members were present:

BDD Board Members Present:

Councilor Rebecca Wurzbarger, Chair
Ms. Consuelo Bokum
Councilor Chris Calvert
Commissioner Liz Stefanics
Commissioner Kathy Holian

Member(s) Excused:

None

BDD Support Staff Present:

Robert Mulvey, Facility Manager
Nancy Long, BDD Board Consulting Attorney
Kyle Harwood, BDD Board Consulting Attorney
Steve Ross, Santa Fe County Attorney
Marcos Martinez, Santa Fe City Attorney
Brian Shelton, BDD Finance Manager
Mel Morgan, City Finance Department
Pego Guerrerortiz, Santa Fe County Utilities Director
Erika Schwender, BDD staff
Gary Durrant, BDD staff
Dale Lyons, Water Resources Coordinator

[Exhibit 1: Sign-in Sheet]

3. APPROVAL OF AGENDA

[Exhibit 2: Agenda]

Robert Mulvey noted a correction to the agenda, regarding the statutory reference on the executive session. It should read 10-12-1-H-7. Stephanie Lopez pointed out the item listed as #12 should be item #11.

Upon motion by Commissioner Holian and second by Councilor Calvert the agenda was unanimously approved as corrected.

4. APPROVAL OF MINUTES: February 2, 2012

Councilor Calvert moved approval of the minutes and his motion was seconded by Commissioner Holian. The minutes were unanimously approved as published.

5. APPROVAL OF CONSENT AGENDA

There were no matters under the Consent Agenda.

6. MATTERS FROM STAFF

None were presented.

DISCUSSION AND ACTION ITEMS

- 7. Discussion and Possible Action on the FY 2012/2013 BDD Operation and Maintenance Budget in the Amount of \$8,464,512. The Budget Includes an Additional Annual Contribution to the Emergency Fund of \$1,000,000 and \$411,212 to the Major Equipment Repair and Replacement Fund for a Total Funding Requirement of \$9,876,324**

ROBERT MULVEY (Facility Manager): Thank you, Madam Chair. This is the proposed operations and maintenance budget for fiscal year 2012/2013. There's a memo in the front of your packet that highlights the major changes from the previous year's budget. I think significantly, this budget is \$403,890 lower than last year's budget. We realized those savings by closer scrutiny of our electrical costs and developing our budget from a program basis, and most of that is explained in the report.

We've requested one additional full-time employee, which would be a budget analyst. We found one of the more challenging parts of the operation is handling our commitments and requirements regarding getting the bills out, the pre-bills, the financial part of this project. So we've asked for that.

And then also our staff has spent a lot of time working to develop performance metrics. We feel it's important to come to you not with just a list of costs, but to explain to you what you're getting for your money. So we've done a lot of work establishing performance metrics, showing you what kind of value the citizens are getting for their dollars and these metrics will be evaluated and redefined annually and improved so that we can have the most efficient operation possible.

CHAIR WURZBURGER: That's good. And did you want to talk about the Las Campanas component? Just reference that?

MR. MULVEY: Yes. There was one other change. Over the last several months Santa Fe County has entered into a raw water agreement with Las Campanas whereby the County will be selling Las Campanas raw water through BS-2A, and in turn billing Las Campanas for that water. In addition to that Las Campanas will be taking

about 187 acre-feet a year of raw water deliveries separate and apart from the agreement with the County, and those costs are all accounted for in this budget and apportioned accordingly.

CHAIR WURZBURGER: Okay. Are you ready to stand for questions?

MR. MULVEY: Yes.

CHAIR WURZBURGER: Yes, Councilor Calvert.

COUNCILOR CALVERT: Yes, first of all, I would like to thank staff for nice work on this budget and the approach they took and the job they did. I just have one slight what I think is a correction on page 10 of 12, under emergency reserve fund. The City of Santa Fe is listed twice. One of those, I think the second one, should be County.

MR. MULVEY: Thank you. We'll make that correction.

CHAIR WURZBURGER: I didn't catch that. Thank you, Councilor. I guess the County should thank you.

COUNCILOR CALVERT: No, I don't think they will.

CHAIR WURZBURGER: Okay. Any other – yes.

COMMISSIONER HOLIAN: Thank you, Madam Chair. So thank you also, for your hard work on this. Of course this is my first look at a budget for the BDD since I'm new on this board, so I just have a couple of questions, and one is have you projected what will actually be spent in this fiscal year to compare with the budget that was put together for this fiscal year?

MR. MULVEY: For the current fiscal year?

COMMISSIONER HOLIAN: For the current fiscal year.

MR. MULVEY: Yes. Our financial manager, Brian Shelton, who I believe is here, he runs budget to actual reports for us monthly, and he just gave me a report the other day. I believe that we have spent about 58 percent of our current year budget, so we're three quarters of the way through the fiscal year, so we're well under budget for this year, which is one of the reasons why we felt comfortable reducing this budget another \$400,000.

My intent is to have Brian come forward eventually and give a mid-year financial update to the board so you can kind of get a sense of where we are as we're moving forward.

COMMISSIONER HOLIAN: Okay. Thank you. And I also have a question about the cost allocations. There were two cost allocations – fixed and variable, and so are they determined by actual use of the facilities or by potential maximum use of the facilities. I'm talking about the share between the City and the County.

MR. MULVEY: Right. The fixed costs are based on percentages that are contained in the FOPA. For the City, they're 62 percent, for the County, its' 20 percent, and for Las Campanas it's 17 percent. Those percentages are determined by their peak day capacity in the system. In other words that's how much of the pipelines and treatment plant processes that they have been allocated and paid for as part of the construction project. So that's how those percentages are determined. That's where the fixed costs come from.

The variable costs, which are primarily power and chemical costs, are determined by the flows, depending on how much flow they actually pump or intend to pump drives those costs.

COMMISSIONER HOLIAN: Okay. So for the variable costs then it's how much we're actually using the facility right now. How much we're pulling out of the facility. Correct.

MR. MULVEY: Yes. This is an important distinction. The budget is based on the projected flows that the partners gave us during the budget process. The actual costs are based on what they really take. So if a partner asks for 100 acre-feet of water, we'll budget for 100 acre-feet. But if they only take 80 they only get charged for 80.

COMMISSIONER HOLIAN: Okay. Thank you. And then, also I noticed in here there were some five-year budget projections. How did you arrive at those?

MR. MULVEY: Essentially what we did is inflate the current budget by three percent to account for inflation. We don't have a better methodology for that at this time.

COMMISSIONER HOLIAN: Okay. Thank you.

COMMISSIONER STEFANICS: On that point.

CHAIR WURZBURGER: Yes, ma'am.

COMMISSIONER STEFANICS: Following up on that point, I see that you've worked on this with Pego, correct?

MR. MULVEY: Yes. I've met with Pego at least once on this budget.

COMMISSIONER STEFANICS: Well, my question is, if you only did a three percent and the utility customers or the water customers increase significantly over the years, wouldn't that need to be reflected? And we do have some projections for that. Don't we?

MR. MULVEY: We'd be happy to take that information and include it into the budget.

