Hi Beth,

Sorry to keep bothering you, but it just occurred to me that I don’t have the capability to check the Subpart W email address inbox to see if anyone has submitted anything since October 1 of 2012. I know you have access, can you please look in there and see if anything has been submitted since October, so we can get it posted to the website? Thanks much.

Reid
This is all thats in there.
Please consider the environment before printing this e-mail.

Beth Miller
Hi Beth,

Sorry to keep bothering you, but it just occurred to me that I don't have the capability to check the Subpart W email address inbox to see if anyone has submitted anything since October 1 of 2012. I know you have access, can you please look in there and see if anything has been submitted since October, so we can get it posted to the website? Thanks much.

Reid

Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov
Hi Angelique,

Happy New Year! I hope all is well with you. I’m pretty much the same, I had a nerve block injection 2 weeks ago that didn't work, so I have an appointment with my neurosurgeon tomorrow to discuss where we go from here. Hopefully not in a wheelchair :)

If you have the time today, would you please join in on the quarterly Subpart W conference call (11 AM EST, 9 AM MST) and help me with the minutes?

866-299-3188

2023439563#

Sorry for the late notice, and I understand if you're busy, but it would help my addled mind if someone else was confirming what I'm hearing. Thanks!

Reid

----------------------------------------------------------
-------
Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov
Can you please forward the ones from Sarah Fields and Scott Spencer?

---------------------------

Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov

-----Beth Miller/DC/USEPA/US wrote: -----
To: Reid Rosnick/DC/USEPA/US@EPA
From: Beth Miller/DC/USEPA/US
Date: 01/03/2013 08:48AM
Subject: Re: Subpart W Email

This is all thats in there.
Please consider the environment before printing this e-mail.

Beth Miller
202-343-9223
Hi Beth,

Sorry to keep bothering you, but it just occurred to me that I don’t have the capability to check the Subpart W email address inbox to see if anyone has submitted anything since October 1 of 2012. I know you have access, can you please look in there and see if anything has been submitted since October, so we can get it posted to the website? Thanks much.

Reid

---

Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov
Utah is the only state that has primacy for the EPA radionuclide NESHAPS, including Subpart W. In 1995 the Environmental Protection Agency (EPA) gave the State Of Utah authority to administer and enforce radionuclide National Emission Standards for Hazardous Air Pollutants (NESHAPS) in the State of Utah. These NESHAPS included 40 C.F.R. Part 61 Subpart W—National Emission Standards for Radon Emissions From Operating Mill Tailings—and the Subpart A General Provisions. The Utah Department of Environmental Quality, Division of Air Quality (DAQ), administers the NESHAP program.

The Subpart W standard, at 40 C.F.R. Part 61 Subpart W, § 61.252 states, in pertinent part:

Sec. 61.252 Standard.
(a) Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m²·sec) (1.9 pCi/(ft²·sec)) of radon-222.
(b) After December 15, 1989, no new tailings impoundment can be built unless it is designed, constructed and operated to meet one of the two following work practices:
(1) Phased disposal in lined tailings impoundments that are no more than 40 acres in area and meet the requirements of 40 CFR 192.32(a) as determined by the Nuclear Regulatory Commission. The owner or operator shall have no more than two impoundments, including existing impoundments, in operation at any one time. [Emphasis added.]

However, the White Mesa Mill in San Juan County, Utah, has from 4 operational tailings in operation at this time: Cells 2, 3, and 4A, and an approved Cell 4B.

This has been brought to the attention of Region 8 EPA office.

In amending any of the Subpart W regulations, the EPA must also consider that the current standard, with respect the number
of operating tailings impoundments, is not even being met.

Sarah M. Fields
Uranium Watch

----- Forwarded by Beth Miller/DC/USEPA/US on 01/03/2013 08:55 AM -----

From: "Scott Spencer" <sspencer@triad.rr.com>
To: SubpartW@EPA
Date: 10/20/2012 08:58 PM
Subject: Living in a state with lots of nuclear power plants

I live in North Carolina it is unnerving how many Nuclear Power plants there are I would like it if you could try to get Duke power which is proably the biggest Power source here to stop their nuclear power program or at least get them to be more closely monitored but make it so they don’t resort to coal power because I have found that that causes cancer thank you for being so open to questions and concerns
No need to post either of these emails. Sarah's is just a repeat of one she sent earlier, and the other one has nothing to do with Subpart W. Thanks, babe, I don’t know what I’d do without you!

R
Hey, Reid. Thanks. Happy New Year to you too. Sorry to hear you are still in pain, and I hope the neurosurgeon has solution for you. Come on, isn't that why they are paid the big bucks?!

I will be on today's call and take notes. Speak to you then.

-Angelique

Angelique D. Diaz, Ph.D.
Environmental Engineer
Air Program, USEPA/Region 8
1595 Wynkoop Street (8P-AR)
Denver, CO 80202-1129
Office: 303.312.6344
Fax: 303.312.6064
diaz.angelique@epa.gov

Hi Angelique, Happy New Year! I hop... 01/03/2013 06:50:52 AM

From: Reid Rosnick/DC/USEPA/US
To: Angelique Diaz/R8/USEPA/US@EPA
Date: 01/03/2013 06:50 AM
Subject: Conference Call

Hi Angelique,

Happy New Year! I hope all is well with you. I'm pretty much the same, I had a nerve block injection 2 weeks ago that didn't work, so I have an appointment with my neurosurgeon tomorrow to discuss where we go from here. Hopefully not in a wheelchair :)

If you have the time today, would you please join in on the quarterly Subpart W conference call (11 AM EST, 9 AM MST) and help me with the minutes?

866-299-3188
2023439563#

Sorry for the late notice, and I understand if you're busy, but it would help my addled mind if someone else was confirming what I'm hearing. Thanks!

Reid

Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
Thank you. I agree about the big bucks, I'm still paying off the October surgery! I'm beginning to think that their opinions are just a little more educated than mine :)

---

Reid J. Rosnick  
Radiation Protection Division (6608J)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
202.343.9563  
rosnick.reid@epa.gov

-----Angelique Diaz/R8/USEPA/US wrote: -----  
To: Reid Rosnick/DC/USEPA/US@EPA  
From: Angelique Diaz/R8/USEPA/US  
Date: 01/03/2013 09:12AM  
Subject: Re: Conference Call

Hey, Reid. Thanks. Happy New Year to you too. Sorry to hear you are still in pain, and I hope the neurosurgeon has a solution for you. Come on, isn't that why they are paid the big bucks?!

I will be on today's call and take notes. Speak to you then.

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Denver, CO 80202-1129  
Office: 303.312.6344  
Fax: 303.312.6064  
diaz.angelique@epa.gov

Reid Rosnick---01/03/2013 06:50:52 AM---Hi Angelique,  
Happy New Year! I hope all is well with you. I'm pretty much the same, I had a nerve

From: Reid Rosnick/DC/USEPA/US  
To: Angelique Diaz/R8/USEPA/US@EPA  
Date: 01/03/2013 06:50 AM  
Subject: Conference Call
Hi Angelique,

Happy New Year! I hope all is well with you. I'm pretty much the same, I had a nerve block injection 2 weeks ago that didn't work, so I have an appointment with my neurosurgeon tomorrow to discuss where we go from here. Hopefully not in a wheelchair :)

If you have the time today, would you please join in on the quarterly Subpart W conference call (11 AM EST, 9 AM MST) and help me with the minutes?

866-299-3188

2023439563#

Sorry for the late notice, and I understand if you're busy, but it would help my addled mind if someone else was confirming what I'm hearing. Thanks!

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---------
Reid J. Rosnick
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202.343.9563
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Thanks, Angelique. It's a big help. I hope 2013 is a better year for Travis...

----------------------------------------------------------------------

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-----Angelique Diaz/R8/USEPA/US wrote: -----
To: Reid Rosnick/DC/USEPA/US@EPA
From: Angelique Diaz/R8/USEPA/US
Date: 01/03/2013 11:20AM
Subject: Sub W Call Notes

(See attached file: Subpart W Quarterly Conference Call - 010313.docx)

Here you go. They are kind of rough, but I think it captures the gist of the call.

-Angelique

Angelique D. Diaz, Ph.D.
Environmental Engineer
Air Program, USEPA/Region 8
1595 Wynkoop Street (8P-AR)
Denver, CO 80202-1129
Office: 303.312.6344
Fax: 303.312.6064
diaz.angelique@epa.gov

[attachment "Subpart W Quarterly Conference Call - 010313.docx" removed by Reid Rosnick/DC/USEPA/US]
Reid,

Here is the link to the EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W:

http://yosemite.epa.gov/opei/RuleGate.nsf/(LookupRIN)/2060-AP26#1

As you will see, it gives no timeline for the rulemaking. No are there any entries in the latest EPA Regulatory Agenda available at
http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OA-2012-0987-0001

Very odd.

Happy New Year!

Katie
Thanks, Katie:

I'm looking into it, and I'll get back to you with an answer.

Happy New Year to you!

Reid

-----

Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov

-----"Sweeney, Katie" <KSweeney@nma.org> wrote: -----
To: Reid Rosnick/DC/USEPA/US@EPA
From: "Sweeney, Katie" <KSweeney@nma.org>
Date: 01/03/2013 11:35AM
Subject: link to EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W

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http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OA-2012-0987-0001
Very odd.

Happy New Year!

Katie
Hello Ray, Happy New Year!

During the Subpart W conference call this morning I took a lot of flak regarding the continued delay in sending the proposed rule package to OMB. People were asking for someone they could speak with regarding the delay. I didn’t have an answer, but told them that OP was part of the Administrator’s office. Do you have any contact person the stakeholders could speak to that is not a staffer? Apparently we staffers are just not high enough on the food chain to affect change.

Also, below is a note from Katie Sweeney of the National Mining Association. She provided two links on how she tracks rulemakings, and for Subpart W (and apparently part 192) there is no updated information on one, and the other link is broken. Do we have someone in the Agency responsible for updating our site? I know we have no control over the regulations.gov site, but what about the other one? Any information you could give me would be very helpful. It was an especially spirited call this morning! Thanks

Reid

-----Forwarded by Reid Rosnick/DC/USEPA/US on 01/03/2013 12:10PM-----

To: Reid Rosnick/DC/USEPA/US@EPA
From: "Sweeney, Katie" <KSweeney@nma.org>
Date: 01/03/2013 11:35AM
Subject: link to EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W

Reid,

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Very odd.

Happy New Year!

Katie
Hi Reid,

Happy new year. Sorry for the long lag in responding to your email. Hope you're doing well.

Your voicemail says that you'll be back in the office next week. Give me a call when you return and we can compare notes on what we know about the status of the rule.

Barry

---

Reid Rosnick

Hi Barry, It's been a while, I hope you... 12/12/2012 10:55:55 AM

From: Reid Rosnick/DC/USEPA/US
To: Barry Elman/DC/USEPA/US@EPA
Date: 12/12/2012 10:55 AM
Subject: Subpart W OMB Submittal

Hi Barry,

It's been a while, I hope you have been well. I have spent the past 3 months having back surgeries, with luck no more, but in between I have been working from home.

The last ORIA reg tracker I saw had the Subpart W proposed rule going to OMB on 12/21. Do you know whether this is a real date? I know that there has been a hierarchy for submissions, court ordered deadlines being the priority. We are not on that list, but rather to meet a settlement agreement, so I thought we might get moved up in the queue quicker than other rules.

That's my only question, thanks for your time. Take care.

Reid

Reid J. Rosnick
Radiation Protection Division (6608J)
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1200 Pennsylvania Ave., NW
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Barry

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Reid J. Rosnick
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1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov
Me too. We will have to talk sometime in the next couple weeks.

Angelique D. Diaz, Ph.D.
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1595 Wynkoop Street (8P-AR)
Denver, CO 80202-1129
Office: 303.312.6344
Fax: 303.312.6064
diaz.angelique@epa.gov

-----Reid Rosnick/DC/USEPA/US wrote: -----
To: Angelique Diaz/R8/USEPA/US@EPA
From: Reid Rosnick/DC/USEPA/US
Date: 01/03/2013 09:23AM
Subject: Re: Sub W Call Notes

Thanks, Angelique. It's a big help. I hope 2013 is a better year for Travis...

