From:

Michelle A. Moreno

To:

sarah@uraniumwatch.org

Subject:

RE: Transport of Water Out of State from Canyon Mine

Date:

Friday, May 12, 2017 9:59:00 AM

Attachments:

image003.png

Hello Ms. Fields,

I am unsure of what your questions are. If you are looking for information regarding a particular project, please complete a public records request form: http://www.azwater.gov/azdwr/eforms/Forms/Request/DWR_Request.aspx

Thank you,

Michelle

Michelle Moreno Public Information Officer Arizona Department of Water Resources Phone: 602.771.8530 | Cell: 480.251.7621

Email: mamoreno@azwater.gov

Twitter: @azwater



From: sarah@uraniumwatch.org [mailto:sarah@uraniumwatch.org]

Sent: Friday, May 12, 2017 9:44 AM

To: Michelle A. Moreno <mamoreno@azwater.gov>

Subject: Transport of Water Out of State from Canyon Mine

Dear Ms. Moreno,

I would appreciate a update or schedule for a response to my concerns that Energy Fuels Resources Inc., the owner of the Canyon Uranium Mine on the South Rim of the Grand Canyon does not have DWR authorization to transport water from Arizona to Utah.

Sincerely,

Sarah Fields Program Director Uranium Watch PO Box 344 Moab, Utah 84532 435-260-8384 Hi, Doug,

Attached is a complaint we received Monday (5/15) from Uranium Watch regarding the trucking of water from Canyon Mine to Utah that you describe below.

The Arizona Daily Sun article referenced in the complaint states:

The Forest Service and the Arizona Department of Environmental Quality, however, have approved the company's strategies for draining its holding ponds and said they have implemented restrictions to ensure water from the mine is not being sprayed onto the national forest.

I called ADEQ to get more information and to attempt to determine whether the water hauling was on-going. ADEQ is not certain that the hauling has stopped, though they believe it has. They did provide a contact person at the mine: Mark Chalmers – 303-389-4155.

I would suggest a quick meeting for the four of us to coordinate where to go from here. Please let me know if that sounds OK.

Thanks, Jeff

:

Arizona Department of Water Resources Complaint

Complaint ID: 051517Fields

Date: 5/15/2017 3:38:12 PM

Complaint Filed by

First Name: Sarah

Last Name: Fields

Address: PO Box 344

City:

Moab

State:

UT

Zip: 84532

eMail:

sarah@uraniumwatch.org

Confidentiality Request: No

Complaint:

- 1. Violator: Energy Fuels Resources (USA) Inc. (or subsidiary). 225 Union Blvd., Suite 600, Lakewood, Colorado 80228. Phone: 303-974-2140. Fax: 303-974-2141.
- 2. Violation: Violation of Arizona Statute 45-292. Approval required to transport water out of state; application; fee; criteria; hearing. Also violation of 45-293.

Since at least December 2016, Energy Fuels has transported mine water from the Canyon Uranium Mine (Sec. 20, T 29 N, R 3 E), Kaibab National Forest, Coconino County, Arizona, to the White Mesa Uranium Mill, San Juan County, Utah, for use at the Mill. The Canyon Mine and White Mesa Mill are both owned by Energy Fuels.

Over 100 tanker trucks of mine water have been transported to the Mill. The Utah Div. of Waste Management and Radiation Control, which regulates the Mill, does not seem to know what is being done with the water. It is either directly disposed of in tailings impoundments and/or used in the mill processing circuit. Direct disposal of the mine water into tailings impoundments would be a violation of Utah and federal regulations that apply to the mill.

- 3. As far as I can tell from ADWR website, the only current water right used for the Canyon Mine is 55-515772, for their culinary, sanitary, and mine related water use. The water is being withdrawn from the mine shaft. The USFS is in the process of drilling a monitoring well at the mine site. In the future, Energy Fuels must drill another shaft that will be used for ventilation and an emergency escape. It is unclear to me whether the Energy Fuels must have a drilling permit to drill the main shaft and ventilation shaft.
- 4. Duration of violation: From late 2016 to 2017. I do not know if mine water is still being trucked to the White Mesa Mill.
- 5. I have not attempted to contact the violator. The USFS is aware of the transport of excess mine water to Utah. They have been inspecting the mine. The ADEQ is also

1 of 2 Adwr Id: 8780

Arizona Department of Water Resources Complaint

aware of the situation.

6. Related articles and information:

http://www.sierraclub.org/arizona/blog/2017/03/uranium-mine-near-grand-canyon-fillin g-contaminated-water

http://azdailysun.com/news/local/uranium-mine-deals-with-excess-water/article_1f35d 10b-3802-5083-a5bd-1c3f255363fc.html

https://www.grandcanyonnews.com/news/2017/mar/28/activists-concerned-canyon-mines-disposal-excess-w/

https://www.grandcanyonnews.com/news/2017/apr/04/canyon-mine-completes-drillin g-1475-foot-mine-shaf/

USFS Canyon Mine Website: https://www.fs.usda.gov/detail/kaibab/home/?cid=fsm91_050263

Adwr Id: 8780 2 of 2

From: Schuppert, Liz M -FS [mailto:lschuppert@fs.fed.us]

Sent: Friday, May 12, 2017 10:34 AM

To: MacDonald, Christopher D -FS <cdmacdonald@fs.fed.us; Doug W. Dunham

<dwdunham@azwater.gov>

Subject: RE: Transferring of mine water from AZ to UT

Energy Fuels told me that they do use this water in their processing operations at the Mill.

Liz Schuppert

Kaibab National Forest Public Services Staff Officer (T) 928-635-8367, (F) 928-635-8208

From: MacDonald, Christopher D -FS Sent: Friday, May 12, 2017 7:53 AM

To: Doug W. Dunham <<u>dwdunham@azwater.gov</u>>
Cc: Schuppert, Liz M -FS <<u>lschuppert@fs.fed.us</u>>
Subject: RE: Transferring of mine water from AZ to UT

Hi Liz,

I'm afraid that I'm not familiar enough with Energy Fuels' operation at the Blanding Mill in UT to answer Doug's question. Would you mind asking them what happens to the mine water after it arrives at their facility in Blanding? Is it then used as process water, or is it treated and disposed of? Do they dispose of it through evaporation or into disposal wells? Any information they can provide would be very helpful for ADWR to make a determination of how this fits in their regulatory framework and whether Director's approval for transport of the water out of state is warranted.

Thanks for your help with this!

From: Doug W. Dunham [mailto:dwdunham@azwater.gov]

Sent: Thursday, May 11, 2017 4:12 PM

To: MacDonald, Christopher D -FS < cdmacdonald@fs.fed.us>

Cc: Schuppert, Liz M -FS < lschuppert@fs.fed.us>

Subject: RE: Transferring of mine water from AZ to UT

Kit-

Thank you for the information. One additional question I can think of as we begin to review this situation is: do you know if the water, once it arrives at the facility in Utah, is used in the processing operations at the mill or is it strictly remediated (treated) for later disposal. If the latter, what is the ultimate disposal of the water?

Thanks again and we will look into this and get back with you shortly.

Douglas W. Dunham

Legislative Liaison, Ombudsman, Special Assistant to the Director Arizona Department of Water Resources 1110 W. Washington St. Suite 310 Phoenix, AZ 85007

Phone: (602) 364-2650 Fax: (602) 771-8689



From: MacDonald, Christopher D -FS [mailto:cdmacdonald@fs.fed.us]

Sent: Thursday, May 11, 2017 3:27 PM

To: Doug W. Dunham <<u>dwdunham@azwater.gov</u>>
Cc: Schuppert, Liz M -FS <<u>lschuppert@fs.fed.us</u>>
Subject: Transferring of mine water from AZ to UT

Mr. Dunham,

Thank you very much for taking time to discuss the inquiry we received from Uranium Watch regarding trucking mine water from the Canyon Mine (Uranium Mine on the Tusayan Ranger District of the Kaibab National Forest) to the Energy Fuels processing facility (i.e., mill) in Blanding, UT. I'll do my best to provide a description of what has occurred and could occur in the future:

As Energy Fuels was sinking the mine shaft, they intersected a portion of the Coconino (C) aquifer and were getting quite a bit of seepage into the mine shaft. In the process of dewatering the mine, Energy Fuels was discharging the mine water into a detention basin at the mine, where it was being evaporated. However, due to the cool, wet winter we had this year, evaporation rates were insufficient to keep up with the mine dewatering. The detention basin was therefore nearly capacity in February. Rather than risk an unauthorized discharge, or even worse, a breach of the detention basin, Energy Fuels decided to pump water from the detention basin into tanker trucks and haul the mine wastewater to their facility in Blanding, UT where they can dispose of the water in a legal and environmentally sound manner.

Since the mine shaft is offset from the ore body, the water they have hauled from the mine has not contacted the ore body, but some of the water has been used to cool drills used in the mining and exploration process. This water therefore does contain drill cuttings and potentially low levels of heavy metals, arsenic, and possibly some background dissolved uranium.

The question from Uranium Watch regarding Energy Fuel's practice of hauling the mine water to UT is as follows:

The ADWR at ARS Section 45-292 requires authorization of the ADWR Director's approval to transport water out of state. Has the USFS determined whether this activity associated with the operation of the Canyon Mine has been approved by the ADWR?

My understanding is ARS Sec. 45-292 would generally apply to water that is being transported out of state for a beneficial use and not disposal of dissolved contaminants, but I would appreciate any clarification you or your legal team can provide.

Thanks again for your time, and I look forward to hearing from you.

Incidentally, I've cc'd a co-worker in this message – Liz Schuppert. She coordinates the mine-related activities between the Kaibab National Forest and Energy Fuels. Liz, is there anything you would like to add, or that I've missed in this correspondence? If so, please provide any clarification or additional information you might have.



Kit MacDonald, CF Soils and Watershed Program Manager Forest Service Coconino and Kaibab National Forests p: 928-527-3451 c: 928-637-5652 f: 928-527-3620 cdmacdonald@fs.fed.us

1824 S Thompson St, Flagstaff, AZ 86001 www.fs.fed.us

Caring for the land and serving people

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From: "Schuppert. Liz M -FS" < lschuppertails.fed.us>

Date: May 17, 2017 at 6:33:13 AM MST

To: "dwdunham a azwater.gov" <dwdunham a azwater.gov>
Ce: "MacDonald, Christopher D -FS" <cdmacdonald a fs.fed.us>
Subject: Fwd: Transferring of mine water from AZ to UT

Douglas, I sent your question to Energy Fuels Resources and wanted to share their response.