COMMISSIONER STEFANICS: I don't it's relevant to approval to that today, but I do think in terms of looking at the five-year you need to probably rework those figures.

MR. MULVEY: Okay. Thank you.

CHAIR WURZBURGER: Any further questions?

COMMISSIONER STEFANICS: I'll move for approval.

COMMISSIONER HOLIAN: Second.

CHAIR WURZBURGER: Further discussion?

COMMISSIONER HOLIAN: Madam Chair, I would also like to make a request to staff, that they work with our County staff in sort of explaining how they arrived at this budget and also how they worked out the cost allocations and so on, the formulas that they used. I think that our staff would like to feel more comfortable with how this was actually developed. Is that appropriate?

CHAIR WURZBURGER: Yes, ma'am. That's perfectly fine, and if you can clarify who among your staff.

COMMISSIONER HOLIAN: [inaudible]

CHAIR WURZBURGER: Thank you.

MR. MULVEY: Yes, Teresa and I have talked and we'd be happy to do that.

COMMISSIONER HOLIAN: Thank you.

CHAIR WURZBURGER: So we have a motion and a second with two amendments. Further discussion?

The motion passed by unanimous [5-0] voice vote.

8. Consideration and Approval of Carry-Forward Budget

BRIAN SHELTON (BDD Finance Manager): I'm sitting in for Rick Carpenter today. He's had a family emergency and couldn't be with us tonight. So I'm asking basically if any general questions on this item – Bob and I are here to answer them, but we thought it was important to get it in front of you, keep some conversation flowing on this. Any specific questions Bob and I will definitely take them back to Rick who's deeply involved in this process and get some answers back to you prior to the next board meeting.

COUNCILOR CALVERT: It's up for approval tonight, right?

MR. SHELTON: Right. But if there's any specific questions that we aren't able to answer we definitely will bring it back, get back to you.

CHAIR WURZBURGER: This is up for discussion and possible action and approval if we can do it, but given the circumstances we wanted to go as far with it as we could tonight.

MR. SHELTON: So the intent is, there's a memo in your packet that describes what we're calling the carry-forward budget. Previously we described it as a carve-out budget. It's the same intent. The intent is that these items were budgeted during the capital budget process. In the approved capital budget process, and these are outstanding items that have yet to be done for the project and we're moving them forward.

What we tried to do was, if you'll recall from past board meetings we've discussed this item is also included in the mutual release that I understand both the County approved, the County Commission, and the Council approved last evening. But the details on this, we tried to simplify it down into a couple categories. The first category is the BDD Board engineer, which is we have an existing contract with the BDD Board engineer and the total remaining on that contract is \$319,000 as summarized on that table on the second page.

We currently have ongoing required tasks as part of that contract that account for \$233,566 and their ongoing budget enhancer in a subsequent memo under CDM Smith is on the next page. It describes then in a little bit more detail. But we tried to do was the last time we talked about this in any detail the number was a lot higher, and what we tried to do was just focus on the items that are outstanding, under contract, and pertinent to what we need to have done moving forward. So that's what you see in your budget or in the packet tonight.

There's also a portion in here that describes on use budget in the amount of approximately \$86,000. That would only be used if and when a problem arises that's not within their scope. They do have money to handle those and answer those types of questions.

The other category that we broke this carry-forward schedule up into is required approved EIS, ESA habitat. Basically, these are permanent requirements for this project. Here again, this was from the approved capital budget, but we tried to break it down into

tasks. These are ongoing tasks with various vendors, and like I said are required as part of our permit process. That total, there's several categories, the biggest of which is the habitat mitigation plan implementation of about \$975,000, and then the contractors or consultants that are working on this – Parametrix, Harwood Consulting, SWCA Resource Surveys, and then ongoing, BLM and US Forest Service coordination and monitoring. And that total cost is \$1.1, almost \$1.2 million.

And then the third category is we added a ten percent contingency into this for unknown, unexpected items that we were unable to foresee. So the total carry-forward schedule as we've identified in here is \$1,558,772. And with that, Bob and I'll stand for any questions you may have.

CHAIR WURZBURGER: Councilor Calvert.

COUNCILOR CALVERT: So Brian, the \$86,163 is not included in this total, right? It's my understanding that – because if you're adding the subtotals of \$233,000, \$1,183,000 and \$141,000 right? To get the –

MR. SHELTON: Councilor Calvert, that's correct. However, they are under contract and we could use that and we'd have to amend – they have that as part of their purchase order currently, and their contract, if we needed to move in that direct. But it's not part of this carry-forward.

COUNCILOR CALVERT: It's not part of what we're approving here this evening if we do so. Plus you have a contingency of \$141,000 built in. Now, I understand that's mostly for these other things. Is it limited to the items in the second grouping or is that available if something happens and you need it for the board engineer?

MR. SHELTON: It's my understanding that the contingency is for the entire carry-forward budget, not limited to the board engineer or the habitat mitigation. It's just in general carry-forward until we close out the carry-forward budget similar to what we did with the capital budget. That would be an item we would be able to utilize if necessary.

COUNCILOR CALVERT: So if anything needed to exceed this amount, \$1.558 million, they would have to come back to the board for approval of that, right? As an amendment?

MR. SHELTON: That is correct.

COUNCILOR CALVERT: Okay. So I'll move for approval.

COMMISSIONER STEFANICS: I'll second.

CHAIR WURZBURGER: Further discussion?

The motion passed by unanimous [5-0] voice vote.

9. Consideration and Approval of New 2012 Meeting Dates for the Fiscal Services And Audit Committee

CHAIR WURZBURGER: I understand this item will probably take us an hour and a half to resolve.

COMMISSIONER STEFANICS: I think there's still one issue. Are we talking about what's in here?

CHAIR WURZBURGER: Yes. So there is an issue. I'm not saying because it's difficult. We have an issue here.

COMMISSIONER STEFANICS: Well, one of the financial meetings is still scheduled on a BCC day, looking at the schedule, July 31st. There's one of the FSACs, July 31st, where we are in Board of County Commissioners.

CHAIR WURZBURGER: So that gets wiped out. We can't have that.

COMMISSIONER STEFANICS: And it's on there. It's the last Tuesday of the month that we meet, and the second.

CHAIR WURZBURGER: So may I suggest we strike that because that's not operable. Let's just spend a few moments please discussing the concept of do we need all these dates? Or maybe we save some, just in case we need them? Because there is, from the briefing that I had from staff there was some perception that we may not need to have as many meetings, that it might be worthwhile to go ahead and put this on the calendar and then every month update it. Robert, do you want to add to that?

MR. MULVEY: Madam Chair, that's correct. Stephanie has been working really hard to work all these dates in and we apologize for that one conflict. As the capital budget goes away we see the need for the FSAC meetings as diminishing as well. So we would kind of like to just save these as placeholders and then call the meetings as needed, and we would also, frankly, if I could possibly bring other operational topics back through these meetings as we deem necessary moving forward. So maybe expand the scope of them to be a little more inclusive to what we'll be doing in the future.

COMMISSIONER STEFANICS: Okay. And Madam Chair, I would just suggest that on the County side that it be either of us that are available to attend.