-----Angelique Diaz/R8/USEPA/US wrote: -----
To: Reid Rosnick/DC/USEPA/US@EPA
From: Angelique Diaz/R8/USEPA/US
Date: 01/03/2013 11:20AM
Subject: Sub W Call Notes

(See attached file: Subpart W Quarterly Conference Call - 010313.docx)

Here you go. They are kind of rough, but I think it captures the gist of the call.

-Angelique
Angelique,

I figured you'd appreciate this. I just got back from the doctor. Since the nerve block injection I had 2 weeks ago did not work, on Wednesday I am scheduled to have a discogram, which sounds very familiar to an arthrogram I had on my knee years ago. This is being done to make sure there are no more disk problems, but it's being done between my L2/3, L3/4 and L4/5 disks. After being sedated, dye will be injected into those areas, and then I'll be x-rayed to see if there are any more cracks/ruptures/fissures in any of those disks. Apparently this hurts, a lot. This is being done in preparation for the fusion surgery that will take place as soon as results come in and the surgery is scheduled. The doctor seems to think that degeneration is to the point where he will fuse (actually bolt together) my spine from L-5 to S-1. Again, there is an 85% success rate, I will spend a day or two in hospital, come home, and hopefully begin PT a month or so after that. I'm looking at up to 3 months at home, although the doctor was confident that I could telework after a week or so, just like now, but hopefully without pain. He also said there should be little to no loss of mobility, since it's so far down my back.

Today is my last day of cigarettes. He will not operate unless I am smoke-free, apparently nicotine is particularly evil in sucking the nutrients out of disk material. I am not allowed to use nicotine patches (defeats the purpose) and take too many drugs for Chantrix, so it's cold turkey. I expect to be a little grumpy (!), but hell, if Keith Richards can do it...Besides, I have a pretty good incentive I guess.

So, I'll force myself to have a couple of beers and smoke my brains out tonight, and take it one day at a time after that. Have a good weekend. Talk to you soon.

Reid
Me too. We will have to talk sometime in the next couple weeks.

Angelique D. Diaz, Ph.D.
Environmental Engineer
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-Angelique

Angelique D. Diaz, Ph.D.
Environmental Engineer
Air Program, USEPA/Region 8
1595 Wynkoop Street (8P-AR)
Hey Reid,

I hope you’re doing better but it sounds like you’re not (talked to Andrea). Any idea what they will do for you next?

Steve Brown and I meant to call in to the Subpart W call last week but we remembered after the call! Would you feel comfortable talking to us about the call about the Subpart W ruling process (specifically how far along is it)? We want to make sure that SENES get to comment during the public comment process. I think we will be on the next call (clients asked us).

Thanks!
Darrell Liles, CHP, PE
Sr. Health Physicist

SENES Consultants Limited
8310 South Valley Highway
Suite 3014
Englewood, Colorado, USA
80112
email: dliles@senesusa.com
phone: 303 524 1406
cell: 303 717 3257

Web Site: http://www.senes.ca/

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Name: Ray Lee  
Email: lee.raymond@epa.gov  
Phone Number: 202-343-9463  
Suggestion:  
Hello,  

I'm the reg. contact for OAR-ORIA and am curious as to why this entry on the website is not up to date with the current information that's in the ADP reg. tracking system. I know this website is supposed to be updated monthly so there should be a lot more information on this in regards to its timeline and when we think it'll be published. Some of our stakeholders check this site for updates and they continue to see a 00-0000 projected date for publication/signature.  

Thanks,  

Ray
Hi Barry,

I've just gotten a question from ORIA about why the subject action of theirs has no FR publication information on our public website of "priority rulemakings." (http://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2060-AP26?opendocument). I know that this action has been stuck in OP for months without moving, but my question is: does ORIA understand this? If not I may work through an OAR IO contact to answer ORIA rather than responding directly.

Let me know if my question isn't clear!

thanks,

Caryn

Caryn Muellerleile
Regulatory Management Division
Office of Policy
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (1806A)
Washington, DC 20460
(202) 564-2855
(202) 564-0965 - fax
muellerleile.caryn@epa.gov

----- Forwarded by Caryn Muellerleile/DC/USEPA/US on 01/07/2013 04:03 PM -----

EPA Priority Action

Action Title: NESHAP for Operating Uranium Mill Tailings - Amendments (Subpart W) (SAN 5281)

Initiating Office: OAR/ORIA/RPD
Contact: Reid Rosnick 202-343-9563
Action Type: Regulation
SAN: SAN 5281
RIN: RIN: 2060-AP26

Tier: Tier 2
OMB: Significant (OMB Confirmed)

Workgroup Participation: OAR; OECA; OGC; OP; ORD; OSWER; OW; R06; R07; R08; R10

Chemicals/Contaminants: Uranium

Abstract:
NESHAP Subpart W protects human health and the environment by setting radon emission standards and work practices for operating uranium mill tailings impoundments. The Clean
Air Act Amendments of 1990 require EPA to review and revise the NESHAP requirements every ten years. We are in the process of entering into a Consent Decree with two Colorado environmental groups that prescribes when the proposed and final standard will be produced because the Agency missed the ten year requirement. In the process of reviewing the status of uranium milling facilities, it became clear that a new type of process had taken over as the major type of uranium recovery. That type is in situ leach (ISL) uranium recovery. The facilities would fall under our regulation by utilizing impoundments that store tailings. Most if not all of these eight facilities (although at least 10 more operations are expected) are not in compliance with the existing standard. We are involved in a compliance effort with OECA to determine the size and scope of the issue. These facilities also have NRC (or Agreement State) operating licenses, and UIC permits from EPA or authorized states.

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<tr>
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<td>Early Guidance</td>
<td></td>
<td>Long-term</td>
</tr>
</tbody>
</table>

Last Edited: 1/10/2012, RAPIDS

Deliberative...Not Agency Policy...Do Not Quote, Cite or Distribute
Hi Darrell,

Happy new year. Yeah, it's the same old stuff with me. I had a nerve root block injection two weeks ago that didn't work, so tomorrow I'm having a procedure called a discogram (sounds like more fun that it really is). This is being done to make sure there are no more disk problems, but it's being done between my L2/3, L3/4 and L4/5 disks. After being sedated, dye will be injected into those areas, pressurized, and then I'll be x-rayed to see if there are any more cracks/ruptures/fissures in any of those disks. Apparently this hurts, a lot. This is being done in preparation for the fusion surgery that will take place as soon as results come in and the surgery is scheduled. The doctor seems to think that degeneration is to the point where he will fuse (actually bolt together) my spine from L-5 to S-1. Again, there is an 85% success rate, I will spend a day or two in hospital, come home, and hopefully begin PT a month or so after that. I'm looking at up to 3 months at home, although the doctor was confident that I could telework after a week or so, just like now, but hopefully without pain. He also said there should be little to no loss of mobility, since it's so far down my back. We'll see what happens.

Subpart W - You didn't miss much on the quarterly call. I should have the minutes posted soon. The website is: http://www.epa.gov/radiation/neshaps/subpartw/rulemaking-activity.html in case you want to check it out. Regarding the proposed rule, I've been told it's scheduled to be received by OMB on 2/8/2013. I have been told that Court ordered deadline rules are at OMB. They have higher priority than Subpart W – reason for the hold up. Subpart W is behind rules with court ordered deadlines, but before general rules because there is a settlement agreement in place. I can tell you the date has been moving since May, so frankly I don't really have a feel for when its going over.

The next call is on April 4, 2013 at 11 am est if you're interested. Take care.

Reid
Hey Reid,

I hope you’re doing better but it sounds like you’re not (talked to Andrea). Any idea what they will do for you next?

Steve Brown and I meant to call in to the Subpart W call last week but we remembered after the call! Would you feel comfortable talking to us about the call about the Subpart W ruling process (specifically how far along is it)? We want to make sure that SENES get to comment during the public comment process. I think we will be on the next call (clients asked us).

Thanks!
Darrell Liles, CHP, PE
Sr. Health Physicist

SENES Consultants Limited
8310 South Valley Highway
Suite 3014
Englewood, Colorado, USA
80112
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cell: 303 717 3257

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CONFIDENTIAL information. Any unauthorized disclosure, use or retention is strictly prohibited. SENES does not accept liability for any errors, omissions, corruption or virus in contents or attachments. Information is provided for use "as is" by the addressee. Revised documents must not be represented as SENES work product, without express, written permission of a SENES Director.
Note to all. At the management meeting yesterday I did convey the general concern in the email change. For what its worth, Mike is frustrated too.

Tom Peake
Director
Center for Waste Management and Regulations
US EPA (6608J)
1200 Pennsylvania Ave, NW
Washington, DC 20460
phone: 202-343-9765

Physical Location and for deliveries:
Room 529
1310 L St, NW
Washington, DC 20005

All,

Well said, Brian. I would add that someone in the OAR front office or in OP should be responsible for public inquiries regarding reg status. It seems very easy to hide behind anonymity while we "bottom feeders" (Brian, I prefer the term "journeymen staff" :) have to take the heat for the lack of accountability at the top.

Reid

--------------------------------------------------------------------------------
Reid Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rodnick.reid@epa.gov
To: Raymond Lee/DC/USEPA/US@EPA
From: Brian Littleton/DC/USEPA/US
Date: 01/09/2013 08:56AM
Cc: Reid Rosnick/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA, Daniel Schultheisz/DC/USEPA/US@EPA, Tom Peake/DC/USEPA/US@EPA
Subject: Re: Fw: link to EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W

Ray et al,

The one thing that could be helpful is to end the "do-loop" with the reg dates. At this time, most of our actions are 100% outside of ORIA and RPD’s control of when they will move. We all know this. The frustration comes in OAR's front office telling us to 'amend the reg agenda dates' when they:

1) Have the most information and control over when our actions will go forth, and
2) Already change the dates (albeit not with any real rationale or reasoning) to provide us the best dates that we can sign up to.

If this is the case, then the reg dates do not need input from 'the guys at the bottom of the food chain' (please note - the same rationale does not apply during the development process of the rule packages).

I still believe the most honest course of action is to put in dates such as "TBD" for actions that are stuck, thereby eliminating the weekly "do-loop" check-in with us bottom-feeders.

Brian
****************************************************

Raymond Lee---01/08/2013 01:33:50 PM---Hi all, I just wanted to follow up on this e-mail I sent yesterday. I talked to Caryn in OP (apparently all e-mails regarding the Reg. DaRRT are forwarded to her) and she essentially told me that our rules (as well as a bunch of others across the Agency) were put in a state of limbo, per OMB direction. This is not a surprise, given the election and everything that was going on last year. OMB cracked down on all federal agencies and looked at what they were looking to publish, and only the most urgent were given a pass. As a result, with there not being a real timeline for any of these "limbo" items (even though there are dates in our internal ADP database), the Fall 2012 Reg. Agenda did not publish a lot of this information and many
Projected milestones were populated with filler info (e.g., 00/0000 dates). This was done for safety's sake, in terms of what we were releasing to the general public.

From here on out, OMB will continue to scrutinize what's coming out of the Agency - particularly signature/publication dates and if they're deemed realistic or not. Reid, I understand this really doesn't help (and Caryn said as much), but for now we can tell our stakeholders that the upcoming Spring 2013 Reg. Agenda should have a lot of these dates populated with current information and more realistic milestone timelines. I'll keep you posted.

Thanks,

Ray

---

Ray Lee | Center for Radiation Information and Outreach (CRIO) | US EPA | Phone 202.343.9463 | Fax 202.343.2305 | lee.raymond@epa.gov

---

Raymond Lee---01/07/2013 02:40:34 PM---Hi Reid, So this is what I was able to find out...

From: Raymond Lee/DC/USEPA/US
To: Reid Rosnick/DC/USEPA/US@EPA
Cc: Andrea Cherepy/DC/USEPA/US@EPA, Daniel Schultheisz/DC/USEPA/US@EPA, Tom Peake/DC/USEPA/US@EPA
Date: 01/07/2013 02:40 PM
Subject: Re: Fw: link to EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W

Hi Reid,

So this is what I was able to find out...