Sent from my iPhone

Begin forwarded message:

From: Mark Chalmers < mchalmers a energy fuels.com>

Date: May 16, 2017 at 5:47:29 PM MDT

To: "Schuppert. Liz M -FS" < <u>Ischuppert a fs.fed.us</u>>. Curtis Moore

<<u>CMoore \(\tilde{a}\) energy fuels.com</u>>

Ce: David Frydenlund < DFrydenlund a energyfuels.com >, Donn

Pillmore < DPillmore a energy fuels.com>

Subject: RE: Transferring of mine water from AZ to UT

Hi Liz,

In response to Douglas Dunham's question, we are required by our aquifer protection permit (APP) issued by the Arizona Department of Environmental Quality (ADEQ) to collect impacted mine shaft water at the Canyon Mine and pump the water to the lined impoundment on the surface of the mine. Because the water is impacted, it is no longer suitable for beneficial use and must be evaporated or otherwise similarly managed.

As you are aware, the lined impoundment is subject to a 2-foot freeboard requirement to prevent potential overtopping. In order to meet these environmental compliance requirements and to ensure that the mine operates in conformance with the approved Mine Plan of Operations and related environmental review documents, we have periodically shipped the impacted water from the impoundment to the White Mesa Mill for ultimate management through the permitted processes at the Mill. The Mill is authorized to receive and manage such sources of impacted water or other environmental media. In other words, the impacted water has been shipped to the Mill for proper material management for environmental compliance purposes and not for beneficial use.

Importantly, the shipment of impacted water to the Mill for environmental compliance purposes is not the type of water transfer scenario envisioned under Ariz. Rev. Stat. (ARS) 45-292. However, if ADWR believes after its review that approval is required to ship the water to the Mill we will coordinate with ADWR to seek such approval.

Let me know if you have any questions.

Regards,



Energy Fuels Resources (USA) Inc.

Mark Chalmers

Chief Operating Officer

t: 303.389.4155 | c: 303.801.7026 225 Union Blvd., Suite 600 Lakewood, CO 80228

http://www.energyfuels.com

This e-mail is intended for the exclusive use of person(s) mentioned as the recipient(s). This message and any attached files with it are confidential and may contain privileged or proprietary information. If you are not the intended recipient(s) please delete this message and notify the sender. You may not use, distribute print or copy this message if you are not the intended recipient(s).

From: Schuppert, Liz M -FS [mailto:lschuppert@fs.fed.us]

Sent: Friday, May 12, 2017 8:45 AM

To: Curtis Moore < CMoore@energyfuels.com>

Cc: Mark Chalmers <mchalmers@energyfuels.com>; David Frydenlund

<DFrydenlund@energyfuels.com>; Donn Pillmore

<DPillmore@energyfuels.com>

Subject: FW: Transferring of mine water from AZ to UT

We've had a question from Uranium Watch as to shipping the pond water out of state, and ADWRs requirements (i.e., permits). I knew Kit had

contacts at ADWR, so I asked if he could just ask them about this. It does not appear that ADWR deals with the type of water in a mine evaporation pond but they said they would get some advice from their legal team on it.

I thought you would be able to give me the answer to Douglas' question below.

Liz Schappert

Kaibab National Forest Public Services Staff Officer (T) 928-635-8367, (F) 928-635-8208

From: Doug W. Dunham [mailto:dwdunham@azwater.gov]

Sent: Thursday, May 11, 2017 4:12 PM

To: MacDonald, Christopher D -FS < cdmacdonald@fs.fed.us>

Cc: Schuppert, Liz M -FS < lschuppert@fs.fed.us>

Subject: RE: Transferring of mine water from AZ to UT

Kit-

Thank you for the information. One additional question I can think of as we begin to review this situation is: do you know if the water, once it arrives at the facility in Utah, is used in the processing operations at the mill or is it strictly remediated (treated) for later disposal. If the latter, what is the ultimate disposal of the water?

Thanks again and we will look into this and get back with you shortly.

Douglas W. Dunham

Legislative Liaison, Ombudsman, Special Assistant to the Director Arizona Department of Water Resources 1110 W. Washington St. Suite 310 Phoenix, AZ 85007

Phone: (602) 364-2650 Fax: (602) 771-8689



From: MacDonald, Christopher D -FS [mailto:cdmacdonald@fs.fed.us]

Sent: Thursday, May 11, 2017 3:27 PM

To: Doug W. Dunham <dwdunham@azwater.gov>
Cc: Schuppert, Liz M -FS <<u>lschuppert@fs.fed.us</u>>
Subject: Transferring of mine water from AZ to UT

Mr. Dunham,

Thank you very much for taking time to discuss the inquiry we received from Uranium Watch regarding trucking mine water from the Canyon Mine (Uranium Mine on the Tusayan Ranger District of the Kaibab National Forest) to the Energy Fuels processing facility (i.e., mill) in Blanding, UT. I'll do my best to provide a description of what has occurred and could occur in the future:

As Energy Fuels was sinking the mine shaft, they intersected a portion of the Coconino (C) aquifer and were getting quite a bit of seepage into the mine shaft. In the process of dewatering the mine, Energy Fuels was discharging the mine water into a detention basin at the mine, where it was being evaporated. However, due to the cool, wet winter we had this year, evaporation rates were insufficient to keep up with the mine dewatering. The detention basin was therefore nearly capacity in February. Rather than risk an unauthorized discharge, or even worse, a breach of the detention basin, Energy Fuels decided to pump water from the detention basin into tanker trucks and haul the mine wastewater to their facility in Blanding, UT where they can dispose of the water in a legal and environmentally sound manner.

Since the mine shaft is offset from the ore body, the water they have hauled from the mine has not contacted the ore body, but some of the water has been used to cool drills used in the mining and exploration process. This water therefore does contain drill cuttings and potentially low levels of heavy metals, arsenic, and possibly some background dissolved uranium.

The question from Uranium Watch regarding Energy Fuel's practice of hauling the mine water to UT is as follows:

The ADWR at ARS Section 45-292 requires authorization of the ADWR Director's approval to transport water out of state. Has the USFS determined whether this activity associated with the operation of the Canyon Mine has been approved by the ADWR?

My understanding is ARS Sec. 45-292 would generally apply to water that is being transported out of state for a beneficial use and not disposal of dissolved contaminants, but I would appreciate any clarification you or your legal team can provide.

Thanks again for your time, and I look forward to hearing from you.

Incidentally, I've cc'd a co-worker in this message — Liz Schuppert. She coordinates the mine-related activities between the Kaibab National Forest and Energy Fuels. Liz, is there anything you would like to add, or that I've missed in this correspondence? If so, please provide any clarification or additional information you might have.



Kit MacDonald, CF Soils and Watershed Program Manager Forest Service Coconino and Kaibab National Forests p: 928-527-3451 c: 928-637-5652 f: 928-527-3620 cdmacdonald@fs.fed.us 1824 S Thompson St,

Flagstaff, AZ 86001

www.fs.fed.us

Caring for the land and serving people

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From:

Michelle A. Moreno sarah@uraniumwatch.org

To: Cc:

Jeff Trembly

Subject:

Arizona Department of Water Resources Update

Date:

Thursday, May 18, 2017 12:04:00 PM

Attachments:

Receipt.pdf image003.png

Hello Sarah,

I am following up to let you know that we received the attached information, plus a photo and are currently looking into the matter.

We will follow up with you once our review is complete.

Thank you,

Michelle

Michelle Moreno Public Information Officer

Arizona Department of Water Resources Phone: 602.771.8530 | Cell: 480.251.7621

Email: mamoreno@azwater.gov

Twitter: @azwater



Arizona Department of Water Resources Complaint

Complaint ID: 051517Fields Date: 5/15/2017 3:38:12 PM

Complaint Filed by

First Name: Sarah Last Name: Fields

Address: PO Box 344

City: Moab

State: UT Zip: 84532 eMail: sarah@uraniumwatch.org

Confidentiality Request: No

Complaint:

1. Violator: Energy Fuels Resources (USA) Inc. (or subsidiary). 225 Union Blvd., Suite 600, Lakewood, Colorado 80228. Phone: 303-974-2140. Fax: 303-974-2141.

2. Violation: Violation of Arizona Statute 45-292. Approval required to transport water out of state; application; fee; criteria; hearing. Also violation of 45-293.

Since at least December 2016, Energy Fuels has transported mine water from the Canyon Uranium Mine (Sec. 20, T 29 N, R 3 E), Kaibab National Forest, Coconino County, Arizona, to the White Mesa Uranium Mill, San Juan County, Utah, for use at the Mill. The Canyon Mine and White Mesa Mill are both owned by Energy Fuels.

Over 100 tanker trucks of mine water have been transported to the Mill. The Utah Div. of Waste Management and Radiation Control, which regulates the Mill, does not seem to know what is being done with the water. It is either directly disposed of in tailings impoundments and/or used in the mill processing circuit. Direct disposal of the mine water into tailings impoundments would be a violation of Utah and federal regulations that apply to the mill.

- 3. As far as I can tell from ADWR website, the only current water right used for the Canyon Mine is 55-515772, for their culinary, sanitary, and mine related water use. The water is being withdrawn from the mine shaft. The USFS is in the process of drilling a monitoring well at the mine site. In the future, Energy Fuels must drill another shaft that will be used for ventilation and an emergency escape. It is unclear to me whether the Energy Fuels must have a drilling permit to drill the main shaft and ventilation shaft.
- 4. Duration of violation: From late 2016 to 2017. I do not know if mine water is still being trucked to the White Mesa Mill.
- 5. I have not attempted to contact the violator. The USFS is aware of the transport of excess mine water to Utah. They have been inspecting the mine. The ADEQ is also

Adwr Id: 8780 1 of 2

Arizona Department of Water Resources Complaint

aware of the situation.

6. Related articles and information:

http://www.sierraclub.org/arizona/blog/2017/03/uranium-mine-near-grand-canyon-filling-contaminated-water

http://azdailysun.com/news/local/uranium-mine-deals-with-excess-water/article_1f35d 10b-3802-5083-a5bd-1c3f255363fc.html

https://www.grandcanyonnews.com/news/2017/mar/28/activists-concerned-canyon-mines-disposal-excess-w/

https://www.grandcanyonnews.com/news/2017/apr/04/canyon-mine-completes-drillin g-1475-foot-mine-shaf/

USFS Canyon Mine Website: https://www.fs.usda.gov/detail/kaibab/home/?cid=fsm91 050263

Adwr Id: 8780 2 of 2

From:

Doug W. Dunham

To:

Amanda E. Stone

Subject:

RE: background information; APP(?) permit: Canyon Mine

Date:

Tuesday, May 30, 2017 2:45:00 PM

THX!!