CHAIR WURZBURGER: Rather than worry –

COMMISSIONER STEFANICS: Right. That it not be just one set person.

COUNCILOR CALVERT: And I guess what I would request, if I'm going to continue on is that we get ample notice on when these meetings are going to actually occur. In other words, these are placeholders but if we're going to want to hold a meeting then let's give us ample notice.

CHAIR WURZBURGER: Could you operationally define ample notice?

COUNCILOR CALVERT: A week.

CHAIR WURZBURGER: A week. Okay. So there will be one week before we actually have one of these meetings.

COUNCILOR CALVERT: Pull the trigger on these.

STEPHANIE LOPEZ: And normally what I do is once this is approved I will send out an outlook invitation to everybody for the entire year.

CHAIR WURZBURGER: Right. But that's not what he's saying.

COUNCILOR CALVERT: Because these are placeholder.

CHAIR WURZBURGER: Right. The point is, when it's a week and one day before we'll want notice that we're having the meeting. Right? Am I interpreting this correctly? Okay. No problem right. So we need an action item to approve a meeting time.

COMMISSIONER HOLIAN: So moved.

CHAIR WURZBURGER: Thank you, ma'am. Do we have a second?

COUNCILOR CALVERT: Second.

CHAIR WURZBURGER: Thank you. Discussion?

The motion passed by unanimous [5-0] voice vote.

Informational Items

10. Update on Status of the One Megawatt Solar Panel Facility at Pump Station 2-A

CHAIR WURZBURGER: Dale, are you going to do this for us?

DALE LYONS (Water Resources Coordinator): Good afternoon, Madam Chair, members of the board. It's been a little over a month since I gave you all an update about the project, the proposed project. I think last time we spoke I presented an update, there was an application before the New Mexico Finance Authority Board to approve the approximately \$5 million in funding for the project. At the NMFA Board meeting last Friday the board did approve the funding for the project, of course contingent on a number of things including our procurement of the solar contractor. I have actually received their approval letter that lays out the contingencies. I'm happy to include that in an email to you all so you know exactly what's involved. It's standard NMFA requirements for all grant/loan agreements.

This project, because it is coming out of the green project reserve will receive 50 percent principal forgiveness, and so whatever we borrow we will simply be borrowing half of the project cost.

I have updated the financial projections for the project. What's new in the financial projections are O&M, operations and maintenance costs, which we have projected to be about \$2300 per month. The total cash flow if we assume a REC of five cents per kilowatt-hour, if in fact you account for the savings in our electric bill and operations and maintenance, total cash flow under that scenario would be about \$8700 per month net revenue. And then under the seven cents per kilowatt-hour scenario that revenue jumps up to about \$12,746 per month.

I have at the NMFA's request conducted a lifecycle cost analysis too that I'd be happy to provide. It evaluates net present value of costs and also the real benefit/cost ratio under those two different scenarios – a five cent REC and a seven cent REC. Needless to say the cost/benefit ratio under the five and seven cent REC scenarios are very favorable for this project.

CHAIR WURZBURGER: It's very nice to have good news.

MR. LYONS: It is.

CHAIR WURZBURGER: Questions or comments? Yes, sir.

COUNCILOR CALVERT: So Dale, you've got one projection without revenue. Is there – are we in line or on the list for whatever REC we want or do we still have to get in line?

MR. LYONS: We still have to get in line and that begins – we actually place ourselves in line when we submit a completed interconnection application to PNM.

COUNCILOR CALVERT: So how long would that take?

MR. LYONS: So that requires that we have to procure the engineering services of a consultant and they need to prepare the design and a few other PNM requirements. So I have the RFP prepared for this project; it has been for a while. I'm going through one more iteration that the Construction Programs Bureau with the Environment Department. I expect that the procurement will be advertised on the 8th and

close on the 29th of March and we would be able to have someone under contract probably within, ideally, a couple weeks but likely –

COUNCILOR CALVERT: Do you know the status of the PNM REC queue?

MR. LYONS: There's still 1 ½ megawatts capacity left in the seven cent REC category, and 1 ½ megawatts in the five cents category. And as far as I know from my discussions with PNM staff there's no one in line aside from us.

COUNCILOR CALVERT: No one was probably counting on this one either.

MR. LYONS: Since the REC has been devalued the incentive is gone and on one's really clued into this possibility of using EPA funding to do these projects.

CHAIR WURZBURGER: Well, Dale, you've done a great job in being our steward on this. I just want to commend you for that. Any further comments or accolades?

COUNCILOR CALVERT: Thank you for the great work and full speed ahead, please.

CHAIR WURZBURGER: Thank you.

11. Update on the Buckman Restoration and Recreation Plan

MR. MULVEY: Madam Chair, members of the board, at the last meeting Rick came forward on behalf of the New Mexico Wildlife Federation requesting some funds for some improvements down along the river. The board had several questions at that time regarding the facilities that we were proposing – the ownership of those facilities, how they would be built and maintained. At this point we just don't have a lot of those answers yet but we wanted to put this back out there as an update item and let you know that we haven't forgotten about your questions. We're working on them. As soon as staff is comfortable that we have a viable plan that we can support we will bring this back to you.

CHAIR WURZBURGER: Thank you.

COMMISSIONER STEFANICS: Will that be next month?

MR. MULVEY: Madam Chair, Commissioner Stefanics, I can't commit to next month. There's a lot of loose ends on this. We will do our best to get it to you at that time but I'm not sure.

COMMISSIONER STEFANICS: Madam Chair, the reason I'm asking about timing is not so much that I need that next month but the good weather is coming and there might be more traffic and involvement of people.

COUNCILOR CALVERT: Like the weather we're having right now, right?

MR. MULVEY: That's an excellent point. We'll make this a priority and we'll get back to you as soon as we can.

CHAIR WURZBURGER: Thank you, Robert.

Executive Session

**Review and Discussion of Issues Related to Threatened or Pending Litigation
Pursuant to NMSA 1978, Section 10-12-1-H(7)**

CHAIR WURZBURGER: Nancy, would you like to give us the preparation for going into executive session please?

NANCY LONG (BDDDB Consulting Attorney): Yes, Madam Chair. You will require a motion to go into executive closed session to review and discuss issues related to threatened or pending litigation, pursuant to 10-15-1H (7) of New Mexico Statutes, and you'll need a roll call vote on that motion.

CHAIR WURZBURGER: Thank you.

COUNCILOR CALVERT: So moved.

COMMISSIONER STEFANICS: Second.

The motion passed by unanimous [5-0] roll call vote with Commissioners Stefanics and Holian, Councilors Calvert and Wurzburger, and Member Bokum all voting in the affirmative.

CHAIR WURZBURGER: We'll be back just as soon as we can.

[The board met in closed session from 4:40 to 4:55.]

CHAIR WURZBURGER: Okay, everyone. If we may have your attention. We're ready to come out of executive session.

COMMISSIONER HOLIAN: Madam Chair.

CHAIR WURZBURGER: Yes.

COMMISSIONER HOLIAN: I move that we come out of executive session where we discussed pending or threatened litigation.

COMMISSIONER STEFANICS: Second.

COUNCILOR CALVERT: With no action being taken.