I couldn't find a specific contact for Katie's first link, but I did send the Reg. DaRRT team a message asking why the information for the NESHAP rule is not up-to-date given that their site is supposed to be updated monthly. I told them all of this information has been updated regularly in the ADP reg. tracker so things should be filtering into their system as well. I left my contact information so hopefully they'll get back to me in short order.

The second link is to the regulations.gov entry for the Fall 2012 Semiannual Reg. Agenda. I believe the next update should be in the first quarter of 2013, so when that exercise is completed the updated information should be included in the Spring 2013 installment.

I understand how frustrating it must be to keep telling your stakeholders that things are delayed. I mean, it's out of our hands right now and we're really not getting any specific answers from OP, so there's really nothing you can tell these people at this point. I really don't think the OP staffers will be any more helpful if your stakeholders choose to contact them directly, but in your case your OP desk officer would be Caryn Muellerleile. Some of OP's upper management haven't been any more helpful on at the bi-weekly rule status meetings on why our actions are sitting, so I doubt Caryn would have any more insight, unfortunately.

Let me know if you have any more questions.

Thanks!
Hello Ray, Happy New Year! During the Subpart W conference call this morning I took a lot of flak regarding the continued delay in sending the proposed rule package to OMB. People were asking for someone they could speak with regarding the delay. I didn't have an answer, but told them that OP was part of the Administrator's office. Do you have any contact person the stakeholders could speak to that is not a staffer? Apparently we staffers are just not high enough on the food chain to affect change.

Also, below is a note from Katie Sweeney of the National Mining Association. She provided two links on how she tracks rulemakings, and for Subpart W (and apparently part 192) there is no updated information on one, and the other link is broken. Do we have someone in the Agency responsible for updating our site? I know we have no control over the regulations.gov site, but what about the other one? Any information you could give me would be very helpful. It was an especially spirited call this morning!

Thanks

Reid

---From: Reid Rosnick/DC/USEPA/US
To: Raymond Lee/DC/USEPA/US@EPA
Cc: Tom Peake/DC/USEPA/US@EPA, Daniel Schultheisz/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA
Date: 01/03/2013 12:49 PM
Subject: Fw: link to EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W

Reid Rosnick---01/03/2013 12:49:59 PM---Hello Ray, Happy New Year! During the Subpart W conference call this morning I took a lot of flak regarding the continued delay in sending the proposed rule package to OMB. People were asking for someone they could speak with regarding the delay. I didn't have an answer, but told them that OP was part of the Administrator's office. Do you have any contact person the stakeholders could speak to that is not a staffer? Apparently we staffers are just not high enough on the food chain to affect change.

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Thanks

Reid
Here is the link to the EPA Regulatory Development and Retrospective Review Tracker Entry for Subpart W:

http://yosemite.epa.gov/oepi/RuleGate.nsf/(LookupRIN)/2060-AP26#1

As you will see, it gives no timeline for the rulemaking. No are there any entries in the latest EPA Regulatory Agenda available at

http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OA-2012-0987-0001

Very odd.

Happy New Year!

Katie
Reid,

Sorry to hear that more surgery is needed. I wish you the best of luck with that.

As for the status of the Subpart W rulemaking, the summary information in your email below is basically consistent with my understanding. But some of that information is sensitive and probably should not be shared with your stakeholders. Caryn suggests telling your stakeholders to stay tuned and that more information will be provided in the upcoming Spring 2013 Reg. Agenda. If that’s not sufficient to satisfy your stakeholders at this point, I suggest consulting with Caryn to see what more you can say.

Hope this is helpful. I’d be happy to discuss further.

Barry

Hi Barry,

Unfortunately I'm still at home. I've had two back surgeries since October, and it looks like I'll be having fusion surgery by the end of the month. Consequently I'm still working from home. If you need to reach me my number is 301-461-3848.

I wanted to give you an update on some Subpart W information. I had my regular quarterly conference call with the stakeholders last Thursday, and most were agitated with the lack of progress on getting the rule to OMB. I promised (under duress) to see if I could find out the delay. Our ORIA reg tracker person, Ray Lee, has been in contact with Caryn Muellerleile, our OP desk officer. She provided the following to Ray: Our rules (as well as a bunch of others across the Agency) were put in a state of limbo, per OMB direction. This is not a surprise, given the election and everything that was going on last year. OMB cracked down on all federal agencies and looked at what they were looking to publish, and only the most urgent were given a pass. As a result, with there not being a real timeline for any of these "limbo" items (even though there are dates in our internal ADP database), the Fall 2012 Reg. Agenda did not publish a lot of this information and many projected milestones were populated with filler info (e.g., 00/0000 dates). This was done for safety's sake, in terms of what we were releasing to the general public.

From here on out, OMB will continue to scrutinize what's coming out of the Agency - particularly signature/publication dates and if they're deemed realistic or not. For now we can tell our stakeholders that the upcoming Spring 2013 Reg. Agenda should have a lot of these dates populated with current information and more realistic milestone timelines.

I now have to try to put this into the minutes of the stakeholder conference call. If you have any ideas on how I could do this I'd appreciate your thoughts. Please call me if this scenario differs from what you've heard. Thanks
-----Barry Elman/DC/USEPA/US wrote: -----  
To: Reid Rosnick/DC/USEPA/US@EPA  
From: Barry Elman/DC/USEPA/US  
Date: 01/03/2013 12:51PM  
Subject: Re: Subpart W OMB Submittal  

Hi Reid,

Happy new year. Sorry for the long lag in responding to your email. Hope you’re doing well.

Your voicemail says that you’ll be back in the office next week. Give me a call when you return and we can compare notes on what we know about the status of the rule.

Barry

-----Reid Rosnick/DC/USEPA/US wrote: -----  
To: Barry Elman/DC/USEPA/US@EPA  
From: Reid Rosnick/DC/USEPA/US  
Date: 12/12/2012 10:55 AM  
Subject: Subpart W OMB Submittal  

Hi Barry,

It's been a while, I hope you have been well. I have spent the past 3 months having back surgeries, with luck no more, but in between I have been working from home.

The last ORIA reg tracker I saw had the Subpart W proposed rule going to OMB on 12/21. Do you know whether this is a real date? I know that there has been a hierarchy for submissions, court ordered deadlines being the priority. We are not on that list, but rather to meet a settlement agreement, so I thought we might get moved up in the queue quicker than other rules.

That’s my only question, thanks for your time. Take care.

Reid
Thank you...One request: please place "draft" in front of the Link to the January minutes. Sometimes the stakeholders add stuff I missed. Thanks!

-----Beth Miller/DC/USEPA/US wrote: -----  
To: Reid Rosnick/DC/USEPA/US@EPA  
From: Beth Miller/DC/USEPA/US  
Date: 01/16/2013 01:41PM  
Cc: Glenna Shields/DC/USEPA/US@EPA  
Subject: Re: Subpart W Website

Hi Reid

It was nice to see you also hurry back to us...

Your page is updated as requested.  
http://www.epa.gov/radiation/neshaps/subpartw/rulemaking-activity.html

Please consider the environment before printing this e-mail.

Beth Miller  
202-343-9223

Reid Rosnick---01/16/2013 12:00:28 PM---Hi Beth,  
It was good to see you yesterday, if only for a short time. I miss you guys a lot!  
I ha
Hi Beth,

It was good to see you yesterday, if only for a short time. I miss you guys a lot!

I have a couple of things for the Subpart W website. Attached are the draft minutes from January 3, 2013 conference call. Could you please post this link at the bottom, below the October 4, 2012 minutes? Remember, they are still draft, till the stakeholders offer changes, so please use the draft for the link.

Second, where it says

**Tentative Completion Estimate**

EPA plans to propose a decision on Subpart W in **Mid/Late June 2013**. After allowing for public comment and/or hearings we plan to have a final decision in early 2014. This estimate will be revised as needed.

Please change the Mid/Late June to **Mid/Late July 2013**. Thanks

Reid

---

Reid J. Rosnick  
Radiation Protection Division (6608J)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
202.343.9563  
rosnick.reid@epa.gov[attachment "Subpart W Quarterly Conference Call-010313[2].docx" deleted by Beth Miller/DC/USEPA/US]
I'm on the shuttle, back soon. Would like to discuss these schedules with you. (I think we can push back on the modifications.) I've alerted Tom E that we may have some input for him before the day is out. -Alan

------------------
Alan Perrin
EPA Wireless

Raymond Lee
Hi all, Here is the latest reg. tracker in... 01/15/2013 02:50 PM EST

Hi all,

Here is the latest reg. tracker information for this week. Anna and Jon -- I included you in this preliminary message (before I get any edits in/send it to Tom Eagles) because there have been some significant amendments/delays added to our previous dates which I believe Mike may want to be aware of. As you can see from the file, here is the breakdown:

- X-Ray Guidance: to be cleared by OMB on 5/31/13 (from 2/1/13)
- PAGs: to be cleared by OMB on 5/31/13 (from 2/1/13)
- 190 ANPR: to be sent from OP to OMB on 4/8/13 (from 2/8/13)
- NESHAP Subpart W: to be sent from OP to OMB on 3/1/13 (from 2/8/13)

Please let me know if you have any edits by tomorrow morning (1/16) at the latest.

Thanks,

Ray

[attachment "OAR Reg Tracker January 11 Final.docx" deleted by Alan Perrin/DC/USEPA/US]
Please update both the Reg Tracker and the OAR Weekly. The previous versions of each are attached. Please update both documents and email them to me by NOON Wednesday, January 16.

Thanks!

Tom Eagles
OAR/OPAR
202-564-1952
Cellphone 410-707-1384

[attachment "OAR Reg Tracker January 11 Final.docx" deleted by Raymond Lee/DC/USEPA/US]
[attachment "OAR Weekly January 11 Final.docx" deleted by Raymond Lee/DC/USEPA/US]
Jon,

Interesting tone to this letter, I like the unnecessarily redundant and overly burdensome bit. However, with respect to 40 CFR 61 (Subpart W) I have the following:

- As you know, the "Simpson Amendment" to the CAA does allow for NRC and EPA to get together to look at dual regulation of facilities, and work to see if the process can be simplified. We did this in the past with NESHAP Subpart I and Subpart T. It involved NRC strengthening their regulations in order to match ours. We then rescinded our reg. It is a lengthy process. In informal discussions with NRC over the past 5 years or so, they have expressed no interest in looking at whether we are in a dual regulation situation with Subpart W. Our requirement is a CAA radon emission requirement for uranium recovery facilities. The standards for impoundments was radon only. NRC requirements are more facility oriented, and do not have the same radon standard.

  - Could we work with NRC and rescind Subpart W? Yes, I believe we have an MOU in place that addresses these activities, but neither side has shown an interest, and if NMA is worked up about it they could petition us to look into it. Again, it would require NRC updating its regs, something it probably isn't that excited to do. I'll defer to Sue Stahle on the legalities of whether we are in a dual regulation situation here.

Reid

Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
202.343.9563
rosnick.reid@epa.gov

--- Forwarded by Jonathan Edwards/DC/USEPA/US on 01/23/2013 01:04 PM ---

Cliff/Jon,

Please see attached, particularly remarks on 40 CFR 61,„„let me know your thoughts... Jon

----- Forwarded by Jonathan Edwards/DC/USEPA/US on 01/23/2013 01:04 PM -----
FYI - NRC asked me to pass this along to you.

MR

----- Forwarded by Marthea Rountree/DC/USEPA/US on 01/23/2013 12:57 PM -----

From: "Hsueh, Kevin" <Kevin.Hsueh@nrc.gov>
To: Marthea Rountree/DC/USEPA/US@EPA
Date: 01/18/2013 02:13 PM
Subject: NMA letter

Marthea,

Please let Jon and Cliff know about the attached letter that we received from NMA, especially on the 40 CFR Part 61 issue, in case they have not seen it.

Thanks.

Kevin

[attachment "NMA letter to Macfarlane.pdf" deleted by Reid Rosnick/DC/USEPA/US]
With respect to the tone of the letter, it seems to me that they are sniveling...
Of course, they have a lot of success with NRC by taking that approach, so I can't blame them.