Douglas W. Dunham

Legislative Liaison, Ombudsman, Special Assistant to the Director Arizona Department of Water Resources 1110 W. Washington St. Suite 310 Phoenix, AZ 85007

Phone: (602) 364-2650 Fax: (602) 771-8689



PROTECTING ARIZONA'S WATER SUPPLIES for ITS NEXT CENTURY

From: Amanda E. Stone [mailto:Stone.Amanda@azdeq.gov]

Sent: Tuesday, May 30, 2017 2:42 PM

To: Doug W. Dunham < dwdunham@azwater.gov>

Subject: RE: background information; APP(?) permit: Canyon Mine

Absolutely! I'll get right on this.

From: Doug W. Dunham [mailto:dwdunham@azwater.gov]

Sent: Tuesday, May 30, 2017 1:50 PM

To: Amanda E. Stone < Stone. Amanda@azdeg.gov>

Subject: background information; APP(?) permit: Canyon Mine

Amanda-

We had a complaint filed with us that the mine operators of the Canyon Mine uranium operation have been transporting water out of state to treatment facilities in Blanding, Utah. There are limits on transporting groundwater out of the state; that was the nature of the complaint. We are exploring the situation to see what, if any permitting may be required from us in the future.

As I understand it, the mine intercepts groundwater in it's access tunnels/shafts. This water is required to be collected and in normally disposed of on site at an evaporation pond under an APP issued by ADEQ. During the wet months last winter the evaporation process did not keep up with the rate of water collected at the mine and had to be trucked into Utah for disposal at a related mill facility. We understand that this activity has now stopped, and the evaporation process is keeping up with the volume of water produced.

We are trying to get an understanding of your permit requirements as it relates to this site. Could you provide me with a summary of the permit requirements? (or the actual permit would work as well)

Thanking you in advance -

Douglas W. Dunham

Legislative Liaison, Ombudsman, Special Assistant to the Director Arizona Department of Water Resources 1110 W. Washington St. Suite 310 Phoenix, AZ 85007 Phone: (602) 364-2650

Fax: (602) 771-8689



PROTECTING ARIZONA'S WATER SUPPLIES for ITS NEXT CENTURY From: Kenneth C. Slowinski
To: Decker, D. Lee
Cc: Sharon Scantlebury
Subject: RE: Canyon Mine

Date: Tuesday, June 06, 2017 2:50:21 PM

Lee,

We have met internally with ADWR's director on this matter, and he would like ADWR staff to meet with representatives of Energy Fuels so that we can get more information on the dewatering activities and water disposal. I will ask my administrative assistant Sharon to contact you to schedule the meeting. Thanks for your cooperation.

Ken Slowinski

Chief Counsel
Arizona Department of Water Resources
602-771-8472



From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Tuesday, May 23, 2017 12:51 PM

To: Kenneth C. Slowinski < kcslowinski@azwater.gov>

Subject: Canyon Mine

Ken,

Thanks for taking time this morning to discuss the Canyon mine and its management of impacted mine water generated at the mine for environmental compliance purposes. Attached is a copy of the information that Energy Fuels sent to the US Forest Service (USFS) last week in response to the questions being raised regarding the application of A.R.S. 45-292 to the ultimate disposal of the impacted water at the White Mesa Mill near Blanding, Utah.

In addition to the attached email, below is some additional information that supports why A.R.S. 45-292 is not applicable to this situation:

As we discussed, in order to meet environmental compliance obligations Energy Fuels needed
to send some of impacted water from the Canyon Mine dewatering over the past few months
to the White Mesa Mill for disposal purposes, because, due to high initial inflows and
unusually wet winter conditions, it was not been possible to evaporate all of the impacted

- water on site during these past winter months.
- 2. The Mill does not need this impacted water, as the Mill has sufficient existing water for all of its purposes. The impacted water was sent to the Mill for disposal purposes and not for beneficial use.
- 3. The cost of transporting the impacted water to the Mill (approximately \$0.25 per gallon) far exceeds any potential use value of the water, which is further evidence that the impacted water is not being beneficially used at the Mill.
- 4. In order to dispose of the water at the Mill, it is necessary to introduce it into the front end of the Mill, for ultimate disposal in the Mill tailings after it runs through the Mill process.
- 5. Due to the ability to evaporate all water on site at the Canyon mine as the summer months are approaching, no impacted water is being transported to the Mill at this time. To date approximately 1.3 million gallons of impacted water has been transported to the Mill, which amounts to about 1/3 of the 10.2 acre-feet operational capacity of the lined impoundment at the mine.

Let me know if you would like any additional information or if ADWR would like to meet with Energy Fuels representatives for further discussions.

Sincerely, Lee Decker

2

2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225 602-530-8000 | www.qknet.com D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135

This message and any of the attached documents contain information from the law firm of Gallagher & Kennedy, P.A. that may be confidential and/or privileged. If you are not the intended recipient, you may not read, copy, distribute, or use this information, and no privilege has been waived by your inadvertent receipt. If you have received this transmission in error, please notify the sender by reply e-mail and then delete this message. Thank you.

From: Luke Peterson [mailto:Peterson.Luke@azdeq.gov]

Sent: Wednesday, June 07, 2017 8:54 AM

To: Doug W. Dunham < <u>dwdunham@azwater.gov</u>> **Subject:** RE: Canyon Mine background information

Doug,

The water going to the impoundment is collected from a sump at the bottom of the mine shaft. It is a combination of groundwater that is flowing in from the surrounding area, and water used in the drilling and shaft sinking process. This does not include the water from the perched aquifer that is captured and kept separate from sump water.

Luke Peterson

Manager, APP Unit 1

Ground Water Section

Arizona Department of Environmental Quality
1110 W. Washington Street

Phoenix, Arizona 85007

(602) 771-2322 (phone)

From: Doug W. Dunham [mailto:dwdunham@azwater.gov]

Sent: Tuesday, June 06, 2017 2:04 PM

To: Luke Peterson < Peterson.Luke@azdeq.gov > **Subject:** RE: Canyon Mine background information

Thanks Luke-

What is the source of the impounded water?

Douglas W. Dunham

Legislative Liaison, Ombudsman, Special Assistant to the Director Arizona Department of Water Resources 1110 W. Washington St. Suite 310 Phoenix, AZ 85007 Phone: (602) 364-2650

Phone: (602) 364-2650 Fax: (602) 771-8689



From: Luke Peterson [mailto:Peterson.Luke@azdeg.gov]

Sent: Tuesday, June 06, 2017 12:51 PM

To: Doug W. Dunham < dwdunham@azwater.gov Subject: Canyon Mine background information

Doug,

Glad I took notes as my memory was a little off. The water from the perched aquifer was kept separated from the discharge (considered groundwater) and sent to a local private ranch. The water that was shipped to their White Mesa Mill operation in Utah did come from the impoundment operating under the Type 3.04 General Permit. Hope this answers your questions. If you need anything else, please don't hesitate to call or send me an email.

Thanks.

Luke Peterson

Manager, APP Unit 1

Ground Water Section

Arizona Department of Environmental Quality
1110 W. Washington Street

Phoenix, Arizona 85007

(602) 771-2322 (phone)

From:

Kenneth C. Slowinski Sharon Scantlebury

To: Subject:

Accepted: Canyon Mine

Start: End:

Monday, June 19, 2017 3:00:00 PM Monday, June 19, 2017 4:00:00 PM

Location:

ADWR, 1110 W. Washington, Suite 310, Gila River Conf. Room, Phoenix, AZ

From: Jeff Trembly
To: Sharon Scantlebury
Subject: Accepted: Canyon Mine

 Start:
 Monday, June 19, 2017 3:00:00 PM

 End:
 Monday, June 19, 2017 4:00:00 PM

Location: ADWR, 1110 W. Washington, Suite 310, Gila River Conf. Room, Phoenix, AZ

From:

Doug W. Dunham

To: Subject: Sharon Scantlebury
Accepted: Canyon Mine

Start:

Monday, June 19, 2017 3:00:00 PM

End:

Monday, June 19, 2017 4:00:00 PM

Location:

ADWR, 1110 W. Washington, Suite 310, Gila River Conf. Room, Phoenix, AZ

From: Janet L. Miller To: Subject:

Sharon Scantlebury Accepted: Canyon Mine

Start: End:

Monday, June 19, 2017 3:00:00 PM Monday, June 19, 2017 4:00:00 PM

Location:

ADWR, 1110 W. Washington, Suite 310, Gila River Conf. Room, Phoenix, AZ

From: To: Kenneth C. Slowinski Decker, D. Lee

Subject:

RE: Canyon Mine

Date:

Monday, June 26, 2017 5:19:00 PM

Lee,

Thanks for your email. We will be discussing this internally with the Director on Thursday.

From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Monday, June 26, 2017 3:36 PM

To: Kenneth C. Slowinski < kcslowinski@azwater.gov>

Subject: RE: Canyon Mine

Ken,

Thank you for meeting with me and Dave Frydenlund and Mark Chalmers of Energy Fuels last week to discuss the past temporary shipment of impacted mine wastewater from the Canyon Mine to the Energy Fuels' White Mesa Mill. As Mark Chalmers mentioned during the meeting, Energy Fuels has no intention of placing ADWR in a difficult position and will continue to work with you going forward.

As we discussed, the impacted mine wastewater generated at the Canyon Mine is pumped from the bottom of the mine shaft and placed in a lined impoundment for disposal by evaporation pursuant to the requirements of the Canyon Mine's Type 3.04 general aquifer protection permit (APP) (copy attached) from the Arizona Department of Environmental Quality (ADEQ). The APP imposes freeboard requirements (see A.A.C. R18-9-D304(D)(1); A.A.C. R18-9-D301(C)(1)) on the lined impoundment to ensure that the impacted wastewater does not overtop the impoundment.

