GROUP A

FOIA/PA NO: 2014 -0080

RECORDS BEING RELEASED IN THEIR ENTIRETY

Trial acting Deaglas	
From:	VonTill, Bill
Sent:	Tuesday, August 13, 2013 5:24 AM
To: Subject:	Mandeville, Douglas RE: Ablation technologies
Subject.	RE. Abiation technologies
thanks	
From: Mandeville, Douglas Sent: Monday, August 12, 201 To: VonTill, Bill Subject: Ablation technologie	
Bill –	
Quick internet search revea	ls the following contact information for Ablation Technologies:
1450 North 7 Mile Road, Ca	asper, Wyoming 82604
Phone (307) 234-5400 Fax ((307) 234-5415
eric@ablation-tech.com	
I don't know for sure if that i start.	is the location where the work is being performed, but it is probably a reasonable
Doug	

From:

Mandeville, Douglas

Sent:

Tuesday, August 13, 2013 2:57 PM

To:

Bill VonTill (Bill.VonTill@nrc.gov)

Subject:

Attachments:

email to send to ablation technologies ML13077a177.pdf

Bill -

Below is the draft of an email to send to Ablation Technologies. We could also copy Black Range Minerals as they are also involved (if I can find an email):

Hello -

We have recently become aware of Black Range Minerals and Ablation Technologies plans to move approximately 100 tons of uranium ore from Colorado to Casper, Wyoming. Once the ore is in Casper, we understand that it will be run through the ablation process.

As discussed in the attached correspondence to the Tallahassee Area Community, it appears that the ablation process would require a source material license.

Please contact the Mr. Bill VonTill of the NRC at 3010-415-0598 at your earliest convenience to discuss this issue.

Thank you.

Email should be sent to eric@ablation-tech.com

From:

Mandeville, Douglas

Sent:

Wednesday, September 04, 2013 4:43 PM

To:

Bill VonTill (Bill.VonTill@nrc.gov)

Subject:

talked with Jennifer Thurston

Bill -

Talked with Jennifer Thurston, she identified 4 questions:

- 1. Would a license be necessary for construction of the 5 ton per hour ablation machine?
- 2. What regulations would apply when the uranium leaves Casper (i.e., transportation between Casper and White Mesa)?
- 3. What happens to the waste material in Casper?
- 4. How would the licensing process work in this situation?

I told her that I'd get back to here with answers.

Doug

From:

Mandeville, Douglas

Sent:

Thursday, September 05, 2013 8:33 AM

To:

Persinko, Andrew

Cc:

Bill VonTill (Bill.VonTill@nrc.gov)

Subject:

Ablation process

Drew -

Some highlights and additional information on the ablation process:

- Ablation process best suited for sandstone hosted uranium deposits
- Ore turned into slurry form (see note below)
- Slurry pumped through injection nozzles under high pressure towards a steel plate
- Impact on steel plate removes uranium patina from the sandstone grains
- Some type of gravity separation to remove target uranium minerals (and I would guess other heavy metals) from the fines
- Uranium collected and sent to conventional mill (White Mesa) for further processing
- Could ablate ore at the mine site, significantly reducing volume of material necessary to send to mill

Note – ablation process would ideally be used in conjunction with underground borehole mining (hydraulic mining, see the Black Range minerals presentation below for more information). In the current situation, Ablation Technologies plans to perform a test on ore that has already been mined and brought to the surface.

Additional Information

Black Range Presentation at 2012 NMA meeting http://www.nrc.gov/materials/uranium-recovery/public-meetings/ur-workshops/grebb.pdf

August 30 edition of nuclear intelligence weekly (see page 8)

July 4 2013 press release from Black Range Minerals http://www.blackrangeminerals.com/content/wp-content/uploads/2013/07/4-July-2013-2M-Facility-for-Commercialisation-of-Ablation-and-Agreement.pdf

Doug

From: Mandeville, Douglas

Sent: Thursday, September 26, 2013 11:09 AM

To:Sollenberger, DennisCc:Spitzberg, Blair

Subject: FW: Ablation Technologies

Attachments: Au-Wire interview with Molyneux.doc; ATT00001.htm; Hot Copper Aug 21 2013.doc;

ATT00002.htm; Hot Copper Sept 12 2013.doc; ATT00003.htm

FYI – more information on Ablation technologies. I'm taking a read through the information today.