PVE

Philip Egidi
Environmental Scientist
U.S. Environmental Protection Agency
Office of Radiation and Indoor Air
Radiation Protection Division
Center for Waste Management and Regulations
Washington, DC

phone: 202-343-9186
email: egidi.philip@epa.gov
cell: 970-209-2885

Jon, Interesting tone to this letter, I like... 01/23/2013 02:38:38 PM

Interesting tone to this letter, I like the unnecessarily redundant and overly burdensome bit. However, with respect to 40 CFR 61 (Subpart W) I have the following:

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Thanks.

Kevin
Thanks Reid. Good response -- appreciate your thoughts. Has the dual reg question ever been put to Sue? --Jon

Reid Rosnick

Jon, Interesting tone to this letter, I like... 01/23/2013 02:38:38 PM

From: Reid Rosnick/DC/USEPA/US
To: Jonathan Edwards/DC/USEPA/US@EPA
Cc: Alan Perrin/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA, Daniel Schultheisz/DC/USEPA/US@EPA, Philip Egidi/DC/USEPA/US@EPA, Tom Peake/DC/USEPA/US@EPA, Brian Littleton/DC/USEPA/US@EPA
Date: 01/23/2013 02:38 PM
Subject: Re: Fw: NMA letter

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----- Forwarded by Jonathan Edwards/DC/USEPA/US on 01/23/2013 01:04 PM -----

From: Marthea Rountree/DC/USEPA/US
To: Cliff Rader/DC/USEPA/US@EPA, Jonathan Edwards/DC/USEPA/US@EPA
Cc: Daniel Schultheisz/DC/USEPA/US@EPA, Brian Littleton/DC/USEPA/US@EPA
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Thanks.

Kevin

[attachment "NMA letter to Macfarlane.pdf" deleted by Reid Rosnick/DC/USEPA/US]
Sorry Jon, I honestly don't remember regarding Subpart W. At the time Elizabeth Cotsworth (our old OD) thought the review and rewrite was the way to go, so I don't know if Sue was ever asked.

---
Reid J. Rosnick  
Radiation Protection Division (6608J)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
202.343.9563  
rosnick.reid@epa.gov

-----Jonathan Edwards/DC/USEPA/US wrote:-----

To: Reid Rosnick/DC/USEPA/US@EPA
From: Jonathan Edwards/DC/USEPA/US
Date: 01/23/2013 03:49PM
Cc: Alan Perrin/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA, Daniel Schultheisz/DC/USEPA/US@EPA, Philip Egidi/DC/USEPA/US@EPA, Tom Peake/DC/USEPA/US@EPA, Brian Littleton/DC/USEPA/US@EPA
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Cc: Alan Perrin/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA, Daniel Schultheisz/DC/USEPA/US@EPA, Philip Egidi/DC/USEPA/US@EPA, Tom Peake/DC/USEPA/US@EPA, Brian Littleton/DC/USEPA/US@EPA
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Reid J. Rosnick
Radiation Protection Division (6608J)
U.S. Environmental Protection Agency
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Jonathan Edwards---01/23/2013 01:05:59 PM---Please see attached, particularly remarks on 40 CFR 61,,,,let me know your thoughts... Jon ----- For

From: Jonathan Edwards/DC/USEPA/US
To: Tom Peake/DC/USEPA/US@EPA, Reid Rosnick/DC/USEPA/US@EPA, Philip Egidii/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA
Cc: Daniel Schultheisz/DC/USEPA/US@EPA, Alan Perrin/DC/USEPA/US@EPA
Date: 01/23/2013 01:05 PM
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Date: 01/18/2013 02:13 PM
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phone: 202-343-9765

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Sorry Jon, I honestly don't remember re... 01/23/2013 03:54:10 PM

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Oh.......Sorry about that. Still shaking out the cobwebs, or maybe just ingesting more...

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Hi Reid --

I'm so glad you sent that update as I've been thinking about you and wondering how things were going. I was about to send you an email checking in on you when I saw this. Wow! I'm not sure if this is getting worse or better. You probably have some strong opinions on that huh? :) I can only hope and pray that this really does provide you the relief you need. I will indeed pray for you - that surgery is successful and that you will receive the strength you need (in every way) to fully recover. I can only imagine that it will be a difficult recovery, but I am hopeful that there will truly be a worthwhile reward for your efforts waiting for you at the end of it.

I'm sure the Capitals losing record is not helping, but is it any consolation that they salvaged the hockey season? How are the Penguins doing?

I myself am quite thrilled with this Super Bowl match-up. I am a Ravens fan so I would like to see them win, especially with this being the last hurrah for Ray Lewis. Of course I am still fond of those 49ers, having lived there the last time they won the Super Bowl. That would be quite the banner year for that city - the World Series champs AND the Super Bowl champs?! Nice! I guess it's a win-win for me. And yes, the entertainment should be good too.

Can I do anything for you? I really would like to help if there is anything I can do. I could bring you meals or order you take-out, send or bring you books, movies, etc. Clean your house? Really, let me know.

I sure hope your kids are stepping up. If not, you let me talk to them.... ;)

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As you know, Steeler fans don't like the Ravens, so I'll be rooting for the 49'ers, but I'm not happy with how Alex Smith was treated. I hope they let him go to a good team. Nevertheless, I'm assuming I'll still be in hospital for the game, so I won't be thinking of chili, wings and beer! The Caps are stinking the rink out, but the Pens are holding their own. A short season is better than no season.

I'll keep you posted with my progress, I usually just drop a line to Tom, and he disperses it, but I'll ask him to include you as well. Thanks again, Sue.

Reid

-----Susan Stahle/DC/USEPA/US wrote: -----
Hi Reid --

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Can I do anything for you? I really would like to help if there is anything I can do. I could bring you meals or order you take-out, send or bring you books, movies, etc. Clean your house? Really, let me know.

I sure hope your kids are stepping up. If not, you let me talk to them.... :) 

Susan Stahle  
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1200 Pennsylvania Avenue, NW (ARN: MC 2344A)  
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fax: (202) 564-5603  
stahle.susan@epa.gov

Reid Rosnick---01/25/2013 12:59:40 PM---Hi Sue,  Yeah, I think Subpart W is the last thing NMA or NRC will want to deal with. We aren’t kil

From: Reid Rosnick/DC/USEPA/US  
To: Susan Stahle/DC/USEPA/US@EPA  
Date: 01/25/2013 12:59 PM  
Subject: Re: Fw: NMA letter

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1200 Pennsylvania Ave, NW
Washington, DC 20460
phone: 202-343-9765

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Room 529
1310 L St, NW
Washington, DC 20005

----- Forwarded by Tom Peake/DC/USEPA/US on 01/24/2013 08:09 AM -----
Cliff/Jon,

FYI - NRC asked me to pass this along to you.

MR

----- Forwarded by Marthea Rountree/DC/USEPA/US on 01/23/2013 12:57 PM -----

From: "Hsueh, Kevin" <Kevin.Hsueh@nrcreg.gov>
To: Marthea Rountree/DC/USEPA/US@EPA
Date: 01/18/2013 02:13 PM
Subject: NMA letter

Marthea,

Please let Jon and Cliff know about the attached letter that we received from NMA, especially on the 40 CFR Part 61 issue, in case they have not seen it.

Thanks.

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Thanks,

Gary L. Smith, Ph.D.
Uranium Section
Radioactive Materials Division
Texas Commission on Environmental Quality
512-239-6460
Hi Gary,

Of course I remember you, I hope you are well. I see you're having your own share of issues with ISR right now. Good luck to you.

Here's the latest on the Subpart W proposed rule. EPA's workgroup finished the proposal in May of 2011, and the entire package was sent to our Office of Policy, which is the last stop before being sent to the Office of Management and Budget for their review. It has been sitting in the Office of Policy ever since. I believe it's a combination of 2011 being an election year as well as other court ordered deadline rules going to OMB first. Once it does get to OMB, they supposedly have 90 days to perform their review, but they generally take as much time as they like. After their review they send comments to us, and we either make the changes they suggest, or defend why we didn't. The proposal is then sent to the Administrator, who signs it, and it then heads to the Federal Register where we usually ask for a 90 day comment period, and also include a couple of public hearings.

Unfortunately, since the package is at the Office of Policy and then OMB it is considered an internal and deliberative document, and I am not at liberty to discuss it further. The powerpoint presentation on the web site at http://www.epa.gov/radiation/docs/neshaps/subpart-w/nrc-nma-uranium-recovery-2011.pdf probably provides the most current information with the exception of the document going to the Policy office and then OMB (slide 8). Feel free to make any changes you need to in order to suit your needs.

Sorry again that's all I can provide, but I'll be happy to keep you posted on its progress. Take care.

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Reid J. Rosnick  
Radiation Protection Division (6608J)  
U.S. Environmental Protection Agency  
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Washington, DC 20460  
202.343.9563  
rosnick.reid@epa.gov

Gary Smith  
Reid, Hello. We met at a NMA a few ye...  
01/29/2013 09:53:33 AM

From: Gary Smith <gary.smith@tceq.texas.gov>  
To: Reid Rosnick/DC/USEPA/US@EPA  
Date: 01/29/2013 09:53 AM  
Subject: Sub-part W

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Hi Sue,

Wow, what a harrowing experience for you and your friends. I'm certain it was the longest drive in your life.

Thank you for your thoughts and prayers. Your note has touched my heart, thank you my friend. I'll keep in touch.

Reid

I'm glad to hear you have such good help - you need it, and deserve it! I hope everything goes well tomorrow. I'll be thinking about you and praying for you. Please do keep me posted. And in-between those morphine comas, give a little look at the TV swimming in front of you and check in on the game. It should be a good one.

I too spent a Super Bowl weekend in the hospital one year. Luckily I was not the patient but was with a friend who had fractured her skull in a skiing accident (those trees are not very soft). It was quite the ordeal. There were just the three of us skiing together at Heavenly Resort in Tahoe, CA, and they life-flighted her to a hospital in Reno, NV, so my friend and I drove to Reno to stay with her until her parents could fly in from UT. I remember watching the Super Bowl in her hospital room but I really don't remember anything else about the game. Just like with you tomorrow, for us that weekend, there were more important things happening than football. Gratefully she eventually made a full recovery and so it's a happy ending to a crazy adventure on the slopes.

I'm counting on you also having that happy ending. Good luck and God speed!

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-----Susan Stahle/DC/USEPA/US wrote: -----
To: Reid Rosnick/DC/USEPA/US@EPA
From: Susan Stahle/DC/USEPA/US
Date: 01/25/2013 03:46PM
Subject: Re: Fw: NMA letter

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-----Susan Stahle/DC/USEPA/US wrote: -----
To: Tom Peake/DC/USEPA/US@EPA
From: Susan Stahle/DC/USEPA/US
Date: 01/25/2013 12:37PM
Cc: Reid Rosnick/DC/USEPA/US@EPA
Subject: Re: Fw: NMA letter

Hmm, very interesting, thanks for sharing. Considering that list, I'm not too concerned that the subpart W issue will be NRC's highest priority....

Is EPA invited to that February 20 meeting? Just wondering whether that would be helpful for you folks.

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1310 L St, NW
Washington, DC 20005

----- Forwarded by Tom Peake/DC/USEPA/US on 01/24/2013 08:09 AM -----

From: Jonathan Edwards/DC/USEPA/US
To: Tom Peake/DC/USEPA/US@EPA, Reid Rosnick/DC/USEPA/US@EPA, Philip Egidi/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA
Cc: Daniel Schultheisz/DC/USEPA/US@EPA, Alan Perrin/DC/USEPA/US@EPA
Date: 01/23/2013 01:05 PM
Subject: Fw: NMA letter

Please see attached, particularly remarks on 40 CFR 61,,,,let me know your thoughts... Jon

----- Forwarded by Jonathan Edwards/DC/USEPA/US on 01/23/2013 01:04 PM -----

From: Marthea Rountree/DC/USEPA/US
To: Cliff Rader/DC/USEPA/US@EPA, Jonathan Edwards/DC/USEPA/US@EPA
Cc: Daniel Schultheisz/DC/USEPA/US@EPA, Brian Littleton/DC/USEPA/US@EPA
Date: 01/23/2013 12:58 PM
Subject: Fw: NMA letter

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Thanks.