Due to unexpected initial inflows, unusually wet winter/spring conditions, and reduced evaporation potential, the impoundment was earlier this year at risk of overtopping and exceeding the freeboard requirements in the permit. In coordination with ADEQ and the US Forest Service (USFS), Energy Fuels proactively implemented emergency response actions including enhanced evaporation through the use of land sharks. Energy Fuels also attempted to reduce the amount of inflow into the lined impoundment by segregating clean inflow from higher up in the mine shaft. While helpful, these emergency efforts were not sufficient to meet the APP freeboard requirements and the company was then forced to ship some of the impacted wastewater to its White Mesa Mill for disposal to ensure compliance with environmental obligations (as well as approved variance deadlines). Importantly, the White Mesa Mill is authorized to receive and manage not only conventional uranium ore but also other similar types of uranium impacted waste streams.

As we discussed, the shipment of the impacted wastewater to the White Mesa Mill was very costly and Energy Fuels is actively evaluating and implementing several alternative management approaches to avoid such shipments in the future.

However, as we emphasized in prior correspondence and during our meeting from last week, we believe the shipment of the impacted wastewater to the White Mesa Mill did not trigger the

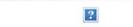
approval requirement in A.R.S. 45-292. First, Energy Fuels did not ship "water" as contemplated under the statute. What was shipped was in effect a waste material that contained water, for proper environmental management and ultimate disposal. If the Energy Fuels' shipment of impacted wastewater is deemed to be subject to such approval, this would require shipments across state boundaries of any other wastes containing any amount of water to seek approval from ADWR, which clearly is beyond the intent of the approval requirement in A.R.S. 45-292. While management and transportation of impacted mine wastewater is subject to regulation by federal and state environmental and land management agencies, it should not be subject to regulation by ADWR.

Second, even assuming that the impacted mine wastewater is "water" for purposes of the approval requirement in A.R.S. 45-292, Energy Fuels clearly did not "withdraw, or divert, and transport water from this state for a reasonable and beneficial use in another state." The impacted wastewater that collects in the bottom of the Canyon Mine shaft is pumped into the lined impoundment for environmental compliance purposes pursuant to the Canyon Mine's Plan of Operations with the USFS and the Mine's APP permit with ADEQ. It is not withdrawn for reasonable and beneficial uses, rather it is withdrawn to be disposed of through evaporation. In addition, when the impacted wastewater had to be transported to the Energy Fuels' Mill for emergency environmental compliance purposes, it was not transported from the state for a reasonable and beneficial use in another state. Rather, it was transported for proper environmental management and ultimate disposal in another state.

We also respectfully disagree with the suggestion that because the wastewater was introduced at the front end of the Mill it would then be considered to have been transported for reasonable and beneficial use. If this position is followed, it would mean that other waste materials containing any amount of water and which are shipped across state boundaries for ultimate management would also require ADWR approval to the extent that the management of the waste materials resulted in any resource recovery including use of the water content in the management and disposal process. As ADWR probably recognizes, not all waste management facilities put waste immediately into disposal units. Rather, such facilities will in many instances process such materials to recover resources including water values.

Based on the above information and our discussion from last week, we believe that ADWR can respond to any concerns regarding the past shipment of mine impacted wastewater by simply stating that ADWR does not regulate shipments of impacted wastewater intended for ultimate disposal.

Sincerely,



2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225 602-530-8000 | www.gknet.com D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135 From: Kenneth C. Slowinski [mailto:kcslowinski@azwater.gov]

Sent: Tuesday, June 06, 2017 2:50 PM **To:** Decker, D. Lee < <u>DLD@gknet.com</u>>

Cc: Sharon Scantlebury < sscantlebury@azwater.gov>

Subject: RE: Canyon Mine

Lee,

We have met internally with ADWR's director on this matter, and he would like ADWR staff to meet with representatives of Energy Fuels so that we can get more information on the dewatering activities and water disposal. I will ask my administrative assistant Sharon to contact you to schedule the meeting. Thanks for your cooperation.

Ken Slowinski

Chief Counsel Arizona Department of Water Resources 602-771-8472



From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Tuesday, May 23, 2017 12:51 PM

To: Kenneth C. Slowinski < kcslowinski@azwater.gov>

Subject: Canyon Mine

Ken,

Thanks for taking time this morning to discuss the Canyon mine and its management of impacted mine water generated at the mine for environmental compliance purposes. Attached is a copy of the information that Energy Fuels sent to the US Forest Service (USFS) last week in response to the questions being raised regarding the application of A.R.S. 45-292 to the ultimate disposal of the impacted water at the White Mesa Mill near Blanding, Utah.

In addition to the attached email, below is some additional information that supports why A.R.S. 45-292 is not applicable to this situation:

1. As we discussed, in order to meet environmental compliance obligations Energy Fuels needed to send some of impacted water from the Canyon Mine dewatering over the past few months

- to the White Mesa Mill for disposal purposes, because, due to high initial inflows and unusually wet winter conditions, it was not been possible to evaporate all of the impacted water on site during these past winter months.
- The Mill does not need this impacted water, as the Mill has sufficient existing water for all of its purposes. The impacted water was sent to the Mill for disposal purposes and not for beneficial use.
- 3. The cost of transporting the impacted water to the Mill (approximately \$0.25 per gallon) far exceeds any potential use value of the water, which is further evidence that the impacted water is not being beneficially used at the Mill.
- 4. In order to dispose of the water at the Mill, it is necessary to introduce it into the front end of the Mill, for ultimate disposal in the Mill tailings after it runs through the Mill process.
- 5. Due to the ability to evaporate all water on site at the Canyon mine as the summer months are approaching, no impacted water is being transported to the Mill at this time. To date approximately 1.3 million gallons of impacted water has been transported to the Mill, which amounts to about 1/3 of the 10.2 acre-feet operational capacity of the lined impoundment at the mine.

Let me know if you would like any additional information or if ADWR would like to meet with Energy Fuels representatives for further discussions.

Sincerely, Lee Decker

?

2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225 602-530-8000 | www.gknet.com D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135

This message and any of the attached documents contain information from the law firm of Gallagher & Kennedy, P.A. that may be confidential and/or privileged. If you are not the intended recipient, you may not read, copy, distribute, or use this information, and no privilege has been waived by your inadvertent receipt. If you have received this transmission in error, please notify the sender by reply e-mail and then delete this message. Thank you.

From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Monday, June 26, 2017 3:36 PM

To: Kenneth C. Slowinski <kcslowinski@azwater.gov>

Subject: RE: Canyon Mine

Ken,

Thank you for meeting with me and Dave Frydenlund and Mark Chalmers of Energy Fuels last week to discuss the past temporary shipment of impacted mine wastewater from the Canyon Mine to the Energy Fuels' White Mesa Mill. As Mark Chalmers mentioned during the meeting, Energy Fuels has no intention of placing ADWR in a difficult position and will continue to work with you going forward.

As we discussed, the impacted mine wastewater generated at the Canyon Mine is pumped from the bottom of the mine shaft and placed in a lined impoundment for disposal by evaporation pursuant to the requirements of the Canyon Mine's Type 3.04 general aquifer protection permit (APP) (copy attached) from the Arizona Department of Environmental Quality (ADEQ). The APP imposes freeboard requirements (see A.A.C. R18-9-D304(D)(1); A.A.C. R18-9-D301(C)(1)) on the lined impoundment to ensure that the impacted wastewater does not overtop the impoundment.

Due to unexpected initial inflows, unusually wet winter/spring conditions, and reduced evaporation potential, the impoundment was earlier this year at risk of overtopping and exceeding the freeboard requirements in the permit. In coordination with ADEQ and the US Forest Service (USFS), Energy Fuels proactively implemented emergency response actions including enhanced evaporation through the use of land sharks. Energy Fuels also attempted to reduce the amount of inflow into the lined impoundment by segregating clean inflow from higher up in the mine shaft. While helpful, these emergency efforts were not sufficient to meet the APP freeboard requirements and the company was then forced to ship some of the impacted wastewater to its White Mesa Mill for disposal to ensure compliance with environmental obligations (as well as approved variance deadlines). Importantly, the White Mesa Mill is authorized to receive and manage not only conventional uranium ore but also other similar types of uranium impacted waste streams.

As we discussed, the shipment of the impacted wastewater to the White Mesa Mill was very costly and Energy Fuels is actively evaluating and implementing several alternative management approaches to avoid such shipments in the future.

However, as we emphasized in prior correspondence and during our meeting from last week, we believe the shipment of the impacted wastewater to the White Mesa Mill did not trigger the approval requirement in A.R.S. 45-292. First, Energy Fuels did not ship "water" as contemplated

under the statute. What was shipped was in effect a waste material that contained water, for proper environmental management and ultimate disposal. If the Energy Fuels' shipment of impacted wastewater is deemed to be subject to such approval, this would require shipments across state boundaries of any other wastes containing any amount of water to seek approval from ADWR, which clearly is beyond the intent of the approval requirement in A.R.S. 45-292. While management and transportation of impacted mine wastewater is subject to regulation by federal and state environmental and land management agencies, it should not be subject to regulation by ADWR.

Second, even assuming that the impacted mine wastewater is "water" for purposes of the approval requirement in A.R.S. 45-292, Energy Fuels clearly did not "withdraw, or divert, and transport water from this state for a reasonable and beneficial use in another state." The impacted wastewater that collects in the bottom of the Canyon Mine shaft is pumped into the lined impoundment for environmental compliance purposes pursuant to the Canyon Mine's Plan of Operations with the USFS and the Mine's APP permit with ADEQ. It is not withdrawn for reasonable and beneficial uses, rather it is withdrawn to be disposed of through evaporation. In addition, when the impacted wastewater had to be transported to the Energy Fuels' Mill for emergency environmental compliance purposes, it was not transported from the state for a reasonable and beneficial use in another state. Rather, it was transported for proper environmental management and ultimate disposal in another state.

We also respectfully disagree with the suggestion that because the wastewater was introduced at the front end of the Mill it would then be considered to have been transported for reasonable and beneficial use. If this position is followed, it would mean that other waste materials containing any amount of water and which are shipped across state boundaries for ultimate management would also require ADWR approval to the extent that the management of the waste materials resulted in any resource recovery including use of the water content in the management and disposal process. As ADWR probably recognizes, not all waste management facilities put waste immediately into disposal units. Rather, such facilities will in many instances process such materials to recover resources including water values.

Based on the above information and our discussion from last week, we believe that ADWR can respond to any concerns regarding the past shipment of mine impacted wastewater by simply stating that ADWR does not regulate shipments of impacted wastewater intended for ultimate disposal.