Black Range has expressed interest in having a public meeting with us to discuss licensing issues, but they have not made the request yet.

Doug

From: Jennifer Thurston [mailto:jennifer@informcolorado.org]

Sent: Tuesday, September 24, 2013 5:07 PM

To: Mandeville, Douglas

Cc: VonTill, Bill

Subject: Ablation Technologies

Hello Doug,

Thanks again for talking to me on Friday about the impact ablation issues in Wyoming. I have attached four documents from my files for your interest.

The first is a July 24, 2013, interview with Azarga investor Alex Molyneux, in which he discusses the development of the impact ablation test unit in Casper and testing of ore samples.

The next two are investor posts from Hot Copper. You have to register for this site to read the posts, so I cut and pasted the copy into a Word document. The Aug 21 post discusses the processing of ore through the 0.5 tph pilot ablation unit. The Sept 12 post discusses the September visit by a group of investors to see a sample run of the "semi-commerical" 5 tph ablation unit, the presence of the October ore pile and imminent plans to process it in Casper.

The fourth is the Sept 17 update from Black Range Minerals, announcing that processing of bulk samples of the October ore in the commercial unit will begin "next week," additional mentions that ore processing in the test unit occurred with a 90 percent recovery rate, and a reference to the company's expectations that the permitting time for mining (not milling) will be reduced.

I look forward to hearing from you again about what steps NRC will take to decipher this situation.

Thanks,

Jennifer Thurston Information Network for Responsible Mining

Cell: 212-473-7717
Email: jennifer@informcolorado.org
Web: www.informcolorado.org
Twitter: https://twitter.com/INFORMining

From:

Mandeville, Douglas

Sent: To: Friday, September 27, 2013 4:26 PM Bill VonTill (Bill.VonTill@nrc.gov)

Subject:

FW: Ablation Technologies

Attachments:

Au-Wire interview with Molyneux.doc; ATT00001.htm; Hot Copper Aug 21 2013.doc;

ATT00002.htm; Hot Copper Sept 12 2013.doc; ATT00003.htm

Bill -

Suggested path forward for this (talked with Dennis this afternoon about the content of the letters)

- 1. Don't see anything in the documents that indicates regulations have been violated talk about plans to run the ablation unit and that it was run with clean sands. Still need to confirm the math, but it might be possible that they could run for some period of time and stay within the general license limits (from a source material perspective, there is still the milling aspect)
- 2. Should develop a response to Jennifer along the lines of: thanks for the information, we've reviewed it and don't see an issue requiring NRC action yet (would need to explain general license limits/provisions), promotional material from company
- 3. Maybe a parallel call to Pugsley to ask more about what is going on (still haven't requested a public meeting yet)
- 4. See if RIV has any other suggestions

Doug

From: Jennifer Thurston [mailto:jennifer@informcolorado.org]

Sent: Tuesday, September 24, 2013 5:07 PM

To: Mandeville, Douglas

Cc: VonTill, Bill

Subject: Ablation Technologies

Hello Doug,

Thanks again for talking to me on Friday about the impact ablation issues in Wyoming. I have attached four documents from my files for your interest.

The first is a July 24, 2013, interview with Azarga investor Alex Molyneux, in which he discusses the development of the impact ablation test unit in Casper and testing of ore samples.

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unit occurred with a 90 percent recovery rate, and a reference to the company's expectations that the permitting time for mining (not milling) will be reduced.

I look forward to hearing from you again about what steps NRC will take to decipher this situation.