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Information Update - There are multiple changes: NRC discussion on Dewey Burdock EPA Dewey Burdock comment Subpart W status and any updates. teleconference call 4th floor teaming room

Tue 02/12/2013 2:00 PM - 3:00 PM

Attendance is required for Angelique Diaz

Chair: Kenneth Distler/R8/USEPA/US

Kenneth Distler has sent updated information; there are multiple changes

Required: Angelique Diaz/R8/USEPA/US@EPA, Suzanne Bohan/R8/USEPA/US@EPA

NRC invited: Haimanot, Champa Rajapakse, Aby Mohseni (The new Drew), Kevin Hsueh, Stephen Cohen

Dial-in 1-888-889-4048
Passcode: 37941
Angelique,
Thanks for the heads up. You can let them know that Subpart W is still waiting its turn in the OMB queue. We hope it will be allowed to go to OMB soon, but we can't say with any certainty when it will really go. Please tell Aby that I said hello.

Reid is still recovering from his surgery, and he probably won't be ready to work until next week at the earliest.

Tom Peake
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Washington, DC 20005
Hi Beth,

It was good to see you yesterday, if only for a short time. I miss you guys a lot!

I have a couple of things for the Subpart W website. Attached are the draft minutes from January 3, 2013 conference call. Could you please post this link at the bottom, below the October 4, 2012 minutes? Remember, they are still draft, till the stakeholders offer changes, so please use the draft for the link.

Second, where it says

**Tentative Completion Estimate**

EPA plans to propose a decision on Subpart W in **Mid/Late June 2013**. After allowing for public comment and/or hearings we plan to have a final decision in early 2014. This estimate will be revised as needed.

Please change the Mid/Late June to **Mid/Late July 2013**. Thanks

Reid
Subpart W Quarterly Call – January 3, 2013

Attendees

EPA: Reid Rosnick (ORIA), Angelique Diaz (Region 8), Susan Stahle (OGC)

Environmental Groups
Jennifer Thurston (INFORM)

Other
Travis Stills (Energy Minerals Law Center)

Industry
Oscar Paulson (Kennecott), Katie Sweeney (National Mining Association), John Cash (Ur-Energy), Mike Thomas (?), John McCarthy (?), Bill Carney (Uranium One), Mike Griffin (Strata Energy), Jim Cain (Cotter)

Reid

- No comments received on October call draft minutes
- Very little to report since the last call. Update on rule package: scheduled to be received by OMB on 2/8/2013. I have been told that Court ordered deadline rules are at OMB with higher priority than Subpart W – reason for the hold up. Subpart W behind rules with court ordered deadlines, but before general rules because there is a settlement agreement in place.

Questions/Comments/Discussion

Travis Stills: Referred to FOIA documents. Travis claims that EPA is 18 months out of compliance with documents being placed on the website. Repeating his claim regarding placement of documents on the website, and says he doesn’t see a good faith attempt by EPA to conform to agreement.

Reid: He doesn’t have authority over when rulemaking packages are sent to OMB; that would be the Administrator’s office.

Travis Stills: Request that minutes reflect that the Administrator’s office is not going forward with the rulemaking package. *SO NOTED*
Katie Sweeney: Why isn’t this rulemaking in the regulatory agenda that came out last week? Neither was Part 192, curious why they weren’t included. Note that after the conference call Katie sent two websites she uses to track EPA regulations (Subpart W):

http://yosemite.epa.gov/opei/RuleGate.nsf/(LookupRIN)2060-AP26#1

http://regulations.gov/#!documentDetail;D=EPA-HQ-OA-2012-1987-0001

Reid: Wasn’t aware of that. Doesn’t have the answer, Reid will find out and address in the minutes. Reid will also try to find status of part 192 rule. ACTION SINCE THE CONFERENCE CALL: SENIOR LEVEL MANAGEMENT OF EPA IS AWARE OF THE DELAY IN SENDING THE SUBPART W RULMAKING PACKAGE TO OMB. REID HAS BEEN DIRECTED TO TELL THE STAKEHOLDERS TO THANK THEM FOR THEIR PATIENCE, STAY TUNED, AND THAT MORE INFORMATION WILL BE PROVIDED IN THE SPRING 2013 REGULATORY AGENDA.

Katie Sweeney: Status update is helpful, because there is no info on the web regarding updates anymore.

Reid: Actually, on the Subpart W website (http://www.epa.gov/radiation/neshaps/subpartw/rulemaking-activity.html) there is a section (required by the settlement agreement) that posts a tentative completion estimate for the rule, and it is updated as necessary. We assume there is a 90 day review period once we give the package to OMB. Therefore the proposed rule would be signed in mid to late June of this year and out for public comments.

Katie Sweeney: Looked at the EPA dashboard.

Travis Stills: Who do you communicate with in Administrator’s office?

Reid: It’s in the Office of Policy - Barry Elman, staff person, member of the Subpart W workgroup.

Travis Stills: Sees it being pushed from desk to desk and not going anywhere. Asking for assurance that this is handled by folks with authority to move rulemakings, doesn’t think it is.

Reid: Will see what he can do to see why the rulemaking is not on the current regulatory agenda and pin down a more realistic time for package. SEE ABOVE ACTION ITEM.
Katie Sweeney: 90 days is optimistic for OMB. Rules have been sitting there for a couple years or longer.

Reid: Correct. The updates I give are the most optimistic deadlines.

Travis Stills: What has been done since the last call to move the regulation forward?

Reid: Once package goes to Office of Policy and then on to OMB, it is out of our hands. Reid again explained the queue of regulations and where the log jam is because of prioritization. Difficult to determine how many are in the line and how they get moved over. Reid will try to provide additional information on the process. Will post what I discover in the minutes.

ACTION SINCE THE CONFERENCE CALL: SENIOR LEVEL MANAGEMENT OF EPA IS AWARE OF THE DELAY IN SENDING THE SUBPART W RULMAKING PACKAGE TO OMB. REID HAS BEEN DIRECTED TO TELL THE STAKEHOLDERS TO THANK THEM FOR THEIR PATIENCE, TO STAY TUNED, AND THAT MORE INFORMATION WILL BE PROVIDED FOR THE SPRING 2013 REGULATORY AGENDA.

Travis Stills: The level of discussion and level of authority is not sufficient. This project needs to be handled by people with authority.

Reid: Without any further questions or comments the conference call was ended.

NEXT CALL: Thursday, April 4, 2013 11am Eastern Time.
Cliff/Jon,

FYI - NRC asked me to pass this along to you.

MR

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From: "Hsueh, Kevin" <Kevin.Hsueh@nrc.gov>
To: Marthea Rountree/DC/USEPA/US@EPA
Date: 01/18/2013 02:13 PM
Subject: NMA letter

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NMA letter to Macfarlane.pdf
January 7, 2013

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Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

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Chairman Macfarlane  
January 7, 2013  
Page Four  

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Sincerely,  

[Signature]  

Katie Sweeney  
General Counsel
Nothing real impactful, but you all deal with the NMA more than me so you should be in the loop.

Brian

***************************************************
Brian Littleton
EPA, Office of Air and Radiation/Radiation Protection Division
1200 Pennsylvania Avenue, NW - Mailcode 6608J
Washington D.C. 20460
(202) 343-9216
----- Forwarded by Brian Littleton/DC/USEPA/US on 01/23/2013 02:26 PM ----- 

From: Marthea Rountree/DC/USEPA/US
To: Cliff Rader/DC/USEPA/US@EPA, Jonathan Edwards/DC/USEPA/US@EPA
Cc: Daniel Schultheisz/DC/USEPA/US@EPA, Brian Littleton/DC/USEPA/US@EPA
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US EPA (6608J)
1200 Pennsylvania Ave, NW
Washington, DC 20460
phone: 202-343-9765

Physical Location and for deliveries:
Room 529
1310 L St, NW
Washington, DC 20005

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From: Jonathan Edwards/DC/USEPA/US
To: Tom Peake/DC/USEPA/US@EPA, Reid Rosnick/DC/USEPA/US@EPA, Philip Egidi/DC/USEPA/US@EPA, Andrea Cherepy/DC/USEPA/US@EPA
Cc: Daniel Schultheisz/DC/USEPA/US@EPA, Alan Perrin/DC/USEPA/US@EPA
Date: 01/23/2013 01:05 PM
Subject: Fw: NMA letter

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In the letter attached, NMA includes this request (among several others) for NRC to consider:

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Given all the other issues NMA raises with NRC in its letter, I'm not too concerned about this being a high priority for NRC, or even this being something NRC considers.

Just wanted keep you informed.

Susan Stahle
Air and Radiation Law Office (Rm 7502B)
Office of General Counsel
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (ARN: MC 2344A)
Washington, D.C. 20460
ph: (202) 564-1272
fax: (202) 564-5603
stahle.susan@epa.gov

----- Forwarded by Susan Stahle/DC/USEPA/US on 01/25/2013 12:37 PM -----

From: Tom Peake/DC/USEPA/US
To: Susan Stahle/DC/USEPA/US@EPA
Cc: Reid Rosnick/DC/USEPA/US@EPA
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Dear Chairman Macfarlane:

Thank you for the invitation to brief the Nuclear Regulatory Commission (NRC) on February 20, 2013 regarding issues of importance to the National Mining Association’s uranium recovery members. As we discussed last year, NMA believes that an annual meeting on uranium recovery regulatory issues can provide an excellent forum to allow Commission members to be thoroughly briefed by industry and other interested stakeholders. The format of the briefing, however, is critical to ensure adequate discussion of the most significant issues. Therefore, I am writing to comment on the proposed format for this briefing, as well as to offer some suggestions on topics that currently are at the forefront of the development of the domestic uranium recovery industry. I hope that you will consider these suggestions when finalizing the schedule for this briefing.

I am concerned that the format of this briefing will not allow the NMA to adequately address relevant industry issues. By offering only 5-10 minutes for NMA to present its views on specific issues, the Commission is relegating our discussion to mere “talking points” rather than to a truly substantive discussion. Previously, in an August 2012 letter to the Commission, NMA suggested that the Commission use a format that allows more time for interested stakeholders to present their views and for an expanded dialogue between such stakeholders and Commission members so that all views and their supporting facts may be considered and queried. Furthermore, NMA suggested that all stakeholders’ slides, written testimony, and any other detailed information be shared in advance with the Commission, NRC staff and others speaking at the briefing. Advance submissions on relevant regulatory issues also will be a good way to focus the scope of discussion. By allowing stakeholders to submit issues in advance, the Commission can direct such stakeholders to consult NRC Staff on which issues are of particular importance to NRC from a legal and/or policy perspective and to direct stakeholders to prepare and submit specific advance information that the Commission deems most relevant to a productive briefing. Thus, NMA respectfully requests that the Commission tailor a format for this briefing that reflects NMA’s previous suggestion.
In addition, NMA believes that the list of issues, ranging from legal/regulatory to policy-related items, should include each of the following topics.

(1) First, as a general matter, the lack of NRC Staff agency resources available to process uranium recovery license and license amendment or renewal applications has resulted in considerable problems for the industry. Several license applicants have experienced significant delays in licensing of their proposed projects and, the vast majority of the time, are being told it is due to a lack of agency resources. At least two license applicants that participated in the NRC’s pre-submission audit process and who submitted extremely high-quality applications already have experienced significant delays in the licensing process starting with basic completeness review. While NRC’s primary mission does not relate to shareholder or investor perspectives, NMA believes the Commission needs to assure that processing of license applications must be accomplished efficiently and cost-effectively.

(2) Second, NRC’s conduct of the National Historic Preservation Act’s (NHPA) Section 106 process has become a source of great concern within the uranium recovery industry. Industry understands that the Section 106 process is mandatory for new operating facilities and for some other licensing actions and has attempted to assist the Agency in conducting this process. However, industry is deeply concerned with the lack of a standardized process or protocol, perhaps a regional programmatic agreement, for the Section 106 process and with the failure of NRC Staff to be more decisive in its role as the “lead agency” in its licensing process. NMA believes an open discussion on this issue will allow all interested stakeholders to better understand how the process can be improved and can lead to more efficient licensing.