CHAIR WURZBURGER: With no action being taken.

The motion passed by unanimous [5-0] voice vote.

Matters from the Public

CHAIR WURZBURGER: Is there anyone who would like to speak? Please come forward. Welcome.

JONI ARENDS: Good afternoon. My name is Joni Arends. I'm with Concerned Citizens for Nuclear Safety.

CHAIR WURZBURGER: Joni, how much time do you need, please?

MS. ARENDS: Just a couple minutes. I have a couple of different issues.

CHAIR WURZBURGER: Thank you.

MS. ARENDS: So in the minutes from the last meeting I was asking about the grants from the Department of Energy and the New Mexico Environment

Department. I understand from the chair that the ball was dropped on that, and I just want to note that in terms of getting back to me about those grants.

CHAIR WURZBURGER: We'll do so as I told you.

MS. ARENDS: Thank you. So I just want to let the board members know that I was out at the Buckman a few weeks ago on a Saturday and encountered one of the guards. We've resolved the issues but I wanted to let you know that we were at the diversion site. We were minding our own business. The guard watched us for quite a long time. We had talked to him up at the big tank up by the power station on the main road, but when we were down at the Buckman on the river he wanted to find out who we were, what we were doing. He talked about the fact that he was armed. He said that his instructions were to shoot first and ask questions later.

And so I want this to be in the minutes to let people know that the guards are saying things like that. It's been resolved and Bob's been very great in terms of setting up a system where I'll let the BDD staff know when I'm going to go out there, which includes this Saturday with a group of people. But I am very concerned about the way that the guard acted when we were very reasonable and being out there. And I understand there will be more guards from the Forest Service and the BLM.

CHAIR WURZBURGER: I'd like to add as chair that your email to me was immediately responded to and I want the board to know that this was not something that was taken lightly by your chair, and we did try to come to a resolution. It's absolutely unacceptable. But we did respond, I think, in less than 24 hours to try to come to a resolution so this won't happen again.

MS. ARENDS: And we're grateful for that. I do want to note that we looked at the sediment facility and saw that there was a large discharge from that facility that went down into the arroyo, and it was pretty damaging, actually. It must have been a very large flow. It wasn't from a rain. It was from the discharge pipe, and there was a side-cut of maybe 2 1/2 feet that flowed down the side of the fence into an arroyo. I didn't understand what that was about; that kind of got lost in the conversation. But there were no best management practices for any kind of discharge at that facility and it raised some concerns about what it was. The soil was dark, black, sandy. So I don't know if that was from the river or what it was but I'll follow up with Bob.

And then we're getting very concerned about the fact that we're not getting prompt information about the sampling results from Los Alamos National Laboratory and specifically about the sample with the tritium in it from last March. We've gone back and forth and back and forth with the lab to get the actual data packages for that sample. Generally when the lab is trying to hide something they obfuscate trying to provide the information and so I think we're in a situation where maybe the board could be asking for that March tritium data and providing it to us.

The reason that we're concerned about the tritium is for a number of reasons. One is that tritium travels with water. You can't take it out; the filtration system will not take it out because it's radioactive hydrogen. It's an early warning and that's our concern, is that it may be an early warning of some kind of plume coming from the laboratory, or we're concerned also that according to the article in the *Santa Fe Reporter* yesterday the laboratory is saying that they changed companies back in 2008 from the University of Miami, which is the world's expert on tritium analysis for low level detection. They changed to this other company, American Remediation Services or something like that

and the fact that there wasn't any kind of consistency, like sending the samples to both companies to make sure the second company was doing the process properly raises some really big concerns. It also raises concerns about what the New Mexico Environment Department apparently approved the change, but why there wasn't some kind of follow-through with that.

It just raises more concerns about a possible toxic cocktail, and this handout here, David will talk about it a little bit more, but there's consistent detections of aluminum, iron and manganese. There's some hits of cyanide. There's perchlorates. The alkalinity of the samples has changed pretty significantly from like 92 in July 26th up to I think over 110 later on and we don't have all of the samples. The last sample on September 4th is 170 parts per million, and that change in alkalinity raises concerns about other contaminants that may move in the surface or in the stormwater that might not normally do that.

There's exceedences on this sample from August 21st of beryllium, lead, arsenic, cadmium, and a host of other contaminants. So while this report is dated November 2, 2011 there hasn't been an update. There's a lot of data that's pending. Erica just told me that they're working on changing their website. I asked her if she could send me the results as soon as they're reviewed. I would appreciate it if the board could help facilitate that communication about these samples. Last year was an unusual year in terms of we were in drought for six months. There was no rain, no moisture, so the concentration of the contaminants could increase, and then we had these big rains during the summer. So it could mobilize these contaminants. The other thing that we're concerned about is that this sample on the last page, on 8/30, there were, in the finish water there were hits of both gross alpha and gross beta, and although they're below the standards they raise concern about the source of the contamination. Because we haven't seen hits of gross alpha and gross beta in the finish water previously.

So we're here as the canaries in the coal mine and I appreciate you all listening and I want to say a special thank you to Bob for his communication about this previous incident, and for your communication as well, Madam Chair.

CHAIR WURZBURGER: Thank you.

COMMISSIONER STEFANICS: Madam Chair, I have a question for Bob. Thank you very much, Joni. Do we have – many people want to visit the BDD. It's a spectacular experiment. It's working, and that's not to minimize the problems with the contaminants. But do we have like visiting hours? Do we have – and the reason I'm asking is – well, we're going to have a very large event coming up with many people coming from out of state and that's one of our tours. And I can envision that people are going to say, oh, come see what I saw yesterday. So I'm just wondering.

MR. MULVEY: Madam Chair, Commissioner Stefanics, we have a formal tour policy and essentially we take tours by appointment. People can contact us, give us some basic information about what type of group they're bringing through, how many people there are going to be, and we schedule those.

COMMISSIONER STEFANICS: But what about visits? It seems like we have people who know the facility that are just going to go visit and do what they need to do. Is it daylight hours? Is it?

MR. MULVEY: Well, we don't have a formal policy on that and it's sometimes difficult for us to just accommodate drop-ins because we're busy. We have

schedules that day. If somebody did walk in the front door and we felt we could accommodate them we would. But we encourage people to make appointments and let us know when they want to come down. We have some security measures and some safety training that we need to take them through before we take them out to certain facilities, and so we sort of encourage people to do it that way.

COMMISSIONER STEFANICS: Well, I guess then my question is, what happens when somebody just drives up and doesn't say, or says, I would like to just walk around?

MR. MULVEY: Well, truthfully, we haven't had that happen yet that I'm aware of, and like I say, if somebody did drop in and dropped into my office and said can you walk me around, I would do my best to do that as long as I didn't have a meeting or some prior commitment, and our staff would probably try to do the same.

COMMISSIONER STEFANICS: You don't think people, Madam Chair, go out there just to see what it is?

MR. MULVEY: Maybe. And maybe if they knew that we have more of an open-door policy they would but I haven't seen that happen yet.

COMMISSIONER STEFANICS: Okay. Thank you, Madam Chair.

CHAIR WURZBURGER: You're welcome.