Sincerely,



2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225 602-530-8000 | www.qknet.com D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

DISCHARGE AUTHORIZATION TYPE 3.04 GENERAL AQUIFER PROTECTION PERMIT

Inventory No. 100333 LTF No.: 60849 USAS No. 030032-02

Permittee Information:

Name:

Energy Fuels Resources (USA) Inc.

Address:

225 Union Blvd., Suite 600

Lakewood, CO 80228

Permitted Facility Information(if different from above):

Name: Canyon Mine Non-Stormwater Impoundment

Address: Tusayan, AZ

Latitude:

35° 52' 59.39" North

Longitude:

112° 05' 46.23" West

Determination is based on the Notice of Intent (NOI) dated 6/10/2009 and Renewal Form dated 7/16/2014.

Discharge Authorization. Your submittal satisfies the requirements in Arizona Administrative Code (A.A.C.) R18-9-A301(A)(3) and R18-9-A301(B). This Discharge Authorization is No. P-100333. Effective on the date of signature, the permittee is authorized to discharge from the facility at the location specified in the NOI under the terms of A.A.C. R18-9-D304. The permittee shall comply with all design, installation, operation, monitoring, recordkeeping, reporting and closure requirements specified in this general permit and the attachments to this discharge authorization. The permittee shall also comply with all other applicable requirements of 49 A.R.S. 2, and 18 A.A.C. 9, including the General Provisions of Article 3. This Authorization expires on August 31, 2019. If you wish to renew this Discharge Authorization and no changes have been made to the discharging facility, an NOI must be submitted no later than 30 days before August 31, 2019 otherwise, the authorization to discharge will expire (see R18-9-A303(B) and (C)).

This authorization can be revoked and an individual permit required in the event the permittee fails to comply with the terms of the general permit described in the rules or if the discharge activity causes or contributes to the violation of an Aquifer Water Quality Standard at the applicable point of compliance.

Jerry H. Smit, Manager Groundwater Section

Water Quality Division

Date

8/28/2014

p. 2 of 3

In addition to the requirements of the 3.04 General Permit in A.A.C. R18-9-D304, the permittee has agreed to the following voluntary conditions:

1. Mine Water Control

- i. The working shaft sumps and final shaft and vent sumps shall be continuously dewatered to allow the minimum practicable water accumulation.
- ii. The permittee shall conduct a Klinkenberg (or equivalent) permeability test on rock samples taken from the bottom of the final shaft and the vent sumps and survey the sumps to identify any features (i.e., fractures, joints, faults, or bedding planes) which may convey fluids out of sumps, prior to use. If permeability tests indicate that the permeability of the rock mass is greater than 1.0 x 10⁻⁷ cm/sec the permittee shall provide notice to ADEQ Groundwater Section and initiate within 30 days, line the sumps with bentonite clay or seal any identified feature that may convey fluids out of the sumps.

All documents required by this permit to be submitted to the Groundwater Section shall be directed to:

Arizona Department of Environmental Quality Groundwater Section Mail Code: 5415B-3 1110 W. Washington Street Phoenix, AZ 85007 Phone (602) 771-4428

2. Mine Shaft Sump Monitoring

EFR agrees to measure the daily volume of water pumped from the underground mining areas, and conduct periodic sampling of water pumped from the underground mining areas as follows:

EFR will sample water pumped from the underground mining areas at the point the water discharges to the non-stormwater impoundment on a quarterly basis for the parameters set forth in Table 1 below. If there is no water pumped during a particular quarter, then no sample will be required. EFR will report to ADEQ the results of the daily volume of water pumped and quarterly sampling within 30 days of the end of each of the first two quarters of operation, and on an annual basis thereafter.

ii. If the sampling results suggest that aquifer water quality standards could be exceeded in groundwater beneath the mine given the depth to groundwater at the mine, EFR will increase the frequency of pumping to mitigate any risk to groundwater.

3. Financial Capability

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee shall maintain financial capability throughout the life of the facility. The estimated closure and post-closure cost is \$52,467 and has been demonstrated pursuant to A.A.C. R18-9-A203(C)(2). The closure and post-closure costs shall be evaluated and financial capability updated, if necessary, with each 5-year renewal.

TABLE 1 DISCHARGE MONITORING/MINE SHAFT SUMP MONITORING

pH (S.U.)	Total Dissolved Solids (mg/L)	Alkalinity – Total (mg/L)	Specific Conductance (umhos/cm)	Sulfate (mg/L)
Fluoride (mg/L)	Calcium (mg/L)	Magnesium ¹ (mg/L)	Potassium ¹ (mg/L)	Sodium (mg/L)
Iron (mg/L)	Antimony ¹ (mg/L)	Arsenic (mg/L)	Barium [†] (mg/L)	Beryllium ¹ (mg/L)
Cadmium ¹ (mg/L)	Chromium ¹ (mg/L)	Copper ¹ (mg/L)	Lead (mg/L)	Manganese ¹ (mg/L)
Mercury (mg/L)	Nickel ¹ (mg/L)	Selenium ¹ (mg/L)	Thallium (mg/L)	Zinc ¹ (mg/L)
Gross Alpha Particle	Radium 226 (pCi/L)	Radium 228 (pCi/L)	Uranium-Isotopes (pCi/L)	Uranium (mg/L)
Activity (pCi/L)	Vanadium ¹ (mg/L)			

¹ Metals shall be analyzed as total recoverable metals.

From: Kenneth C. Slowinski [mailto:kcslowinski@azwater.gov]

Sent: Tuesday, June 06, 2017 2:50 PM **To:** Decker, D. Lee < <u>DLD@gknet.com</u>>

Cc: Sharon Scantlebury < sscantlebury@azwater.gov>

Subject: RE: Canyon Mine

Lee,

We have met internally with ADWR's director on this matter, and he would like ADWR staff to meet with representatives of Energy Fuels so that we can get more information on the dewatering activities and water disposal. I will ask my administrative assistant Sharon to contact you to schedule the meeting. Thanks for your cooperation.

Ken Slowinski

Chief Counsel
Arizona Department of Water Resources
602-771-8472



From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Tuesday, May 23, 2017 12:51 PM

To: Kenneth C. Slowinski < kcslowinski@azwater.gov>

Subject: Canyon Mine

Ken,

Thanks for taking time this morning to discuss the Canyon mine and its management of impacted mine water generated at the mine for environmental compliance purposes. Attached is a copy of the information that Energy Fuels sent to the US Forest Service (USFS) last week in response to the questions being raised regarding the application of A.R.S. 45-292 to the ultimate disposal of the impacted water at the White Mesa Mill near Blanding, Utah.

In addition to the attached email, below is some additional information that supports why A.R.S. 45-292 is not applicable to this situation:

1. As we discussed, in order to meet environmental compliance obligations Energy Fuels needed to send some of impacted water from the Canyon Mine dewatering over the past few months to the White Mesa Mill for disposal purposes, because, due to high initial inflows and

- unusually wet winter conditions, it was not been possible to evaporate all of the impacted water on site during these past winter months.
- The Mill does not need this impacted water, as the Mill has sufficient existing water for all of its purposes. The impacted water was sent to the Mill for disposal purposes and not for beneficial use.
- 3. The cost of transporting the impacted water to the Mill (approximately \$0.25 per gallon) far exceeds any potential use value of the water, which is further evidence that the impacted water is not being beneficially used at the Mill.
- 4. In order to dispose of the water at the Mill, it is necessary to introduce it into the front end of the Mill, for ultimate disposal in the Mill tailings after it runs through the Mill process.
- 5. Due to the ability to evaporate all water on site at the Canyon mine as the summer months are approaching, no impacted water is being transported to the Mill at this time. To date approximately 1.3 million gallons of impacted water has been transported to the Mill, which amounts to about 1/3 of the 10.2 acre-feet operational capacity of the lined impoundment at the mine.

Let me know if you would like any additional information or if ADWR would like to meet with Energy Fuels representatives for further discussions.

Sincerely, Lee Decker



5/5 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225 602-530-8000 | <u>www.gknet.com</u> D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135

This message and any of the attached documents contain information from the law firm of Gallagher & Kennedy, P.A. that may be confidential and/or privileged. If you are not the intended recipient, you may not read, copy, distribute, or use this information, and no privilege has been waived by your inadvertent receipt. If you have received this transmission in error, please notify the sender by reply e-mail and then delete this message. Thank you.

From:

Michelle A. Moreno sarah@uraniumwatch.org

To: Cc:

Jeff Trembly

Subject:

RE: Complaint: 051517Fields

Date:

Friday, July 21, 2017 1:21:00 PM

Attachments:

image003.png

Dear Ms. Fields.

Thank you for contacting the Arizona Department of Water Resources regarding this matter. As I mentioned in a previous conversation, the Department does not release details regarding ongoing investigations. Our office will contact you once the investigation has come to a conclusion.

Thank you for your patience and the additional information.

Sincerely,

Michelle Moreno Public Information Officer Arizona Department of Water Resources Phone: 602.771.8530 | Cell: 480.251.7621

Email: mamoreno@azwater.gov

Twitter: @azwater



From: sarah@uraniumwatch.org [mailto:sarah@uraniumwatch.org]

Sent: Friday, July 21, 2017 1:11 PM

To: Michelle A. Moreno <mamoreno@azwater.gov>

Subject: Complaint: 051517Fields

Dear Ms. Moreno,

It has been over 60 days since I filed a Complaint regarding the transport of water out of state

from the Canyon Mine, Coconino County, by Energy Fuels Resources (USA) Inc. See Complaint 051517Fields.

There has been no reply, nor any indication of the schedule for a reply.

At the very least, I would like to know when I will receive the Department of Water Resources' response to my Complaint.

I would greatly appreciate an update on the complaint process.

Additionally, at a Utah Div. of Waste Managment and Radiation Control public hearing on the

License Renewal of the White Mesa Mill License, held June 8, 2017, in Salt Lake City, David Frydenlund, Senior Vice President and General Council and Corporate Secretary of Energy Fuels Inc., stated that the mine water from the Canyon Mine was "used" at the Mill. Therefore, the mine water

is not being directly disposed of, but is being used at the mill. There will be a transcript of that hearing.

Sincerely,

Sarah Fields Program Director Uranium Watch PO Box 344 Moab, Utah 84532 435-260-8384 From:

Jeff Trembly

To:

sarah@uraniumwatch.org

Cc:

Michelle A. Moreno

Subject:

Response to complaint to ADWR Number 051517Fields

Date:

Wednesday, August 02, 2017 1:44:57 PM

Attachments:

image001.png

2017 07-27 Canyon Mine letter.pdf

Dear Ms. Fields:

The Arizona Department of Water Resources (ADWR) has concluded it inquiries into the matter raised in your complaint received on May 15, 2017. ADWR's letter to Energy Fuels regarding this matter is attached.