(3) Third, there are several process-related issues that require some detailed discussion with the Commission. NRC billing practices have long been a difficult issue for industry. For several years, industry has been dissatisfied with the level of detail contained in NRC’s billing invoices, especially when it relates to time and fees charged by NRC-retained independent contractors. NRC invoices have been wholly lacking in standard detail that every consultant, law or accounting firm in the private sector must provide and NRC’s hourly rates exceed those of many of these organizations in the Western part of the country. Accordingly, NRC’s invoices do not offer industry any opportunity to gauge the reasonableness of fees incurred for different phases of the licensing process which, in turn, makes a lessons learned approach for future licensing actions virtually impossible to implement. NMA has met with and communicated in writing with NRC’s Chief Financial Officer (See Attached Letter) and has received no reply to date. NMA would like to explore this issue in more depth with the Commission.

(4) The structure and focus of licensing reviews are also an issue that requires some significant attention. Industry has found that environmental and safety reviews often employ different licensing approaches and do not narrow their focus to “significant risks”
of harm contrary to the Supreme Court caution in the so-called 1980 Benzene decision (Industrial Union Department, AFL-CIO v. American Petroleum Institute) and the Commission-approved risk-informed regulatory program. By allowing license reviews to be focus on a larger range of "insignificant risks," additional delays are realized in the licensing process. Moreover, environmental reviews which are essentially procedural in nature take far too much time and cost far too much compared with the Commission's primary responsibility for public health and safety reviews. This results in a waste of agency and company resources that should not occur in the first place. Thus, this issue is paramount to achieving the goal of cost-effective and efficient licensing.

(5) Several looming regulatory and policy issues need to be extensively discussed during this briefing. Industry is concerned with the lack of progress on the finalization of new and/or revised standard review plans (SRP) for in situ and conventional/heap leach uranium recovery facilities. NRC Staff typically refer to the former as the "bible" for new ISR license applications and license renewals. Yet, industry has been proceeding over the last six years without an updated set of SRPs and have been forced to "read the minds" of NRC Staff when it comes to changing or evolving safety and environmental requirements. Indeed, the Commission needs to address the importance of such documents specifically to its licensing board panels, which have little familiarity with the technical aspects of these operations. Finalization of these SRPs should be a priority as they will require extensive public comment prior to finalization.

(6) The Commission should also consider involving itself in the upcoming rulemaking by the Environmental Protection Agency (EPA) regarding 40 CFR Part 61, Subpart W radon emission standards for uranium mill tailings impoundments. The interpretation and application of these standards by EPA to uranium recovery facilities appears to be unnecessarily redundant and overly burdensome given the Commission's existing regulations for such facilities. Precedent for Commission involvement in regulations under Part 61 exists as the Commission participated in the rescission of 40 CFR Part 61, Subpart I and T in the 1980s which resulted in a reduction of duplicative, overlapping regulation. Industry believes that the Commission would be well-served to actively consider this opportunity to increase regulatory efficiency.

(7) Finally, the new final rule for revisions to 10 CFR Part 40.32(e) on pre-licensing site construction is a source of immense confusion for industry. When a potential revision to Part 40.32(e) was initially raised by an industry delegation, the ultimate goal for this new rulemaking was to clarify the scope of pre-licensing site construction activities that could be conducted without concern for denial of a requested license. Unfortunately, the Statement of Considerations for the final rule as well as the rule itself has further complicated this issue. NMA believes that the Commission decision in NFS cited by both NMA and the Nuclear Energy Institute (NEI) in its comments on the Proposed Rule has either been ignored or wholly misinterpreted, thus leaving industry in a state of confusion. NMA would appreciate further discussion of this issue at the February 20, 2013 briefing.
Chairman Macfarlane
January 7, 2013
Page Four

Please do not hesitate to contact me to discuss these requests at (202) 463-2627. Thank you very much for your time and consideration in this matter.

Sincerely,

Katie Sweeney
General Counsel
So I come across this report while trolling ADAMS. The question you will be asked (someday) is which of their 5 ponds are they going to have to get rid of in order to meet the proposed NESHAPs? Good luck with the surgery and don't think about this until after the surgery. You are in my thoughts and I hope the best for you. Miss ya, it is really quiet around here...

PVE

Philip Egidi
Environmental Scientist
U.S. Environmental Protection Agency
Office of Radiation and Indoor Air
Radiation Protection Division
Center for Waste Management and Regulations
Washington, DC

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email: egidi.philip@epa.gov
cell: 970-209-2885

- ML12257A470.pdf
August 30, 2012

Attn: Document Control Desk
Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
Mailstop T8-F5
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Semiannual Radiological Effluent and Environmental Monitoring Report
Source Materials License No. SUA-1534, Docket No. 40-8943

Dear Sir or Madam:

Enclosed please find one copy of the Semiannual Radiological Effluent and Environmental Monitoring Report for the Crow Butte Uranium Project. The report is provided in accordance with License Condition 12.1 of Source Materials License SUA-1534 and 10 CFR Part 40. This report covers the first and second quarters of 2012.

If you have any questions concerning the report, please feel free to call me at (307) 316-7586.

Sincerely,

CAMECO RESOURCES

Scott A. Bakken
Manager, SHEQ Systems & Compliance

cc: Keith I. McConnell - NRC
Dave Miesbach – NDEQ
CBO - File

ec: CR – Cheyenne
CROW BUTTE URANIUM PROJECT

RADIOLOGICAL EFFLUENT
AND
ENVIRONMENTAL MONITORING
REPORT

for

FIRST AND SECOND QUARTERS, 2012

USNRC Source Materials License SUA 1534
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1 WATER QUALITY MONITORING DATA

1.1 Excursion Monitoring

Biweekly excursion monitoring in the shallow aquifer and perimeter monitor wells was continued in Mine Units 2 through 11 during the first and second quarters of 2012.

IJ-13, a Mine Unit 3 perimeter monitor well, was placed on excursion status on October 5, 2011. This well had been removed from excursion status on March 29, 2011 after having been on excursion since December 26, 2002. CBO believed the source of the excursion water to be an area to the southeast of IJ13 and consulted with a hydro geologist to develop a corrective action plan to adjust the water flow balance. As a part of the water balance, CBO installed well RES-1i, 130 feet southeast of IJ13 and by letter received from NDEQ dated November 15, 2011 was given approval to operate the well. On November 23, 2011, CBO began using this well to inject reverse osmosis permeate into the affected area. On February 21, 2012, IJ-13 was successfully removed from excursion status.

Excursion reports have been submitted to NRC as required in License Condition 12.2. Complete excursion monitoring results are available on site for inspection. A summary table for monitor wells on excursion status during the first half of 2012 follows:
1.2 Water Supply Wells and Surface Water

Summary sheets of quarterly radiological analytical data for the reporting period from all surface waters and water supply wells within one kilometer of the active wellfield boundary are included in Appendix A.

The reported radiological data are within the expected ranges for each well and surface water sampling points. Samples were obtained from all sample locations with the exceptions noted in Appendix A.

2 OPERATIONAL

2.1 Production Data Summary

Mining operations continued through the first and second quarters of 2012. The average operating production flow rate was 6,572 gpm for the first quarter and 6,576 gpm for the second quarter. Injection and production totals from the totalizers and the calculated bleed totals for the reporting period are included in Appendix B.

2.2 Wastewater Summary

The total volume of wastewater discharged to the ponds was 856,595 gallons during the first quarter and 1,644,022 gallons during the second quarter. Currently, all five evaporation ponds contain wastewater.

Wastewater that is not disposed of in the evaporation ponds is injected into the Deep Disposal Well (DDW). Currently, the well is operated on a nearly continuous basis and 51,135,335 gallons of wastewater was injected into the well during the first half of 2012. A summary of the total volume of wastewater injected and the average radionuclide content is contained in Appendix D.

2.3 Effluent Release
10 CFR §40.65 requires licensees to report quantities of radionuclides in liquid and gaseous effluent releases to the environment. In the Application for Renewal of Source Materials License SUA-1534, submitted December 1995, Table 7.3(A) presented calculations of the annual radon emissions for the Crow Butte Plant. These calculations assumed a $7.04 \times 10^4$ Curies/m$^3$ radon release from leaching operations and the radon release calculations for the first half of 2012 use this release rate estimate.

During the first quarter, production occurred at an average flow rate of 6,572 gpm (24,878 lpm). Production was maintained nearly continuously for 91 days during the first quarter with an operating factor of 99.8%. The production flow for the first quarter results in a calculated radon release of 1,649 Curies. During the second quarter, production occurred at an average flow rate of 6,576 gpm (24,893 lpm). Production was maintained nearly continuously for 91 days during the second quarter with an operating factor of 100%. The production flow for the second quarter results in a calculated radon release of 1,653 Curies. Calculations for radon release from production operations are shown in Appendix E.

Additional wells were brought on line during the first half of 2012. Calculations for the start-up of 6.14 acres of a new wellfield are shown in Appendix E. The calculated radon released from start-up of 6.14 acres is 8 Curies.

The total radon emission due to leaching operations from the Crow Butte plant for the first half of 2012 was 3,310 Curies. This calculated release rate is comparable with the releases estimated in CBR’s License Renewal Application.

Radon gas is also released from restoration activities. For restoration water that is treated by ion exchange only, the radon concentration is 0.697 μCi/l. Of the total restoration production flow it is assumed that 25% of the radon is released through wellfield loss and 10% of the remaining radon is released during pressurized ion exchange treatment. For water that is treated by reverse osmosis, it is assumed that 100% of the remaining radon is released. For water treated by reverse osmosis the radon concentration is 0.470 μCi/l after adjusting for wellfield loss and ion exchange loss.

During the first half of 2012, a total of 151,641,194 gallons (574,022,576 l) of restoration water was produced from Mine Units 2, 3, 4, 5, and 6. Based upon an estimated radon concentration of 0.697 μCi/l, the total amount of radon in the restoration solution was calculated to be 292 Curies as shown in Appendix E. The estimated release of radon through wellfield loss at 25% of this total was 110 Curies. The plant loss for ion exchange treatment of the restoration water is estimated at 10% of the remaining radon, or 30 Curies. For water that is treated by reverse osmosis, it is assumed that 100% of the remaining radon is released. For water treated by reverse osmosis the radon concentration is 0.470 μCi/l after adjusting for wellfield loss and ion exchange loss.
CAMECO RESOURCES  
CROW BUTTE OPERATION  

First Half 2012 Semiannual Radiological Effluent and Environmental Monitoring Report

Of the total amount of restoration water produced in the first half of 2012, 86,995,412 gallons (329,312,433 l) of the water was treated by reverse osmosis. The total estimated radon release from reverse osmosis treatment was 155 Curies. An additional 6.03 acres of wellfields were placed into restoration during the first half of 2012. The calculated radon released from start-up of 6.03 acres is 8 Curies. Calculations for the start-up of 6.03 acres of a wellfield placed in restoration are shown in Appendix E.

Based upon the calculations shown in Appendix E, the total estimated semiannual radon emission for the first half of 2012 from restoration activities was 292 Curies. This resulted in a total estimated radon release from the Crow Butte project during the first half of 2012 of 3,603 Curies.

2.4 Restoration

Restoration activities continued in Mine Units 2, 3, 4, 5, and 6 during the first half of 2012. Permeate continued to be injected into Mine Units 2 and 3 and permeate injection was started in Mine Units 4 and 5. Mine Unit 6 was placed into IX treatment. Restoration injection and production totals are included in Appendix B. Restoration injection pressures are included in Appendix C.

3 ENVIRONMENTAL MONITORING

3.1 Air Monitor Stations

Seven air monitoring stations are used to monitor the Crow Butte Plant. Ambient radon-222 concentrations and radionuclide concentrations in air for each monitoring site are listed in Appendix F. All air monitoring results were within expected historical ranges.