DAVID BACON: I'm David Bacon. I'm a board member of CCNS. I'm reading from the Institute for Energy and Environmental Research, which I regret not having copies for you guys. This is Arjun Makhijani. He's a PhD physicist from Berkeley. His conclusion that he draws that the safe level for alpha-emitting, long-lived transuranic radionuclides should be tightened by about a factor of minus 100. That is, it should be reduced from 15 picocuries per liter to .15 picocuries per liter. He says the 15 picocuries per liter limit for transuranic radionuclides is obsolete, not protective of public health, against the spirit of the safe drinking water act and not in accord with the intent of the initial regulation.

If you look at 8/21 on that handout I gave you, *Exhibit 3* page 3 of 4, and you look at what the call buffer water – they obviously flipped filtered and unfiltered. But under filtered, you see a gross alpha of 953 picocuries per liter, which is way over. Then when you look at unfiltered – or you look at filtered, which is marked unfiltered, it's 5.79 picocuries per liter. According to Arjun's figures that's at a level of – I can't do the math, but it's high. That would be about 53 times the acceptable levels. You have huge levels of gross alpha in there. The raw water you have 953 picocuries of gross alpha, gross beta 1,430 picocuries per liter. And you have quite a bit of radionuclides in there at levels way, way exceeding what he calls out as the minimum level of .15. If you do .15 times 100 you're at 150.

So this is an astonishing thing. And then you have the only chart – this is the only series of tests that show up on line at the BDD project storm event summaries. It ends in 9/04/11. There's nothing else. Nothing until now. Zero. I don't know if they stopped taking samples or what. But when you have something like that on August 21, 2011, these are huge figures of hot, hot radioactivity coming down the river it's astonishing.

CHAIR WURZBURGER: Would you be kind enough to get us a copy of that for our staff?

MR. BACON: What's that?

CHAIR WURZBURGER: The reference that you've got from which you are reading. May we have one copy of it? The article that you're –

MR. BACON: I'll just leave this. Sure.

CHAIR WURZBURGER: That'd be great.

MR. BACON: I outlined his conclusion in there but what I don't understand is why does it stop then? Why are you getting radionuclides pending, pending, pending from late 2011 when we're in March 2012. I don't understand this. And in the Reporter article Katzman's saying, Mark's just wrong. He keeps referring to the March tests from Buckman that show tritium but then he just says, but it never really happened. But we've never seen the data that show how they arrived at that conclusion, ever. Mark's asked seven different times to see that data and has never received it. So this is way, way off the charts.

CHAIR WURZBURGER: Thank you. Any further comments.

Matters from the Board

CHAIR WURZBURGER: Are there any matters from the board?

COMMISSIONER STEFANICS: Yes. Thank you, Madam Chair. I just wanted to refer to my comment earlier. The Western Interstates Conference of the National Association of Counties is going to be here in mid-May, and there's about 400 people coming from across the western states and the board. And one of our pre-conference tours is to the BDD, and staff is working on arrangements for that. So we don't know if it's going to be 50 people or 200 people but I think it's going to be – for those individuals who are really considering something like this they're going to be impressed. Thank you.

CHAIR WURZBURGER: Thank you. If you would like anything from the board let us know.

COMMISSIONER STEFANICS: Thank you. I can get back to the board on that.

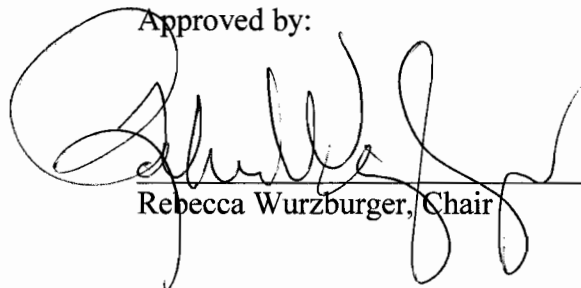
CHAIR WURZBURGER: Any further comments?

Next Meeting: April 5, 2012 @4:00 P.M.

Adjournment

Having completed the agenda, Chair Wurzbarger, this meeting was declared adjourned at approximately 5:12 p.m.

Approved by:



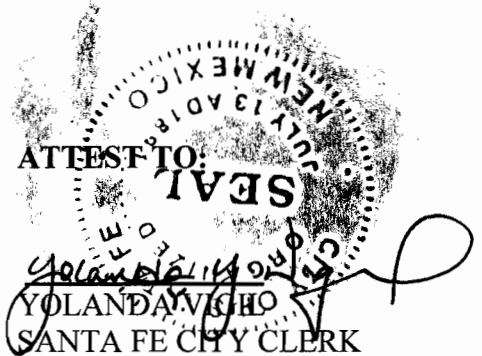
Rebecca Wurzbarger, Chair

Respectfully submitted:

Debbie Doyle, Wordswork

ATTEST TO:

VALERIE ESPINOZA
SANTA FE COUNTY CLERK



COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

BUCKMAN DIRECT DIV MIN
PAGES: 22

I Hereby Certify That This Instrument Was Filed for
Record On The 3RD Day Of April, 2012 at 09:26:07 AM
And Was Duly Recorded as Instrument # 1665178
Of The Records Of Santa Fe County

Deputy Marcella [Signature])
Witness My Hand And Seal Of Office
Valerie Espinoza
County Clerk, Santa Fe, NM

BUCKMAN DIRECT DIVERSION BOARD MEETING

SIGN IN SHEET

March 1, 2012

NAME (Please print)

ORGANIZATION

JONI ARENDT

CCNS

Basia Miller

CCNS

Steve Klinger

The Light of NM

David Bacon

CCNS - KSFR

MAZIOS MARTINEZ

CITY OF SANTA FE

MICHAEL AUNE

VOTER + TAXPAYER

Mel Morgan

City Finance

Phil Neward

Las Campanas Water Coop

NICK BABIC

ASI

Angela Anderson

Affordable Solar Installation

Nancy Seewald

CCNS

DANIEL FISHER

CCNS

Gary Durrant

BDD

Erica Schwender

BDD

Dale Lyons

City of SF

Judith Lawson

The NM Broadside / voter

Tony Peter

SF Reporter

PAUL KARAS

CDM SMITH

City of Santa Fe



CITY CLERK'S OFFICE

DATE 2/24/12 TIME 2:15

SERVED BY Stephanie Lopez

RECEIVED BY [Signature]

EXHIBIT

2

AGENDA

THE CITY OF SANTA FE

And

SANTA FE COUNTY

BUCKMAN DIRECT DIVERSION BOARD MEETING

THURSDAY, MARCH 1, 2012

4:00 PM

CITY HALL

SANTA FE COUNTY COMMISSION CHAMBERS

102 Grant Avenue

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES FOR THE FEBRUARY 2, 2012 BUCKMAN DIRECT DIVERSION BOARD MEETING
5. APPROVAL OF CONSENT AGENDA
6. MATTERS FROM STAFF