Please contact me if you have any comments or questions. Thank you for contacting ADWR.

Sincerely,

Jeff Trembly, RG

Special Projects Coordinator Adjudications Program Director Arizona Department of Water Resources (602) 771-8425



PROTECTING ARIZONA'S WATER SUPPLIES for ITS NEXT CENTURY

We have moved. Our new office is located at: 1110 W. Washington St. Suite 310, Phoenix, AZ 85007 Mailing Address: PO BOX 36020, Phoenix, AZ 85067

*Our staff's phone numbers and email addresses will stay the same

From: To: Kenneth C. Slowinski Decker, D. Lee

Subject: Date: RE: Canyon Mine

Attachments:

Thursday, July 27, 2017 11:45:00 AM 2017 07-27 Canyon Mine letter.pdf

Lee,

The attached letter explaining the Department's position on this matter is being mailed to you today. Feel free to contact me if you have any questions.

From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Monday, June 26, 2017 3:36 PM

To: Kenneth C. Slowinski < kcslowinski@azwater.gov>

Subject: RE: Canyon Mine

Ken,

Thank you for meeting with me and Dave Frydenlund and Mark Chalmers of Energy Fuels last week to discuss the past temporary shipment of impacted mine wastewater from the Canyon Mine to the Energy Fuels' White Mesa Mill. As Mark Chalmers mentioned during the meeting, Energy Fuels has no intention of placing ADWR in a difficult position and will continue to work with you going forward.

As we discussed, the impacted mine wastewater generated at the Canyon Mine is pumped from the bottom of the mine shaft and placed in a lined impoundment for disposal by evaporation pursuant to the requirements of the Canyon Mine's Type 3.04 general aquifer protection permit (APP) (copy attached) from the Arizona Department of Environmental Quality (ADEQ). The APP imposes freeboard requirements (see A.A.C. R18-9-D304(D)(1); A.A.C. R18-9-D301(C)(1)) on the lined impoundment to ensure that the impacted wastewater does not overtop the impoundment.

Due to unexpected initial inflows, unusually wet winter/spring conditions, and reduced evaporation potential, the impoundment was earlier this year at risk of overtopping and exceeding the freeboard requirements in the permit. In coordination with ADEQ and the US Forest Service (USFS), Energy Fuels proactively implemented emergency response actions including enhanced evaporation through the use of land sharks. Energy Fuels also attempted to reduce the amount of inflow into the lined impoundment by segregating clean inflow from higher up in the mine shaft. While helpful, these emergency efforts were not sufficient to meet the APP freeboard requirements and the company was then forced to ship some of the impacted wastewater to its White Mesa Mill for disposal to ensure compliance with environmental obligations (as well as approved variance deadlines). Importantly, the White Mesa Mill is authorized to receive and manage not only conventional uranium ore but also other similar types of uranium impacted waste streams.

As we discussed, the shipment of the impacted wastewater to the White Mesa Mill was very costly and Energy Fuels is actively evaluating and implementing several alternative management approaches to avoid such shipments in the future.

However, as we emphasized in prior correspondence and during our meeting from last week, we believe the shipment of the impacted wastewater to the White Mesa Mill did not trigger the approval requirement in A.R.S. 45-292. First, Energy Fuels did not ship "water" as contemplated under the statute. What was shipped was in effect a waste material that contained water, for proper environmental management and ultimate disposal. If the Energy Fuels' shipment of impacted wastewater is deemed to be subject to such approval, this would require shipments across state boundaries of any other wastes containing any amount of water to seek approval from ADWR, which clearly is beyond the intent of the approval requirement in A.R.S. 45-292. While management and transportation of impacted mine wastewater is subject to regulation by federal and state environmental and land management agencies, it should not be subject to regulation by ADWR.

Second, even assuming that the impacted mine wastewater is "water" for purposes of the approval requirement in A.R.S. 45-292, Energy Fuels clearly did not "withdraw, or divert, and transport water from this state for a reasonable and beneficial use in another state." The impacted wastewater that collects in the bottom of the Canyon Mine shaft is pumped into the lined impoundment for environmental compliance purposes pursuant to the Canyon Mine's Plan of Operations with the USFS and the Mine's APP permit with ADEQ. It is not withdrawn for reasonable and beneficial uses, rather it is withdrawn to be disposed of through evaporation. In addition, when the impacted wastewater had to be transported to the Energy Fuels' Mill for emergency environmental compliance purposes, it was not transported from the state for a reasonable and beneficial use in another state. Rather, it was transported for proper environmental management and ultimate disposal in another state.

We also respectfully disagree with the suggestion that because the wastewater was introduced at the front end of the Mill it would then be considered to have been transported for reasonable and beneficial use. If this position is followed, it would mean that other waste materials containing any amount of water and which are shipped across state boundaries for ultimate management would also require ADWR approval to the extent that the management of the waste materials resulted in any resource recovery including use of the water content in the management and disposal process. As ADWR probably recognizes, not all waste management facilities put waste immediately into disposal units. Rather, such facilities will in many instances process such materials to recover resources including water values.

Based on the above information and our discussion from last week, we believe that ADWR can respond to any concerns regarding the past shipment of mine impacted wastewater by simply stating that ADWR does not regulate shipments of impacted wastewater intended for ultimate disposal.

Sincerely,



2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225 602-530-8000 | www.gknet.com D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135 From: Kenneth C. Slowinski [mailto:kcslowinski@azwater.gov]

Sent: Tuesday, June 06, 2017 2:50 PM **To:** Decker, D. Lee < <u>DLD@gknet.com</u>>

Cc: Sharon Scantlebury < sscantlebury@azwater.gov>

Subject: RE: Canyon Mine

Lee,

We have met internally with ADWR's director on this matter, and he would like ADWR staff to meet with representatives of Energy Fuels so that we can get more information on the dewatering activities and water disposal. I will ask my administrative assistant Sharon to contact you to schedule the meeting. Thanks for your cooperation.

Ken Slowinski

Chief Counsel Arizona Department of Water Resources 602-771-8472



From: Decker, D. Lee [mailto:DLD@gknet.com]

Sent: Tuesday, May 23, 2017 12:51 PM

To: Kenneth C. Slowinski < kcslowinski@azwater.gov>

Subject: Canyon Mine

Ken,

Thanks for taking time this morning to discuss the Canyon mine and its management of impacted mine water generated at the mine for environmental compliance purposes. Attached is a copy of the information that Energy Fuels sent to the US Forest Service (USFS) last week in response to the questions being raised regarding the application of A.R.S. 45-292 to the ultimate disposal of the impacted water at the White Mesa Mill near Blanding, Utah.

In addition to the attached email, below is some additional information that supports why A.R.S. 45-292 is not applicable to this situation:

- As we discussed, in order to meet environmental compliance obligations Energy Fuels needed
 to send some of impacted water from the Canyon Mine dewatering over the past few months
 to the White Mesa Mill for disposal purposes, because, due to high initial inflows and
 unusually wet winter conditions, it was not been possible to evaporate all of the impacted
 water on site during these past winter months.
- 2. The Mill does not need this impacted water, as the Mill has sufficient existing water for all of its purposes. The impacted water was sent to the Mill for disposal purposes and not for beneficial use.
- 3. The cost of transporting the impacted water to the Mill (approximately \$0.25 per gallon) far exceeds any potential use value of the water, which is further evidence that the impacted water is not being beneficially used at the Mill.
- 4. In order to dispose of the water at the Mill, it is necessary to introduce it into the front end of the Mill, for ultimate disposal in the Mill tailings after it runs through the Mill process.
- 5. Due to the ability to evaporate all water on site at the Canyon mine as the summer months are approaching, no impacted water is being transported to the Mill at this time. To date approximately 1.3 million gallons of impacted water has been transported to the Mill, which amounts to about 1/3 of the 10.2 acre-feet operational capacity of the lined impoundment at the mine.

Let me know if you would like any additional information or if ADWR would like to meet with Energy Fuels representatives for further discussions.

Sincerely, Lee Decker



Phoenix, Arizona 85016-9225 602-530-8000 | www.gknet.com D. Lee Decker Attorney Profile dld@gknet.com 602-530-8135

This message and any of the attached documents contain information from the law firm of Gallagher & Kennedy, P.A. that may be confidential and/or privileged. If you are not the intended recipient, you may not read, copy, distribute, or use this information, and no privilege has been waived by your inadvertent receipt. If you have received this transmission in error, please notify the sender by reply e-mail and then delete this message. Thank you.



DOUGLAS A. DUCEY
Governor

THOMAS BUSCHATZKE
Director

ARIZONA DEPARTMENT of WATER RESOURCES

1110 West Washington Street, Suite 310 Phoenix, Arizona 85007 602.771.8500 azwater.gov

July 27, 2017

Lee Decker Gallagher & Kennedy 2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225

RE: Transportation of Water from Arizona to Utah by Energy Fuels, Inc.

Dear Lee:

On June 19, 2017, representatives of the Arizona Department of Water Resources (Department) and Energy Fuels Resources, Inc. (Energy Fuels) met to discuss Energy Fuels' past transportation of water across state lines from its Canyon Mine in Arizona to its White Mesa Mill (Mill) in Blanding, Utah. This meeting was followed by your email to me on June 26, 2017.

Energy Fuels' transportation of water across state lines was first brought to the Department's attention by the U.S. Forest Service, which had been contacted by a group known as Uranium Watch. On May 15, 2017, the Department received a formal complaint from Uranium Watch alleging that over 100 tanker trucks of water from the Canyon Mine had been transported to Utah from late 2016 to 2017 without approval of the Director of the Department, in violation of A.R.S. § 45-292.

The Department understands from Energy Fuels that the water Energy Fuels transported was a combination of clean groundwater from a perched aquifer and mine waste water pumped from a sump at the bottom of a mine shaft that is offset from the uranium ore body. According to the Arizona Department of Environmental Quality (ADEQ), the mine waste water was a combination of groundwater from the area (not including the water from the perched aquifer) and water used in the drilling and shaft sinking process.