Thanks,

Jennifer Thurston Information Network for Responsible Mining

Cell: 212-473-7717

Email: jennifer@informcolorado.org Web: www.informcolorado.org

Twitter: https://twitter.com/INFORMining

From:

Linton, Ron

Sent:

Monday, November 04, 2013 9:33 AM

To:

Mandeville, Douglas

Subject:

FW: Nuclear Intelligence Weekly, November 1, 2013 (PDF)

Attachments:

ni131101.pdf

Doug:

Note the article on page 6 on U1 selling Shootering Canyon Mill to Black Range Minerals. Article goes on to discuss Black Range's Ablation technology. Not certain how this fits into what you have been following, but thought you should be aware if not already so.
Ron

----Original Message-----

From: Energy Intelligence [mailto:eigcirculation@networkats.com]

Sent: Friday, November 01, 2013 5:29 PM

To: Linton, Ron

Subject: Nuclear Intelligence Weekly, November 1, 2013 (PDF)

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From:

Mandeville, Douglas

Sent:

Tuesday, November 05, 2013 8:10 AM

To:

Snyder, Amy

Cc:

Bill VonTill (Bill.VonTill@nrc.gov)

Subject:

FW: [FWD: Licensing of Ablation in Wyoming and Other States]

Importance:

High

month-

FYI – incoming questions on Ablation technologies and Black Range Minerals. I'll work on developing a response.

From: <u>sarah@uraniumwatch.org</u> [<u>mailto:sarah@uraniumwatch.org</u>]

Sent: Monday, November 04, 2013 9:28 PM

To: Mandeville, Douglas

Subject: [FWD: Licensing of Ablation in Wyoming and Other States]

Importance: High

Had your wrong e-mail address.

----- Original Message -----

Subject: Licensing of Ablation in Wyoming and Other States

From: <<u>sarah@uraniumwatch.org</u>>
Date: Mon, November 04, 2013 3:23 pm

To: <u>Doug.Mandeville@nrc.gov</u>

Cc: Bill.VonTill@nrc.gov, "Duncan White" < Duncan.White@nrc.gov >

Dear Mr. Mandeville,

I have some questions regarding the NRC's licensing of a proposed Wyoming Ablation test processing where "ore" will be processed by Black Range Minerals Ltd. and Ablation Technologies LLC in Wyoming. Recent information on the BRM website indicates that the company plans to process ore and produce a product of uranium (that is, source material) in licensable amounts. The company plans to process "ore" for its "source material" uranium content in a few weeks. That process will create a waste product, yet there is no satisfactory definition of that waste or a satisfactory waste disposal plan. Nor is there a surety, plans to protect the health and safety of the workers and the public, plans to protect the environment, or a NEPA review.

Yet, there is no evidence that the company planning this processing project has applied for and received a license from the NRC. Why, exactly, has this project been exempted from NRC Part 40 licensing? If it has not been exempted, when is the NRC going to take action? Is the NRC going to demand a license application after the fact? Why has the NRC not inspected this operation?

http://www.blackrangeminerals.com/content/wp-content/uploads/2013/10/30-Oct-2013-Update-on-Commercialisation-of-Ablation-for-Recovery-of-Uranium-Mineralisation.pdf

There is also the question as to whether this above-ground processing of ore primarily for its source material content constitutes uranjum milling. Ablation licensing is still an unresolved issue. I do not see that the NRC has addressed the issues of of Black Range Minerals' plans to process stockpiled ore for its source material content in Colorado and Utah.

r#tp://www.blackrangeminerals.com/content/wp-content/uploads/2013/10/30-Oct-2013-Update-on-Commercialisation-of-Ablation-for-Recovery-of-Uranium-Mineralisation.pdf

The question of the processing of "ore" for its source material content via Ablation now involves operations or proposed operations in two states subject to NRC licensing (Wyoming and Arizona) and two NRC Agreement States (Utah and Colorado). There is no evidence of any NRC guidance on this issue or any NEPA analysis, specific regulations, or public review of any applicable guidance or regulations.

How long is the NRC going to delay a complete analysis of all aspects of Ablation technology and establish some kind of regulatory framework, with accompanying NEPA review and public input?