CONSENT AGENDA

None

DISCUSSION AND ACTION ITEMS

7. Discussion and Possible Action of the FY 2012/2013 BDD Operation and Maintenance Budget in the Amount of \$8,464,512. The Budget Includes an Additional Annual Contribution to the Emergency Fund of \$1,000,000 and \$411,212 to the Major Equipment Repair and Replacement Fund for a Total Funding Requirement of \$9,876,324. (Robert Mulvey)

SFO CLERK RECORDED 04/03/2012

8. Consideration and Approval of Carry-Forward Budget. (Rick Carpenter)
9. Consideration and Approval of New 2012 Meeting Dates for the Fiscal Services and Audit Committee. (Bob Mulvey and Stephanie Lopez)

INFORMATION ITEMS

10. Update on Status of the One Mega Watt Solar Panel Facility at Pump Station 2A. (Bob Mulvey and Dale Lyons)
12. Update on the Buckman Restoration and Recreation Plan. (Bob Mulvey)

EXECUTIVE SESSION:

Review and Discussion of Issues Related to Threatened or Pending Litigation Pursuant to NMSA 1978, Section 10-12-1-H(8). (BDD Legal Counsel)

End of Executive Session

MATTERS FROM THE PUBLIC

MATTERS FROM THE BOARD

NEXT MEETING: THURSDAY, APRIL 5, 2012 @ 4:00 P.M.

ADJOURN

PERSONS WITH DISABILITIES IN NEED OF ACCOMODATIONS, CONTACT THE CITY CLERK'S OFFICE AT 505-955-6520, FIVE (5) WORKING DAYS PRIOR TO THE MEETING DATE.

SFC CLERK RECORDED 04/03/2012

						Alkalinity: 93 ppm
07/29/11	1:10	Santa Clara Canyon (presumed)	Yes	Yes	gross alpha, gross beta, metals, VOCs	Radiologicals (unfiltered): gross alpha ND, gross beta ND Radiologicals (filtered): gross alpha ND, gross beta ND Metals (unfiltered): <u>Al 6 ppm</u> , Ca 39, <u>Fe 3.7 ppm</u> , Mg 6.8 ppm, <u>Mn 0.42 ppm</u> , Ni 0.003 ppm, all others not tested VOCs: ND
07/29/11	8:20	Santa Clara Canyon (presumed)	Yes	Yes	gross alpha, gross beta, metals, VOCs	Radiologicals (unfiltered): gross alpha ND, gross beta 1.26 pCi/L Radiologicals (filtered): gross alpha ND, gross beta ND Metals (unfiltered): <u>Al 5.2 ppm</u> , Ca 38, <u>Fe 3.4 ppm</u> , Mg 6.7 ppm, <u>Mn 0.24 ppm</u> , Ni 0.0023 ppm, all others not tested VOCs: ND
07/30/11	7:00	unknown	No	Yes	gross alpha, gross beta, metals, VOCs, Cyanide, Nitrate, Nitrite, alkalinity	Radiologicals (unfiltered): gross alpha <u>71 pCi/L</u> , gross beta 74 pCi/L Radiologicals (filtered): gross alpha ND, gross beta ND Metals (unfiltered): <u>Al 100 ppm</u> , Ba 0.97 ppm, Be 0.0071 ppm, Ca 39, Cd ND, Co 0.04 ppm, Cu 0.043 ppm, <u>Fe 53 ppm</u> , Hg 0.00016 ppm, Mg 47 ppm, <u>Mn 2.3 ppm</u> , Na 13 ppm, Ni 0.04 ppm, Se 0.00082 ppm, Zn 0.17 ppm, all others not tested VOCs: ND Cyanides: ND Nitrates: 0.11 ppm Nitrites: ND Alkalinity: (pending)
08/01/11	5:00	unknown	No	Yes	gross alpha, gross beta, metals, VOCs, Cyanide, nitrate, nitrite, alkalinity	Radiologicals (unfiltered): gross alpha 10.4 pCi/L, gross beta 5.42 pCi/L Radiologicals (filtered): gross alpha 1.35 pCi/L, gross beta 4.02 pCi/L Metals (unfiltered): <u>Al 91 ppm</u> , As 0.0084, Ba 0.91 ppm, Be 0.0057 ppm, Ca 140 ppm, Cd ND, Cr 0.037 ppm, Cu 0.042 ppm, <u>Fe 53 ppm</u> , Hg 0.00012 ppm, Mg 39 ppm, <u>Mn 2 ppm</u> , Na 12 ppm, Ni 0.039 ppm, Se ND, Zn 0.15 ppm, all others not tested VOCs: ND Cyanides: ND Nitrates: 0.16 ppm Nitrites: ND Alkalinity: (pending)
08/03/11	16:15	ENS - Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: 0.00000134 ppm Dioxins: ND Furans: ND Radiologicals (unfiltered): gross alpha 10.9 pCi/L, gross beta 4.4 pCi/L, Am241 0.385 pCi/L, Cs137 34.4 pCi/L, Co60 ND, K40 ND, Na22 ND, Np237 ND, Pu238 ND, Pu239/Pu240 1.81 pCi/L, Ra226 7.74 pCi/L, Ra228 14.2 pCi/L, <u>Ra226/Ra228 21.9 pCi/L</u> , Sr90 8.92 pCi/L, U234 12.1 pCi/L, U235/U236 0.911 pCi/L, U238 11.4 pCi/L Radiologicals (filtered): gross alpha ND, gross beta 3.85 pCi/L, Am241 ND, Cs137 ND, Co60 ND, K40 ND, Na22 ND, Np237 ND, Pu238 ND, Pu239/Pu240 0.584 pCi/L, Ra226 0.681 pCi/L, Ra228 ND, Ra226/Ra228 1.08 pCi/L, Sr90 1.27 pCi/L, U234 1.77 pCi/L, U235/U236 0.0997 pCi/L, U238 1.45 pCi/L Metals (unfiltered): Ag, ND, <u>Al 3.92 ppm</u> , As 0.00294 ppm, Ba 0.126 ppm, Be 0.000342 ppm, Ca 35 ppm, Cd ND, Co ND, Cr 0.0035 ppm, Cu 0.00484 ppm, <u>Fe 2 ppm</u> , Hg ND, K 3.46 ppm, Mg ppm, Mn 0.294 ppm, Na 15 ppm, Ni 0.00416 ppm, Pb 0.00551 ppm, Sb 0.00271 ppm, Se ND, Ti ND, U 0.00183 ppm, V 0.00724 ppm, Zn 0.0157 ppm Metals (filtered): Ag ND, Al 0.0528 ppm, As 0.00248 ppm, Ba 0.679 ppm, Be ND, Ca 32 ppm, Cd ND, Co ND, Cr ND, Cu 0.00115 ppm, Fe ND, Hg ND, K 2.68 ppm, Mg 5.32 ppm, Mn 0.0036 ppm, Na 15.2 ppm, Ni 0.00136 ppm, Pb ND, Sb 0.00271 ppm, Se ND, Ti ND, U 0.00138 ppm, V 0.00418 ppm, Zn ND Perchlorates: 0.0000838 ppm VOCs: (pending) Cyanides: 0.01 ppm Nitrates: ND Alkalinity: 94 ppm
08/03/11	15:28	Finished Drinking Water (FWT)	No	Yes	SDWA parameters	passed all SDWA Standards