It is the Department's understanding that Energy Fuels places the mine waste water in a lined impoundment for disposal by evaporation as required by an Aquifer Protection Permit issued by ADEQ. Energy Fuels informed the Department at the meeting on June 19, 2017, that although its preferred practice is to not place the clean groundwater from the perched aquifer in the lined impoundment with the mine waste water, it began doing so when a hoist in the mine shaft broke. Therefore, at the time Energy Fuels was transporting water from the impoundment across state lines, the water included both mine waste water and groundwater from the perched aquifer.

Lee Decker
Re: Transportation of Water from Arizona to Utah by Energy Fuels, Inc.
July 27, 2017
Page 2 of 3

Energy Fuels does not deny that it transported the mine wastewater and clean groundwater from the perched aquifer from Arizona to Utah. However, in your email and in past communications, you maintain that prior approval of the Director was not required under A.R.S. § 45-292 for two reasons. As explained below, the Department disagrees with both reasons.

First, in your email, you maintain that the Director's prior approval was not required because the water "was not transported from the state for a reasonable and beneficial use in another state." You point to language in A.R.S. § 45-292 that states: "A person may withdraw, or divert, and transport water from this state for a reasonable and beneficial use in another state if approved by the director pursuant to this article." You state in your email that this language requires approval by the Director only if the water is transported for a reasonable and beneficial use in another state. You argue that approval was not necessary in this case because Energy Fuels transported the water "for proper environmental management and ultimate disposal in another state," and not for a reasonable and beneficial use in another state.

The Department disagrees with this argument. It is undisputed that the water transported by Energy Fuels across state lines was put to a reasonable and beneficial use at the Mill. Thus, approval by the Director was required by the plain language of the statute. Moreover, even if the Department were to accept your argument that approval of the Director was not required because the water was not transported for a reasonable and beneficial use, the transportation would not have been allowed under Arizona law because, as the Department representatives stated at the June 19, 2017 meeting, A.R.S. § 45-292 allows a person to transport water across state lines *only* if the water will be put to reasonable and beneficial use in the other state and if all other requirements of A.R.S. § 45-292 have been satisfied.

Second, you argue in your email that prior approval of the director was not required under A.R.S. § 45-292 because "Energy Fuels did not ship 'water' as contemplated under the statute. What was shipped was in effect a waste material that contained water, for proper environmental management and ultimate disposal." The Department disagrees with this argument. There is no exception in A.R.S. § 45-292 for the transportation of mine waste water from this state to another state. It is the position of the Department that the mine waste water is water, and that the water may not be transported across state lines unless the water is put to a reasonable and beneficial use in the other state and prior approval of the Director is obtained pursuant to A.R.S. § 45-292. Additionally, the water from the perched aquifer was not mine waste water. The transportation of that water across state lines is therefore clearly subject to A.R.S. 45-292.

Regarding the past shipments of water by Energy Fuels from the Canyon Mine in Arizona to Utah, Energy Fuels represented that the transportation was undertaken to avoid overtopping at the lined impoundment near the mine. At the June 19, 2017 meeting, Energy Fuels represented that transportation across state lines ceased approximately three to four weeks prior to the meeting, and that it is implementing measures to eliminate the risk of overtopping at the impoundment in the future. These measures include greater reduction of water levels or depletion of water from the impoundment prior to high-precipitation winter months each year, the installation and use of electric boilers to enhance

Lee Decker

Re: Transportation of Water from Arizona to Utah by Energy Fuels, Inc.

July 27, 2017

Page 3 of 3

evaporation rates, continued use of land sharks, segregation of the clean groundwater aquifer from the mine waste water, and possible on-site treatment of contaminated water.

Because shipments of water across state lines have ceased and because Energy Fuels is implementing measures to eliminate the need to transport water out of Arizona from the Canyon Mine, the Department will not take any action against Energy Fuels for the past transportation of water from the mine to Utah. However, Energy Fuels must comply with A.R.S. § 45-292 for any future transportation of water from the Canyon Mine out of state by filing an export application with the Department and obtaining the prior approval of the Director. Before the Director decides whether to grant the application, an administrative hearing must be held in the county from which the water would be transported. At this hearing, "any interested person, including the Department, may appear and give oral or written testimony on all issues involved." A.R.S. § 45-292(E). The processing of an export application, including time for an administrative hearing, could require over a year.

The Department appreciates the willingness of Energy Fuels to meet with the Department to discuss this matter and Energy Fuels' future compliance with state law.

Sincerely,

Kenneth Slowinski

Kennthe Slevensli

Chief Counsel

From: Michelle A. Moreno

To: Kenneth C. Slowinski; Jeff Trembly

Subject: Fw: ADWR Public Records Request Confirmation 080417Fields

Date: Friday, August 04, 2017 8:50:48 AM

Attachments: Receipt.pdf

Please see attached request.

Michelle Moreno
Public Information Officer
Arizona Department of Water Resources

Phone: 602.771.8530

Email: mamoreno@azwater.gov

From: NoReply

Sent: Friday, August 4, 2017 8:47 AM

To: Michelle A. Moreno

Subject: ADWR Public Records Request Confirmation 080417Fields

This email serves as confirmation that the Arizona Department of Water Resources has recieved your public records request.

Our staff will contact you soon in regards to the status of your request.

If you need immediate assistance please contact:

Michelle Moreno Public Information Officer Arizona Department of Water Resources Email: mamoreno@azwater.gov

Phone: 602.771.8530

Arizona Department of Water Resources Public Records Request

Request ID: 080417Fields Date: 8/4/2017 8:47:34 AM

Request Filed by

First Name: Sarah Last Name: Fields

Company: Uranium Watch
Address: PO Box 344

City: Moab

State: UT Zip: 84532 eMail: sarah@uraniumwatch.org

Phone: (435) 260-8384

Fax:

Request Type: Record Inspection of Electronic documents

Request Details: Records requested are referenced in a July 27, 2017 letter from Kenneth

Slowinski, Chief Counsel, ADWR, to Lee Decker, Gallagher & Kennedy, Phoenix, Arizona, regarding "Transportation of Water from Arizona to Utah by Energy Fuels Inc." Apparently, Lee Decker was representing Energy Fuels Inc.

This letter was forwarded to myself by Jeff Trembly, RG

Special Projects Coordinator, Adjudications Program Director, ADWR, on

August 2, 2017.

I request the following documents referenced in the letter:

- 1. E-mail or other written communications between ADWR and Energy Fuels Inc., or their representatives, regarding the transport of water from the Canyon Mine in Arizona to the White Mesa Uranium Mill in Utah. This includes an e-mail dated June 26, 2017.
- 2. The notes, transcript, meeting summary, or other documentation of a meeting between ADWR and Energy Fuels' representative on June 19, 2017.
- 3. Any correspondence between ACWR and the US Forest Service regarding this matter, including phone notes or other documentation of calls regarding the Canyon Mine.
- 4. Any other documents related to internal or external ADWR communications regarding the transport of water from the Canyon Mine to Utah. This does not include any communications to and from myself and Uranium Watch.

Request Use: Not used for commercial Purposes.



DOUGLAS A. DUCEY Governor

THOMAS BUSCHATZKE
Director

ARIZONA DEPARTMENT of WATER RESOURCES

1110 West Washington Street, Suite 310 Phoenix, Arizona 85007 602.771.8500 azwater.gov

July 27, 2017

Lee Decker Gallagher & Kennedy 2575 E. Camelback Road, Suite 1100 Phoenix, Arizona 85016-9225

RE: Transportation of Water from Arizona to Utah by Energy Fuels, Inc.

Dear Lee:

On June 19, 2017, representatives of the Arizona Department of Water Resources (Department) and Energy Fuels Resources, Inc. (Energy Fuels) met to discuss Energy Fuels' past transportation of water across state lines from its Canyon Mine in Arizona to its White Mesa Mill (Mill) in Blanding, Utah. This meeting was followed by your email to me on June 26, 2017.

Energy Fuels' transportation of water across state lines was first brought to the Department's attention by the U.S. Forest Service, which had been contacted by a group known as Uranium Watch. On May 15, 2017, the Department received a formal complaint from Uranium Watch alleging that over 100 tanker trucks of water from the Canyon Mine had been transported to Utah from late 2016 to 2017 without approval of the Director of the Department, in violation of A.R.S. § 45-292.

The Department understands from Energy Fuels that the water Energy Fuels transported was a combination of clean groundwater from a perched aquifer and mine waste water pumped from a sump at the bottom of a mine shaft that is offset from the uranium ore body. According to the Arizona Department of Environmental Quality (ADEQ), the mine waste water was a combination of groundwater from the area (not including the water from the perched aquifer) and water used in the drilling and shaft sinking process.

It is the Department's understanding that Energy Fuels places the mine waste water in a lined impoundment for disposal by evaporation as required by an Aquifer Protection Permit issued by ADEQ. Energy Fuels informed the Department at the meeting on June 19, 2017, that although its preferred practice is to not place the clean groundwater from the perched aquifer in the lined impoundment with the mine waste water, it began doing so when a hoist in the mine shaft broke. Therefore, at the time Energy Fuels was transporting water from the impoundment across state lines, the water included both mine waste water and groundwater from the perched aquifer.

Lee Decker

Re: Transportation of Water from Arizona to Utah by Energy Fuels, Inc.

July 27, 2017 Page **2** of **3**

Energy Fuels does not deny that it transported the mine wastewater and clean groundwater from the perched aquifer from Arizona to Utah. However, in your email and in past communications, you maintain that prior approval of the Director was not required under A.R.S. § 45-292 for two reasons. As explained below, the Department disagrees with both reasons.

First, in your email, you maintain that the Director's prior approval was not required because the water "was not transported from the state for a reasonable and beneficial use in another state." You point to language in A.R.S. § 45-292 that states: "A person may withdraw, or divert, and transport water from this state for a reasonable and beneficial use in another state if approved by the director pursuant to this article." You state in your email that this language requires approval by the Director only if the water is transported for a reasonable and beneficial use in another state. You argue that approval was not necessary in this case because Energy Fuels transported the water "for proper environmental management and ultimate disposal in another state," and not for a reasonable and beneficial use in another state.

The Department disagrees with this argument. It is undisputed that the water transported by Energy Fuels across state lines was put to a reasonable and beneficial use at the Mill. Thus, approval by the Director was required by the plain language of the statute. Moreover, even if the Department were to accept your argument that approval of the Director was not required because the water was not transported for a reasonable and beneficial use, the transportation would not have been allowed under Arizona law because, as the Department representatives stated at the June 19, 2017 meeting, A.R.S. § 45-292 allows a person to transport water across state lines *only* if the water will be put to reasonable and beneficial use in the other state and if all other requirements of A.R.S. § 45-292 have been satisfied.