Sincerely,

Sarah Fields Program Director Uranium Watch PO Box 344 Moab, Utah 84532 435-259-9450

From:

Mandeville, Douglas

Sent:

Tuesday, November 05, 2013 9:33 AM

To: Cc: Persinko, Andrew

Snyder, Amy

Subject:

FW: [FWD: Licensing of Ablation in Wyoming and Other States]

Importance:

High

Drew -

Just a heads up on an email from Sarah Fields that came in last night about Ablation and Black Range Minerals. I've started working on a response, I've also got a spot reserved on your calendar for tomorrow morning to discuss in more detail.

Doug

From: <u>sarah@uraniumwatch.org</u> [<u>mailto:sarah@uraniumwatch.org</u>]

Sent: Monday, November 04, 2013 9:28 PM

To: Mandeville, Douglas

Subject: [FWD: Licensing of Ablation in Wyoming and Other States]

Importance: High

Had your wrong e-mail address.

----- Original Message -----

Subject: Licensing of Ablation in Wyoming and Other States

From: <<u>sarah@uraniumwatch.org</u>>
Date: Mon, November 04, 2013 3:23 pm

To: Doug.Mandeville@nrc.gov

Cc: Bill.VonTill@nrc.gov, "Duncan White" < Duncan.White@nrc.gov>

Dear Mr. Mandeville,

I have some questions regarding the NRC's licensing of a proposed Wyoming Ablation test processing where "ore" will be processed by Black Range Minerals Ltd. and Ablation Technologies LLC in Wyoming. Recent information on the BRM website indicates that the company plans to process ore and produce a product of uranium (that is, source material) in licensable amounts. The company plans to process "ore" for its "source material" uranium content in a few weeks. That process will create a waste product, yet there is no satisfactory definition of that waste or a satisfactory waste disposal plan. Nor is there a surety, plans to protect the health and safety of the workers and the public, plans to protect the environment, or a NEPA review.

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Sincerely,

Sarah Fields Program Director Uranium Watch PO Box 344 Moab, Utah 84532 435-259-9450

From:

Mandeville, Douglas

Sent:

Tuesday, November 05, 2013 10:00 AM

To:

White, Duncan

Subject:

RE: Licensing of Ablation in Wyoming and Other States

Thanks Duncan. I'll run a response past you to make sure we have any Agreement State discussion correct. Do we need to give the group in Utah a heads up?

Doug

From: White, Duncan

Sent: Monday, November 04, 2013 5:34 PM

To: Mandeville, Douglas

Subject: Fw: Licensing of Ablation in Wyoming and Other States

From: White, Duncan

To: 'Doug.Mandeville@nrc.gov' < <u>Doug.Mandeville@nrc.gov</u>>

Cc: VonTill, Bill; Sollenberger, Dennis; Poy, Stephen

Sent: Mon Nov 04 17:30:40 2013

Subject: Re: Licensing of Ablation in Wyoming and Other States

Doug:

Let us know if we can provide any assistance with a response.

Duncan

From: <u>sarah@uraniumwatch.org</u> < <u>sarah@uraniumwatch.org</u>> **To**: <u>Doug.Mandeville@nrc.gov</u> < <u>Doug.Mandeville@nrc.gov</u>>

Cc: VonTill, Bill; White, Duncan Sent: Mon Nov 04 17:23:12 2013

Subject: Licensing of Ablation in Wyoming and Other States

Dear Mr. Mandeville,

I have some questions regarding the NRC's licensing of a proposed Wyoming Ablation test processing where "ore" will be processed by Black Range Minerals Ltd. and Ablation Technologies LLC in Wyoming. Recent information on the BRM website indicates that the company plans to process ore and produce a product of uranium (that is, source material) in licensable amounts. The company plans to process "ore" for its "source material" uranium content in a few weeks. That process will create a waste product, yet there is no satisfactory definition of that waste or a satisfactory waste disposal plan. Nor is there a surety, plans to protect the health and safety of the workers and the public, plans to protect the environment, or a NEPA review.

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How long is the NRC going to delay a complete analysis of all aspects of Ablation technology and establish some kind of regulatory framework, with accompanying NEPA review and public input?