3.2 TLD Monitors

Environmental TLD monitors are located at each air monitoring station. The results of the area TLD monitors fall within the expected ranges and are listed in Appendix G.
Appendix A

Private Well and Surface Water Radiological Monitoring Results

First and Second Quarter, 2012
<table>
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<th>SAMPLE ID</th>
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<th>URANIUM mg/l</th>
<th>URANIUM µCi/ml</th>
<th>RADIUM-226 pCi/l</th>
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## PRIVATE WELL AND SURFACE WATER RADIOLOGICAL MONITORING RESULTS

**Second Quarter, 2012**

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ND - Not detected at the reporting limit
Appendix B

Plant Production and Waste Totals

First and Second Quarter, 2012
### WASTE VOLUME
First Quarter 2012

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<th>TOTALIZER</th>
<th>PLANT TO PONDS</th>
<th>PLANT TO DDW 1 &amp; 2</th>
<th>RESTORATION TO DDW</th>
<th>CLEAN WATER INTO PLANT</th>
<th>DDW TOTAL INJECTED</th>
<th>TRUCKS TO POND</th>
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<td>January</td>
<td>240,160</td>
<td>5,452,361</td>
<td>2,071,356</td>
<td>634,573</td>
<td>8,669,719</td>
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<td>4,562,299</td>
<td>2,076,049</td>
<td>580,691</td>
<td>7,850,347</td>
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<td>March</td>
<td>282,280</td>
<td>4,806,915</td>
<td>3,159,677</td>
<td>656,285</td>
<td>4,484,522</td>
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<td>1,971,549</td>
<td>25,986,580</td>
<td>16,625</td>
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</table>

**TOTAL 1st QTR VOLUME DISCHARGED TO WASTE PONDS** = 856,595 GALLONS
**TOTAL 1st QTR VOLUME DISCHARGED TO DEEP WELL** = 25,986,580 GALLONS
**TOTAL 1st QTR VOLUME DISCHARGED TO WASTE PONDS + DPWELL** = 28,843,173 GALLONS

### WELLFIELD BLEED
First Quarter 2012

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<th>MONTH</th>
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<th>FEBRUARY</th>
<th>MARCH</th>
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### PLANT FLOW
First Quarter 2012

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<th>AVERAGE COM TOI GPM</th>
<th>AVERAGE REST INJ GPM</th>
<th>HRS. DOWN</th>
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<td>6,572 GPM EOQ</td>
<td>081,254,425 GALLONS EOQ</td>
<td>844,572,890 GALLONS EOQ</td>
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<td>TOTAL GAL. S PRODUCED</td>
<td>TOTAL GAL. S INJECTED</td>
<td>TOTAL HOURS IN MONTH</td>
<td>TOTAL HOURS IN PRODUCTION</td>
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<td>January</td>
<td>290,339,280</td>
<td>284,645,679</td>
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<td>272,936,977</td>
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<td>March</td>
<td>297,979,248</td>
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<th>TOTAL MUU GAL S PRODUCED</th>
<th>TOTAL MUU GAL S INJECTED</th>
<th>MUU BLEED TO WASTE</th>
<th>MUU BLEED TO WASTE</th>
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<tr>
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<td>EOQ TOTAL</td>
<td>9,116,154</td>
<td>20,516,379</td>
<td>21,188,057</td>
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<tr>
<td>YTD TOTAL</td>
<td>9,116,154</td>
<td>20,516,379</td>
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<tr>
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<th>TOTAL PERM GAL S PRODUCED</th>
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## Waste Volume

**Second Quarter 2012**

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<th>TOTALIZER</th>
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<th>PLANT TO DOW &amp; 2</th>
<th>RESTORATION TO DOW</th>
<th>CLEAN WATER INTO PLANT</th>
<th>DOW TOTALJECTED</th>
<th>TRUCKS TO POND</th>
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<tbody>
<tr>
<td>April</td>
<td>255,449</td>
<td>5,318,568</td>
<td>2,967,924</td>
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<td>3,986,892</td>
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<td>442,010</td>
<td>6,626,099</td>
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<td>645,284</td>
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<td>729,380</td>
<td>5,244,593</td>
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<tr>
<td>TOTAL GAL. EQQ</td>
<td>1,426,830</td>
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<td>1,592,922</td>
<td>15,478,747</td>
<td>211,192</td>
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</table>

**TOTAL 6th QTR VOLUME DISCHARGED TO WASTE PONDS =** 1,644,022 GALLONS

**TOTAL 6th QTR VOLUME DISCHARGED TO DEEP WELL =** 25,148,747 GALLONS

**TOTAL 6th QTR VOLUME DISCHARGED TO WASTE PONDS + DPWELL =** 26,792,769 GALLONS

**TOTAL 6th QTR VOLUME WF BLEED FROM WELLFIELDS =** 243,666 GALLONS

## Wellfield Bleed

**Second Quarter 2012**

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<tr>
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<td>May</td>
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<tr>
<td>June</td>
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## Plant Flow

**Second Quarter 2012**

**AVERAGE OPERATING FLOW RATE = 6.576 GPM EQQ**

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<tr>
<th>TOTAL GALLONS PRODUCED</th>
<th>TOTAL GALLONS INJECTED</th>
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<tbody>
<tr>
<td>861,254,425</td>
<td>844,572,890</td>
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**TOTAL 6th QTR VOLUME PRODUCED =** 1,826,873,312 GALLONS

**TOTAL 6th QTR VOLUME INJECTED =** 1,844,145,965 GALLONS

**TOTAL 6th QTR VOLUME PROD/CMD =** 2,161,981 GALLONS

**TOTAL 6th QTR VOLUME IN/INJ =** 2,163,017 GALLONS

**TOTAL 6th QTR VOLUME PROD/CMD - IN/INJ =** 1,972,965 GALLONS

**AVERAGE BLEED TO WASTE = 6.444 GPM**

**AVERAGE BLEED TO WASTE = 6.444 GPM**

**HRS. DOWN TIME = 5**

## Brine

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<th>TOTAL PERM</th>
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<td>8,689,478</td>
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<td>19,624,425</td>
<td>63,374,690</td>
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**TOTAL 6th QTR VOLUME PRODUCED =** 1,826,873,312 GALLONS

**TOTAL 6th QTR VOLUME INJECTED =** 1,844,145,965 GALLONS
Appendix C

Wellfield Injection Pressures

First and Second Quarter, 2012
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Appendix D

Deep Disposal Wells Injection Radiological Data

First and Second Quarter, 2012
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<tr>
<th>Month</th>
<th>Total Gallons Injected</th>
<th>Average Natural Uranium (mg/l)</th>
<th>Total Natural Uranium Injected (mg)</th>
<th>Total Natural Uranium Injected (uCi)</th>
<th>Average Radium-226 (pCi/l)</th>
<th>Total Radium-226 Injected (uCi)</th>
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<tr>
<td>January-12</td>
<td>7,785,326</td>
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<td>1.18E+08</td>
<td>7.98E+04</td>
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<td>February-12</td>
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<td>1.22E+08</td>
<td>8.28E+04</td>
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<td>March-12</td>
<td>7,498,767</td>
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<td>2.27E+08</td>
<td>1.54E+05</td>
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<td>1.19E+08</td>
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<td>May-12</td>
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<td>9.35E+08</td>
<td>6.33E+05</td>
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## Crow Butte Uranium Mine

### Deep Disposal Well #2 Injection Radiological Data

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<th>Month</th>
<th>Total Gallons Injected</th>
<th>Average Natural Uranium (mg/l)</th>
<th>Total Natural Uranium Injected (mg)</th>
<th>Total Natural Uranium Injected (uCi)</th>
<th>Average Radium-226 (pCi/l)</th>
<th>Total Radium-226 Injected (uCi)</th>
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<td>January-12</td>
<td>884,393</td>
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Appendix E

Radon Release Calculations

First and Second Quarter, 2012
**Radon Effluent Release Calculation (Production and Startup)**

**First Quarter 2012 Radon Release from Leaching Operations:**

<table>
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<th>Curies/M³</th>
<th>Production Flow (liters)</th>
<th>Radon-222 Decay Constant</th>
<th>Operating Days</th>
<th>Operating Factor</th>
<th>M³/liter Conversion</th>
<th>Hours/Day Conversion</th>
<th>Minutes/Hour Conversion</th>
<th>Total Radon Release from Leaching</th>
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<tr>
<td>7.04E-04</td>
<td>24,878</td>
<td>0.72</td>
<td>91</td>
<td>99.8%</td>
<td>0.001</td>
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**Second Quarter 2012 Radon Release from Leaching Operations:**

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<th>Radon-222 Decay Constant</th>
<th>Operating Days</th>
<th>Operating Factor</th>
<th>M³/liter Conversion</th>
<th>Hours/Day Conversion</th>
<th>Minutes/Hour Conversion</th>
<th>Total Radon Release from Leaching</th>
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<tr>
<td>7.04E-04</td>
<td>24,893</td>
<td>0.72</td>
<td>91</td>
<td>100.0%</td>
<td>0.001</td>
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<td>1,653</td>
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**First Half 2012 Radon Release From Startup:**

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<th>Curies/M³</th>
<th>Total Acres of New Wellfield Conversion</th>
<th>Orebody Thickness (meters)</th>
<th>Porosity</th>
<th>Total Radon Release from Startup</th>
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<td>7.04E-04</td>
<td>6.14</td>
<td>4,074</td>
<td>1.52</td>
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**Total Estimated Radon Release from Production:**

3,310

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**Radon Effluent Release Calculation (Restoration)**

**First Half 2012 Radon Release From Restoration:**

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<th>Total Restoration Flow (liters)</th>
<th>Microcuries/liter</th>
<th>Curies/Microcurie</th>
<th>Production Potential</th>
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<td>574,022,576</td>
<td>0.697</td>
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**Wellfield Loss (25% of Production Potential):**

100

**Ion Exchange Loss (10% of Production Potential minus Wellfield Loss):**

30

**Reverse Osmosis Loss (100% of remaining activity at 0.470 microcuries/liter):**

155

<table>
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<th>Total Reverse Osmosis Flow (liters)</th>
<th>Microcuries/liter</th>
<th>Curies/Microcurie</th>
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<td>329,312,433</td>
<td>0.470</td>
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**First Half 2012 Radon Release From Startup of New Restoration:**

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<th>Curies/M³</th>
<th>Total Acres of New Wellfield Conversion</th>
<th>Orebody Thickness (meters)</th>
<th>Porosity</th>
<th>Total Radon Release from Startup</th>
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**Total Estimated Radon Release from Restoration:**

292

**Total Estimated Radon Release, First Half 2012:**

3,603
Appendix F

Environmental Air Monitoring Results

First and Second Quarter, 2012
Crow Butte Resources, Inc.
Crow Butte Uranium Project

**Track Etch Cup Ambient Radon Concentrations**

**Air Monitoring Station**

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<th>No.</th>
<th>Period: January 4, 2012 to June 29, 2012</th>
<th>Gross Count</th>
<th>Average Radon Concentration (x 10^{-9} \mu\text{Ci/ml})</th>
<th>Accuracy (x 10^{-9} \mu\text{Ci/ml})</th>
<th>Percent Effluent Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM-1</td>
<td></td>
<td>75.0</td>
<td>0.2</td>
<td>0.02</td>
<td>2.0%</td>
</tr>
<tr>
<td>AM-2</td>
<td></td>
<td>105.0</td>
<td>0.3</td>
<td>0.03</td>
<td>3.0%</td>
</tr>
<tr>
<td>AM-3</td>
<td></td>
<td>60.0</td>
<td>0.2</td>
<td>0.03</td>
<td>2.0%</td>
</tr>
<tr>
<td>AM-4</td>
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<td>104.0</td>
<td>0.3</td>
<td>0.03</td>
<td>3.0%</td>
</tr>
<tr>
<td>AM-5</td>
<td></td>
<td>159.0</td>
<td>0.6</td>
<td>0.05</td>
<td>6.0%</td>
</tr>
<tr>
<td>AM-6</td>
<td></td>
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<td>0.02</td>
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</tr>
<tr>
<td>AM-8</td>
<td></td>
<td>105.0</td>
<td>0.3</td>
<td>0.03</td>
<td>3.0%</td>
</tr>
<tr>
<td>AB-1 (AM-1 Duplicate)</td>
<td></td>
<td>89.0</td>
<td>0.2</td>
<td>0.02</td>
<td>2.0%</td>
</tr>
<tr>
<td>AB-2 (AM-2 Duplicate)</td>
<td></td>
<td>83.0</td>
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<tr>
<td>AB-6 (AM-6 Duplicate)</td>
<td></td>
<td>86.0</td>
<td>0.2</td>
<td>0.02</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