SFC CLERK RECORDED 04/03/2012

Rio Grande Stormwater and Finished Drinking Water Sampling Events

Updated 11-3-2011

Date	Time	Storm Event Origination	Ash Event	Samples Collected	Analyses Requested	Results ND = not detected metals= Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Ti, U, V, and Zn radiologicals = gross alpha, gross beta, Am241, Cs137, Co60, K40, Na22, Np237, Pu238, Pu239/Pu240, Ra226, Ra228, Ra226/Ra228, Sr90, U234, U235/U236, and U238 Results exceeding Safe Drinking Water Act (SDWA) standards are <u>underlined</u> .
07/15/11	11:25	Santa Clara Canyon (presumed)	Yes	Yes	total and dissolved Cs137, Sr90, Pu238, Pu239/240	Radiologicals: ND
07/22/11	23:34	ENS - Guaje Canyon	Yes	Yes	LANL MOU*, VOCs**	PCBs: 0.00000088 ppm Dioxins: ND Furans: ND Radiologicals (unfiltered): gross alpha 4.80 pCi/L, gross beta 8.44 pCi/L, Am241 0.0252 pCi/L, Co60 26.7 pCi/L, Cs137 269 pCi/L, K40 784 pCi/L, Na22 ND, Np237 ND, Pu238 ND, Pu239/Pu240 ND, Ra226 ND, Ra228 ND, Ra226/Ra228 1.37 pCi/L, Sr90 1.80 pCi/L, U234 51.4 pCi/L, U235/U236 1.88 pCi/L, U238 59.4 pCi/L, Ra226/Ra228 1.37 pCi/L Radiologicals (filtered): gross alpha ND, gross beta ND, Am241 ND, Cs137 ND, Co60 ND, K40 ND, Na22 ND, Np237 ND, Pu238 ND, Pu239/Pu240 ND, Ra226 ND, Ra228 2.38 pCi/L, Ra226/Ra228 2.47 pCi/L, Sr90 ND, U234 ND, U235/U236 ND, U238 ND Metals (unfiltered): Ag ND, <u>Al 5.28 ppm</u> , As 0.00246 ppm, Ba 0.182 ppm, Be 0.000401 ppm, Ca 41 ppm, Cd 0.00017 ppm, Co 0.00147 ppm, Cr 0.032 ppm, Cu 0.0076 ppm, <u>Fe 3.1 ppm</u> , Hg ND, K 3.72 ppm, Mg 6.81 ppm, <u>Mn 0.427 ppm</u> , Na 13 ppm, Ni 0.00469 ppm, Pb 0.00679 ppm, Se ND, Ti ND, U 0.00143 ppm, V 0.00947 ppm, Zn 0.0294 ppm Metals (filtered): Ag ND, Al 0.0528 ppm, As 0.00182 ppm, Ba 0.0625 ppm, Be ND, Ca 35 ppm, Cd ND, Co ND, Cr ND, Cu ND, Fe ND, Hg ND, K 2.39 ppm, Mg 5.56 ppm, Mn ND, Na 12.5 ppm, Ni 0.0011 ppm, Pb ND, Se ND, Ti ND, U 0.00143 ppm, V 0.00947 ppm, Zn ND Perchlorates: 0.0000986 ppm VOCs: (pending)
07/25/11	18:43	Santa Clara Canyon (presumed)	No	Yes	gross alpha, gross beta, metals***, VOCs, alkalinity	
07/26/11	8:48	Santa Clara Canyon (presumed)	Yes	Yes	gross alpha, gross beta, metals, VOCs, alkalinity	Radiologicals (unfiltered): gross alpha 2.17 pCi/L, gross beta 2.77 pCi/L Metals (unfiltered): <u>Al 6.3 ppm</u> , As 0.003 ppm, Ba 0.17 ppm, Be 0.00043 ppm, Ca 39 ppm, Cd ND, Cr 0.0046 ppm, Cu 0.0063 ppm, <u>Fe 4.1 ppm</u> , Hg ND, Mg 7.3 ppm, <u>Mn 0.3 ppm</u> , Ni 0.0034 ppm, Pb 0.0056 ppm, Sb ND, Se ND, all others not tested VOCs: ND Alkalinity: 92 ppm
07/27/11	4:06	Santa Clara Canyon (presumed)	No	Yes	gross alpha, gross beta, metals, VOCs, alkalinity	Radiologicals (unfiltered): gross alpha 5.65 pCi/L, gross beta 9.16 pCi/L Metals (unfiltered): <u>Al 41 ppm</u> , As 0.0057 ppm, Ba 0.49 ppm, Be 0.0024 ppm, Ca 69 ppm, Cr 0.012 ppm, Cu 0.022 ppm, <u>Fe 16 ppm</u> , Hg ND, Mg 20 ppm, <u>Mn 0.84 ppm</u> , Ni 0.018ppm, Pb 0.0095 ppm, Sb ND, Se ND, all others not tested VOCs: ND Alkalinity: 96 ppm
07/28/11	2:06	Santa Clara Canyon (presumed)	Yes	Yes	gross alpha, gross beta, metals, VOCs	Radiologicals (unfiltered): gross alpha ND, gross beta 5.20 pCi/L Radiologicals (filtered): gross alpha ND, gross beta 2.75 pCi/L Metals (unfiltered): Al 6 ppm, Be ND, Ca 39 ppm, <u>Fe 3.7 ppm</u> , Mg 6.8 ppm; <u>Mn 0.42 ppm</u> , Ni 0.003 ppm, all others not tested VOCs: ND
07/28/11	17:36	ENS - Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: 0.000000618 ppm Dioxins: ND Furans: ND Radiologicals (unfiltered): gross alpha 13.2 pCi/L, gross beta 7.42 pCi/L, Am241 0.115 pCi/L, Cs137 6.59 pCi/L, Co60 5.64 pCi/L, K40 ND, Na22 ND, Np237 ND, Pu238 ND, Pu239/Pu240 0.216 pCi/L, Ra226 2.14 pCi/L, Ra228 2.41 pCi/L, Ra226/Ra228 4.55 pCi/L, Sr90 1.16 pCi/L, U234 2.99 pCi/L, U235/U236 0.158 pCi/L, U238 2.88 pCi/L Radiologicals (filtered): gross alpha ND, gross beta 3.13 pCi/L, Am241 ND, Cs137 ND, Co60 ND, K40 ND, Na22 ND, Np237 ND, Pu238 ND, Pu239/Pu240 ND, Ra226 0.841 pCi/L, Ra228 ND, Ra226/Ra228 1.77 pCi/L, Sr90 0.980 pCi/L, U234 0.874 pCi/L, U235/U236 ND, U238 0.682 pCi/L Metals (unfiltered): Ag ND, <u>Al 7.38 ppm</u> , As 0.00318 ppm, Ba 0.201 ppm, Be 0.00049 ppm, Ca 39 ppm, Cd 0.00054 ppm, Co 0.00299 ppm, Cr 0.00057 ppm, Cu 0.00758 ppm, <u>Fe 4.4 ppm</u> , Hg ND, K 4.21 ppm, Mg 6.97 ppm, <u>Mn 0.566 ppm</u> , Na 14 ppm, Ni 0.00577 ppm, Pb 0.0106 ppm, Sb 0.00318 ppm, Se ND, U 0.00182 ppm, V 0.0113 ppm, Zn 0.032 ppm Metals (filtered): Ag ND, Al 0.0481 ppm, As 0.00196 ppm, Ba 0.0587 ppm, Be ND, Ca 32 ppm, Cd ND, Co ND, Cr ND, Cu 0.00095 ppm, Fe ND, Hg ND, K 2.34 ppm, Mg 5.31 ppm, Mn 0.00504 ppm, Na 12.7 ppm, Ni 0.00109 ppm, Pb ND, Sb 0.00196 ppm, Se ND, U 0.00133 ppm, Ti ND, U ND, V 0.00138 ppm, Zn ND Perchlorates: 0.0000957 ppm VOCs: ND Cyanides: ND Nitrates: (pending)