Sincerely,

Sarah Fields Program Director Uranium Watch PO Box 344 Moab, Utah 84532 435-259-9450

From:

Mandeville, Douglas

Sent:

Tuesday, November 12, 2013 4:45 PM

To:

Snyder, Amy

Cc:

Bill VonTill (Bill.VonTill@nrc.gov)

Subject:

11/8 and 11/12 acting updates

Amy -

Update on things that came up Friday and Tuesday:

- Ablation
 - o Drew did talk briefly with Puglsey on Friday, Chris did not have much to say
 - o Drew was going to follow up with him today to further check on the status of a public meeting
 - Draft response to S. Fields in progress
- Ticket G20130767 (continuation of OIG audit of NEPA implementation)
 - Exit meeting with OIG pushed back to 11/21
 - Diana sent the report around to the NEPA working group
 - o OGC working on comments
 - Will share comments with OGC Thursday at noon (should get comments from other offices by Thursday at 9)
 - Meeting scheduled with OGC and NMSS Friday at 9 am, plan to provide input to FSME front office midday on Friday
 - o Input due to OEDO by 11/18 at 10 am
 - Send around my initial comments earlier today
- Radon ISG
 - o Package on your desk for concurrence
 - o Ron sent around updated language for letter to licensees
- 11 am meeting with Larry on division restructuring
 - Environmental review and performance assessment branches moving to DILR (change already considered before NMSS/FSME merge/no merge paper finalized)
 - Special projects branch going away, staff absorbed into other branches
- Conventional SRP update with Drew
 - Sent around agenda earlier today
 - Moved meeting to 3 pm Wednesday to avoid branch meeting

I should be in around 8 tomorrow morning.

Doug

From:

Persinko, Andrew

Sent:

Monday, November 18, 2013 7:12 AM

To:

Sollenberger, Dennis; Stokes, Tracey; VonTill, Bill; Mandeville, Douglas

Subject:

Ablation

Black Range wants to meet with us re ablation technologies. They are thinking sometime the week of Dec 9 or 16. What is your availability those weeks?

Drew Persinko 415-7479

From:

Mandeville, Douglas

Sent:

Monday, November 18, 2013 9:51 AM

To:

Persinko, Andrew; Sollenberger, Dennis; Stokes, Tracey; VonTill, Bill

Subject:

RE: Ablation

I am available either of those two weeks.

Doug

From: Persinko, Andrew

Sent: Monday, November 18, 2013 7:12 AM

To: Sollenberger, Dennis; Stokes, Tracey; VonTill, Bill; Mandeville, Douglas

Subject: Ablation

Black Range wants to meet with us re ablation technologies. They are thinking sometime the week of Dec 9 or 16. What is your availability those weeks?

Drew Persinko 415-7479

From:

Mandeville, Douglas

Sent:

Tuesday, November 19, 2013 9:11 AM

To:

Persinko, Andrew; Sollenberger, Dennis; Stokes, Tracey; VonTill, Bill

Subject:

RE: Ablation

FYI – left a message with Pugsley this morning that the 19th would be the best day from our perspective. Other days those weeks could work as well, but they might not get the full complement of NRC people.

I asked Chris to call back to verify that date works on their end.

From: Persinko, Andrew

Sent: Monday, November 18, 2013 7:12 AM

To: Sollenberger, Dennis; Stokes, Tracey; VonTill, Bill; Mandeville, Douglas

Subject: Ablation

Black Range wants to meet with us re ablation technologies. They are thinking sometime the week of Dec 9 or 16. What is your availability those weeks?

Drew Persinko 415-7479

From:

Mandeville, Douglas

Sent:

Tuesday, November 19, 2013 4:05 PM

To:

Sollenberger, Dennis

Subject:

S. Fields letter

Dennis -

Took a look back through my notes and ADAMS – for the certified letter to Ablation, we just printed out the email and put it in an envelope. I modified the sentence in the letter to sarah so it reads as follows:

We have communicated our position to Black Range and Ablation on August 13, 2013 via email and certified mail (see ADAMS Accession ML13227A070 and ML13323B444).

The first accession number is for the email, the second contains the proof of deliver for the certified mail.

Doug