LLD (x 10^{-9} \mu\text{Ci/ml}) 0.2
Effluent Concentration Limit, 10 CFR 20 App B Column 2: 10
Air Filter Summary Report

Client: Cameco Resources, Crow Butte Operation
Client Sample ID: AM-1

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result pCi/ml</th>
<th>Precision ± pCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent</th>
<th>Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>103</td>
<td>5.9</td>
<td>2E-14</td>
<td>1E-15</td>
<td>2E-15</td>
<td>6 E-13</td>
<td>Day</td>
<td>3.33</td>
<td></td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-13</td>
<td>9 E-13</td>
<td>0.00</td>
<td>Week</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Uranium</td>
<td>0.3</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-14</td>
<td>9 E-14</td>
<td>0.00</td>
<td>Year</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result pCi/ml</th>
<th>Precision ± pCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent</th>
<th>Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>13.6</td>
<td>1.1</td>
<td>2E-15</td>
<td>2E-15</td>
<td>2E-15</td>
<td>6 E-13</td>
<td>Day</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>Radium 226</td>
<td>0.5</td>
<td>0.1</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>1E-16</td>
<td>9 E-13</td>
<td>Week</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Thorium 230</td>
<td>&lt;0.2</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>3 E-14</td>
<td>3 E-14</td>
<td>0.00</td>
<td>Year</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Uranium</td>
<td>3.1</td>
<td>6E-16</td>
<td>1E-16</td>
<td>9 E-14</td>
<td>9 E-14</td>
<td>0.67</td>
<td>Year</td>
<td>0.67</td>
<td></td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2
ND - Not Detected at the Reporting Limit
Client: Cameco Resources, Crow Butte Operation

Client Sample ID: AM-2

<table>
<thead>
<tr>
<th>Lab ID: S1207115-002</th>
<th>Sampled 4/18/2012-6/29/2012 (2012 2nd Qtr)</th>
<th>Sample Air Volume: 6171740 Liters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Result ± Precision ± Result ± Precision ±</td>
<td>Result ± Precision ± Result ± Precision ±</td>
</tr>
<tr>
<td></td>
<td>pCi/filter</td>
<td>pCi/filter</td>
</tr>
<tr>
<td>Lead 210</td>
<td>109</td>
<td>6.2</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Uranium</td>
<td>0.4</td>
<td>&lt;1E-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lab ID: S1204106-002</th>
<th>Sampled 1/4/2012-4/4/2012 (2012 1st Qtr)</th>
<th>Sample Air Volume: 5503736.4 Liters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Result ± Precision ± Result ± Precision ±</td>
<td>Result ± Precision ± Result ± Precision ±</td>
</tr>
<tr>
<td></td>
<td>pCi/filter</td>
<td>pCi/filter</td>
</tr>
<tr>
<td>Lead 210</td>
<td>84.6</td>
<td>6.7</td>
</tr>
<tr>
<td>Radium 226</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Thorium 230</td>
<td>&lt;0.2</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Uranium</td>
<td>6.9</td>
<td>1E-16</td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2

ND - Not Detected at the Reporting Limit
Air Filter Summary Report

Client: Cameco Resources, Crow Butte Operation

Client Sample ID: AM-3

<table>
<thead>
<tr>
<th>Lab ID: S1207115-003</th>
<th>Sampled: 4/18/2012-6/29/2012 (2012 2nd Qtr)</th>
<th>Sample Air Volume: 6164200 Liters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Result pCi/filter</td>
<td>Precision ± pCi/filter</td>
</tr>
<tr>
<td>Lead 210</td>
<td>104</td>
<td>6.2</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Uranium</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lab ID: S1204106-003</th>
<th>Sampled: 1/4/2012-4/4/2012 (2012 1st Qtr)</th>
<th>Sample Air Volume: 5950853.8 Liters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Result pCi/filter</td>
<td>Precision ± pCi/filter</td>
</tr>
<tr>
<td>Lead 210</td>
<td>98.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Thorium 230</td>
<td>&lt;0.2</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Uranium</td>
<td>2.3</td>
<td>4E-16</td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2

ND - Not Detected at the Reporting Limit

Page 3 of 7
Air Filter Summary Report

Client: Cameco Resources, Crow Butte Operation
Client Sample ID: AM-4

<table>
<thead>
<tr>
<th>Lab ID: S1207115-004</th>
<th>Sampled 4/18/2012-6/29/2012 (2012 2nd Qtr)</th>
<th>Sample Air Volume: 6112900 Liters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Result pCi/filter</td>
<td>Precision ± pCi/filter</td>
</tr>
<tr>
<td>Lead 210</td>
<td>105</td>
<td>6.1</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Uranium</td>
<td>0.4</td>
<td>&lt;1E-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lab ID: S1204108-004</th>
<th>Sampled 1/4/2012-4/4/2012 (2012 1st Qtr)</th>
<th>Sample Air Volume: 5798062.5 Liters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Result pCi/filter</td>
<td>Precision ± pCi/filter</td>
</tr>
<tr>
<td>Lead 210</td>
<td>92.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Radium 226</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Thorium 230</td>
<td>&lt;0.2</td>
<td>&lt;1E-16</td>
</tr>
<tr>
<td>Uranium</td>
<td>3.6</td>
<td>6E-16</td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2
ND - Not Detected at the Reporting Limit
Client: Cameco Resources, Crow Butte Operation

Client Sample ID: AM-5

### Air Filter Summary Report

**Sampled 4/18/2012-6/29/2012 (2012 2nd Qtr)**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result µCi/ml</th>
<th>Precision ± µCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>92.0</td>
<td>5.8</td>
<td>2E-14</td>
<td>1E-15</td>
<td>2E-15</td>
<td>6 E-13</td>
<td>Day</td>
<td>3.33</td>
</tr>
<tr>
<td>Radium 226</td>
<td>0.3</td>
<td>0.1</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-13</td>
<td>Week</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Uranium</td>
<td>0.4</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-14</td>
<td>Year</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sampled 1/4/2012-4/4/2012 (2012 1st Qtr)**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result µCi/ml</th>
<th>Precision ± µCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>81.9</td>
<td>6.3</td>
<td>1E-14</td>
<td>1E-15</td>
<td>2E-15</td>
<td>6 E-13</td>
<td>Day</td>
<td>1.67</td>
</tr>
<tr>
<td>Radium 226</td>
<td>0.6</td>
<td>0.1</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-13</td>
<td>Week</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Thorium 230</td>
<td>0.2</td>
<td>0.2</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>3 E-14</td>
<td>Year</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Uranium</td>
<td>3.5</td>
<td>6E-16</td>
<td>1E-16</td>
<td>9 E-14</td>
<td>Year</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2

ND - Not Detected at the Reporting Limit
### Air Filter Summary Report

**Client:** Cameco Resources, Crow Butte Operation  
**Client Sample ID:** AM-6

#### Lab ID: S1207115-006  
**Sampled:** 4/18/2012-6/29/2012 (2012 2nd Qtr)  
**Sampled:** 4/18/2012-6/29/2012 (2012 2nd Qtr)  
**Sample Air Volume:** 6169500 Liters

<table>
<thead>
<tr>
<th>Analyte</th>
<th>pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>pCi/ml</th>
<th>Precision ± pCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>99.4</td>
<td>6.2</td>
<td>2E-14</td>
<td>1E-15</td>
<td>6E-13</td>
<td>6 E-13</td>
<td>Day</td>
<td>3.33</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9E-13</td>
<td>Week</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Uranium</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-14</td>
<td>Year</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Lab ID: S1204106-006  
**Sampled:** 1/4/2012-4/4/2012 (2012 1st Qtr)  
**Sample Air Volume:** 5784703.1 Liters

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result pCi/ml</th>
<th>Precision ± pCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>93.4</td>
<td>6.6</td>
<td>2E-14</td>
<td>1E-15</td>
<td>6E-13</td>
<td>6 E-13</td>
<td>Day</td>
<td>3.33</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9 E-13</td>
<td>Week</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorium 230</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>3 E-14</td>
<td>Year</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uranium</td>
<td>2.0</td>
<td>3E-16</td>
<td>1E-16</td>
<td>9 E-14</td>
<td>Year</td>
<td>0.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2

ND - Not Detected at the Reporting Limit
Air Filter Summary Report

Client: Cameco Resources, Crow Butte Operation
Client Sample ID: AM-8

### Lab ID: S1207115-007
**Sampled 4/18/2012-6/29/2012 (2012 2nd Qtr)**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result μCi/ml</th>
<th>Precision ± μCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>87.5</td>
<td>5.5</td>
<td>1E-14</td>
<td>9E-16</td>
<td>2E-15</td>
<td>6.10 × 10^-13</td>
<td>Day</td>
<td>1.67</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9E-13</td>
<td>9.00 × 10^-13</td>
<td>Week</td>
<td>0.00</td>
</tr>
<tr>
<td>Uranium</td>
<td>0.3</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9E-14</td>
<td>Year</td>
<td>9.00 × 10^-13</td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Lab ID: S1204106-007
**Sampled 1/4/2012-4/4/2012 (2012 1st Qtr)**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result pCi/filter</th>
<th>Precision ± pCi/filter</th>
<th>Result μCi/ml</th>
<th>Precision ± μCi/ml</th>
<th>RL</th>
<th>10 CFR Pt 20 Effluent Limit</th>
<th>Effluent Class</th>
<th>% Effluent Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 210</td>
<td>86.5</td>
<td>6.7</td>
<td>2E-14</td>
<td>1E-15</td>
<td>2E-15</td>
<td>6.10 × 10^-13</td>
<td>Day</td>
<td>3.33</td>
</tr>
<tr>
<td>Radium 226</td>
<td>&lt;0.3</td>
<td>&lt;1E-16</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>9E-13</td>
<td>9.00 × 10^-13</td>
<td>Week</td>
<td>0.00</td>
</tr>
<tr>
<td>Thorium 230</td>
<td>0.3</td>
<td>0.2</td>
<td>&lt;1E-16</td>
<td>1E-16</td>
<td>3E-14</td>
<td>3.00 × 10^-13</td>
<td>Year</td>
<td>0.00</td>
</tr>
<tr>
<td>Uranium</td>
<td>3.5</td>
<td>6E-16</td>
<td>1E-16</td>
<td>9E-14</td>
<td>Year</td>
<td>9.00 × 10^-13</td>
<td></td>
<td>0.67</td>
</tr>
</tbody>
</table>

Effluent Limits are from 10 CFR Part 20 Appendix B Table 2
ND - Not Detected at the Reporting Limit
Appendix G

Environmental TLD Monitoring Results

First and Second Quarter, 2012
**ADDRESS**

CROW BUTTE RESOURCES
ATTN: RHONDA GRANTHAM
PO BOX 169
CRAWFORD, NE 69339

**FOR EXPOSURE PERIOD**

01/01/2012

**NET CUMULATIVE TOTALS (MILLIREMS)**

<table>
<thead>
<tr>
<th>LOCATION ID</th>
<th>IDENTIFIER (CLIENT SUPPLIED)</th>
<th>NOTE EXPOSURE OF CODE</th>
<th>DOSIMETER (MILLIREMS AMBIENT DOSE EQUIVALENT)</th>
<th>CALENDAR YEAR TO PERMANENT QUARTER</th>
<th>ADJUSTMENTS NUMBER OF DOSIMETERS REPORTED</th>
<th>INCEPTION DATE OF PERM. TOTAL</th>
</tr>
</thead>
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**Q.C. Release**

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**ONLY PAGE**
### Environmental Dosimetry Report

#### Account: 306192  Subaccount: 1405938  Series: X9

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