SFC CLERK RECORDED 04/03/2012

08/05/11	10:50	Santa Clara Canyon (presumed)	yes	yes	gross alpha, gross beta, metals, VOCs, cyanide, nitrate, nitrite, alkalinity	Radiologicals (unfiltered): gross alpha 7.38 pCi/L, gross beta 9.03 pCi/L Radiologicals (filtered): gross alpha ND, gross beta 4.16 pCi/L Metals (unfiltered): <u>Al 22 ppm</u> , <u>Be 0.0033 ppm</u> , Ca 70, Cd ND, Cr 0.014 ppm, Cu 0.027 ppm, Fe 15 ppm, Hg ND, Mg 11 ppm, <u>Mn 2.2 ppm</u> , Ni 0.01 ppm, <u>Pb 0.05 ppm</u> , Se 0.0015 ppm, Zn 0.13 ppm, all others not tested VOCs: ND Cyanides: 0.01 ppm Nitrates: ND Nitrites: ND
08/05/11	16:24	ENS - Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: (pending) Dioxins: (pending) Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) VOCs: (pending) Cyanides: (pending) Nitrates: (pending) Alkalinity: (pending)
08/18/11	0:30	unknown	No	Yes	gross alpha, gross beta, metals, VOCs, cyanide, nitrate, nitrite, alkalinity	Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) VOCs: (pending) Cyanides: (pending) Nitrates: (pending) Alkalinity: (pending)
08/19/11	21:10	unknown	No	Yes	gross alpha, gross beta, metals, VOCs, cyanide, nitrate, nitrite, alkalinity	Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) VOCs: (pending) Cyanides: (pending) Nitrates: (pending) Nitrites: (pending) Alkalinity: (pending)
08/21/11	17:29	ENS - Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: 0.000384 ppm Dioxins: (not available) Furans: (not available) Radiologicals (filtered): gross alpha 953 pCi/L, gross beta 1430 pCi/L, (individual radionuclides pending) Radiologicals (unfiltered): gross alpha 5.39 pCi/L, gross beta ND, Am241, Cs137, Co60, K40 66.1 pCi/L, Na22, Np237, Pu238, Pu239/Pu240, Ra226, Ra228 3.69 pCi/L, Ra226/Ra228 4.19 pCi/L, Sr90, U234 2.24 pCi/L, U235/U236 0.0929 pCi/L, U238 1.91 pCi/L Metals (unfiltered): Ag 0.00176 ppm, <u>Al 622 ppm</u> , As 0.0725 ppm, Ba 8.99 ppm, Be 0.0485 ppm, Ca 1260 ppm, <u>Cd 0.0103 ppm</u> , Co 0.227 ppm, <u>Cr 0.39 ppm</u> , Cu 0.39 ppm, <u>Fe 408 ppm</u> , Hg ND, K 134 ppm, Mg 231 ppm, <u>Mn 324 ppm</u> , Na 24.5 ppm, Ni 0.481 ppm, <u>Pb 0.56 ppm</u> , Sb 0.0015 ppm, Se, <u>Ti 0.00639 ppm</u> , <u>U 0.0903 ppm</u> , V 0.392 ppm, Zn 1.83 ppm. Metals (filtered): Ag, <u>Al 5.21 ppm</u> , As 0.00793 ppm, Ba 1.52 ppm, Be 0.00031 ppm, Ca 42.7 ppm, Cd, Co 0.00456 ppm, Cr 0.00436 ppm, Cu 0.0094 ppm, <u>Fe 3.35 ppm</u> , Hg, K 10.1 ppm, Mg 5.71 ppm, <u>Mn 0.328 ppm</u> , Na 15.5 ppm, Ni 0.00477 ppm, Pb 0.00318 ppm, Sb, Se, Ti, U 0.00401 ppm, V 0.012 ppm, Zn 0.014 ppm Perchlorates: (pending) VOCs: (pending) Cyanides: (pending) Nitrates: (pending) Alkalinity: (pending)
08/24/11	15:01	BASELINE STUDY	N/A	Yes	LANL MOU, cyanide, nitrate, alkalinity	Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) Cyanides: ND Nitrates: (pending) Alkalinity: 110 ppm
08/26/11	18:14	ENS - Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: (pending) Dioxins: (pending) Furans: (pending) Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) Cyanides: ND Nitrates: (pending) Alkalinity: 99 ppm
08/27/11	16:51	ENS - Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: (pending) Dioxins: (pending) Furans: (pending) Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) VOCs: (pending)

SEC. CLERK RECORDED 04/03/2014

						Cyanides: ND Nitrates: (pending) Alkalinity: 110 ppm
08/30/11	11:26	Finished Drinking Water (BS SA)	N/A	Yes	gross alpha, gross beta	Passed SDWA Standards Radiologicals: gross alpha 3 pCi/L, gross beta 6.8 pCi/L
09/01/11	18:09	ENS -Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: (pending) Dioxins: (pending) Furans: (pending) Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) VOCs: (pending) Cyanides: (pending) Nitrates: (pending) Alkalinity: (pending)
09/04/11	19:55	ENS -Guaje Canyon	Yes	Yes	LANL MOU, VOCs, cyanide, nitrate, alkalinity	PCBs: (pending) Dioxins: (pending) Furans: (pending) Radiologicals: (pending) Metals: (pending) Perchlorates: (pending) VOCs: ND Cyanides: 0.039 ppm Nitrates: ND Alkalinity: 170 ppm

non-LANL, non-ash event

non-LANL, ash event

ENS event

Finished Drinking Water

*LANL MOU filtered & gross alpha, gross beta, gross gamma, Sr90, Am241, Cs137, Co60, Na22, Np237, K40, P(iso), U(iso), Ra226, Ra228
unfiltered: metals (Ca, K, Mg, Al, Na, Ag, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Cd, Sb, Ba, Tl, Pb, Bi, U, Hg)
TDS

unfiltered: SSC, Particle size, TOC, Perchlorate, Dioxins - Furans, PCBs, PCB (congener)

**VOCs = Volatile Organic Compounds

***metals = Al, As, Ba, Be, Ca, Cd, Cr, Cu, Fe, Hg, K, Mg, Mn, Ni, Pb, Sb, Se, Tl