Second, you argue in your email that prior approval of the director was not required under A.R.S. § 45-292 because "Energy Fuels did not ship 'water' as contemplated under the statute. What was shipped was in effect a waste material that contained water, for proper environmental management and ultimate disposal." The Department disagrees with this argument. There is no exception in A.R.S. § 45-292 for the transportation of mine waste water from this state to another state. It is the position of the Department that the mine waste water is water, and that the water may not be transported across state lines unless the water is put to a reasonable and beneficial use in the other state and prior approval of the Director is obtained pursuant to A.R.S. § 45-292. Additionally, the water from the perched aquifer was not mine waste water. The transportation of that water across state lines is therefore clearly subject to A.R.S. 45-292.

Regarding the past shipments of water by Energy Fuels from the Canyon Mine in Arizona to Utah, Energy Fuels represented that the transportation was undertaken to avoid overtopping at the lined impoundment near the mine. At the June 19, 2017 meeting, Energy Fuels represented that transportation across state lines ceased approximately three to four weeks prior to the meeting, and that it is implementing measures to eliminate the risk of overtopping at the impoundment in the future. These measures include greater reduction of water levels or depletion of water from the impoundment prior to high-precipitation winter months each year, the installation and use of electric boilers to enhance

Lee Decker

Re: Transportation of Water from Arizona to Utah by Energy Fuels, Inc.

July 27, 2017 Page **3** of **3**

evaporation rates, continued use of land sharks, segregation of the clean groundwater aquifer from the mine waste water, and possible on-site treatment of contaminated water.

Because shipments of water across state lines have ceased and because Energy Fuels is implementing measures to eliminate the need to transport water out of Arizona from the Canyon Mine, the Department will not take any action against Energy Fuels for the past transportation of water from the mine to Utah. However, Energy Fuels must comply with A.R.S. § 45-292 for any future transportation of water from the Canyon Mine out of state by filing an export application with the Department and obtaining the prior approval of the Director. Before the Director decides whether to grant the application, an administrative hearing must be held in the county from which the water would be transported. At this hearing, "any interested person, including the Department, may appear and give oral or written testimony on all issues involved." A.R.S. § 45-292(E). The processing of an export application, including time for an administrative hearing, could require over a year.

The Department appreciates the willingness of Energy Fuels to meet with the Department to discuss this matter and Energy Fuels' future compliance with state law.

Sincerely,

Kenneth Slowinski Chief Counsel

Kennthe Slevindi



From: sarah@uraniumwatch.org

To: <u>complaints</u>

Subject: Complaint 051517Fields

Date: Monday, May 15, 2017 4:13:48 PM

Dear Sir or Madam:

Regarding Complaint 051517Fields:

Attached is a photo of one of the tanker tucks that transported water to the Mill.

The Utah Division of Waste Management and Radiation Control is aware of the transport of mine water from the Canyon Mine, Arizona, to the White Mesa Mill, Utah. Contact person would be

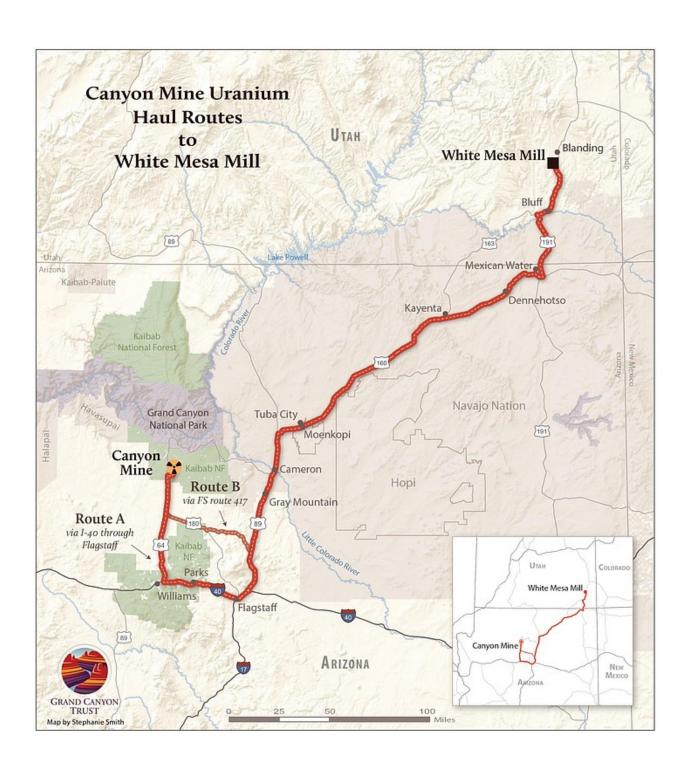
Phil Goble: 801-536-4044. "Phil Goble" cpgoble@utah.gov

Thank you,

Sarah Fields 435-260-8384

Links

https://www.grandcanyonnews.com/news/2017/mar/28/activists-concerned-canyon-mines-disposal-excess-w/

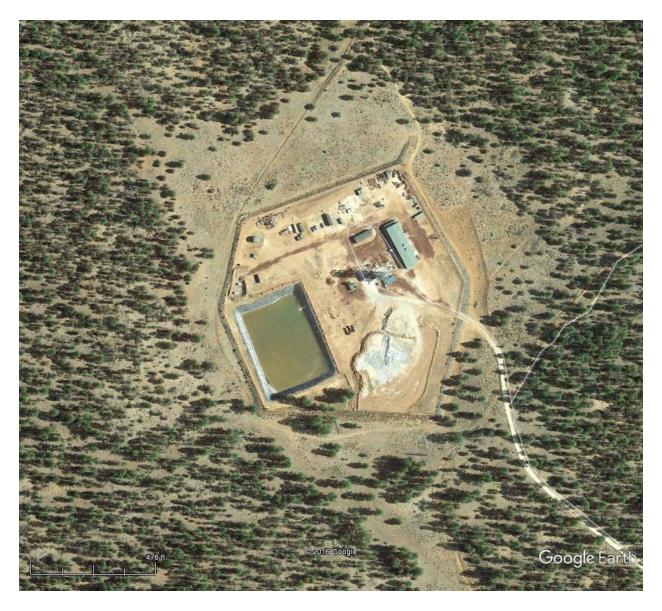


 $\frac{https://www.grandcanyonnews.com/news/2017/apr/04/canyon-mine-completes-drilling-1475-foot-mine-shaf/$

 $\frac{http://www.sierraclub.org/arizona/blog/2017/03/uranium-mine-near-grand-canyon-filling-contaminated-water}{}$



White Mesa Uranium Mill near Blanding, Utah



Canyon Mine

http://knau.org/post/adeq-says-no-mismanagement-canyon-mine-water-disposal#stream/0

trucked more than 130 shipments

 $\frac{http://www.phoenixnewtimes.com/news/contaminated-water-from-uranium-mine-near-grand-canyon-worries-environmental-groups-and-tribal-members-9179304$

 $\frac{http://azdailysun.com/news/local/uranium-mine-deals-with-excess-water/article\ 1f35d10b-3802-5083-a5bd-1c3f255363fc.html}{}$





ENERGY FUELS

Forward looking statements

Certain of the information contained in this presentation constitutes "forward-looking information" (as defined in the Securities Act (Ontario)) and "forward-looking statements" (as defined in the U.S. Private Securities Litigation Reform Act of 1995) that are based on expectations, estimates and projections of management of Energy Fuels Inc. ("Energy Fuels") as of today's date. Such forward-looking information and forward-looking statements include but are not limited to: the business strategy for Energy Fuels; Energy Fuels expectations with regard to current and future uranium market conditions, including prices, production and lags; the uranium industry's ability to respond to higher demand; the impacts of recent market developments; business plans; outlook; objectives; expectations as to the prices of U₃O₈, V₂O₅, and Cu; expectations as to reserves, resources, results of exploration and related expenses; estimated future production and costs; changes in project parameters; the expected permitting and production time lines; the Company's belief that it has significant organic production growth potential, unmatched scalability, the results of drilling at the Canyon Mine; the potential for additional business opportunities including the cleanup of historic mines in the Four Corners Region of the U.S.; the potential for optimizing mining and processing; the Company's belief in its readiness to capitalize on improving markets; the potential to joint venture, sell, trade or pursue other opportunities on its non-core projects; and expected worldwide uranium supply and demand.

All statements contained herein which are not historical facts are forward-looking statements that involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking information and forward-looking statements. Factors that could cause such differences, without limiting the generality of the foregoing include: risks that the synergies and effects on value described herein may not be achieved; risks inherent in exploration, development and production activities; volatility in market prices for uranium and vanadium; the impact of the sales volume of uranium and vanadium; the ability to sustain production from mines and the mill; competition; the impact of change in foreign currency exchange; imprecision in mineral resource and reserve estimates; environmental and safety risks including increased regulatory burdens; changes to reclamation requirements; unexpected geological or hydrological conditions; a possible deterioration in political support for nuclear energy; changes in government regulations and policies, including trade laws and policies; demand for nuclear power; replacement of production and failure to obtain necessary permits and approvals from government authorities; weather and other natural phenomena; ability to maintain and further improve positive labour relations; operating performance of the facilities; success of planned development projects; and other development and operating risks. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. Although Energy Fuels believes that the assumptions inherent in the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this presentation. Energy Fuels does not undertake any obligation to publicly update or revise any forward-looking informati

Additional information about the material factors or assumptions on which forward looking information is based or the material risk factors that may affect results is contained under "Risk Factors" in Energy Fuels' annual report on Form 10-K for the year ended December 31, 2016 which was filed with the SEC on March 10, 2017. These documents are available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

Topics



- Overview of Energy Fuels
- The Canyon Mine
- History
- Geology
- Exploration Results
- Mine Plan
- Path Forward

Energy Fuels

Uranium Producer Based in Denver, CO



- ▲ 2nd Largest US Uranium Producer
 - 1.02 million lbs. in 2016
- Current Conventional + ISR Production

Utah, Wyoming, Arizona, and Texas

- De-Risked + Diversified 3 operational uranium production centers
- The Largest Uranium Resource Portfolio in the US

83 million lbs. U₃O₈ Measured & Indicated¹ 52 million lbs. U₃O₈ Inferred¹

Reliable, Long-Term Supplier

With significant production growth potential

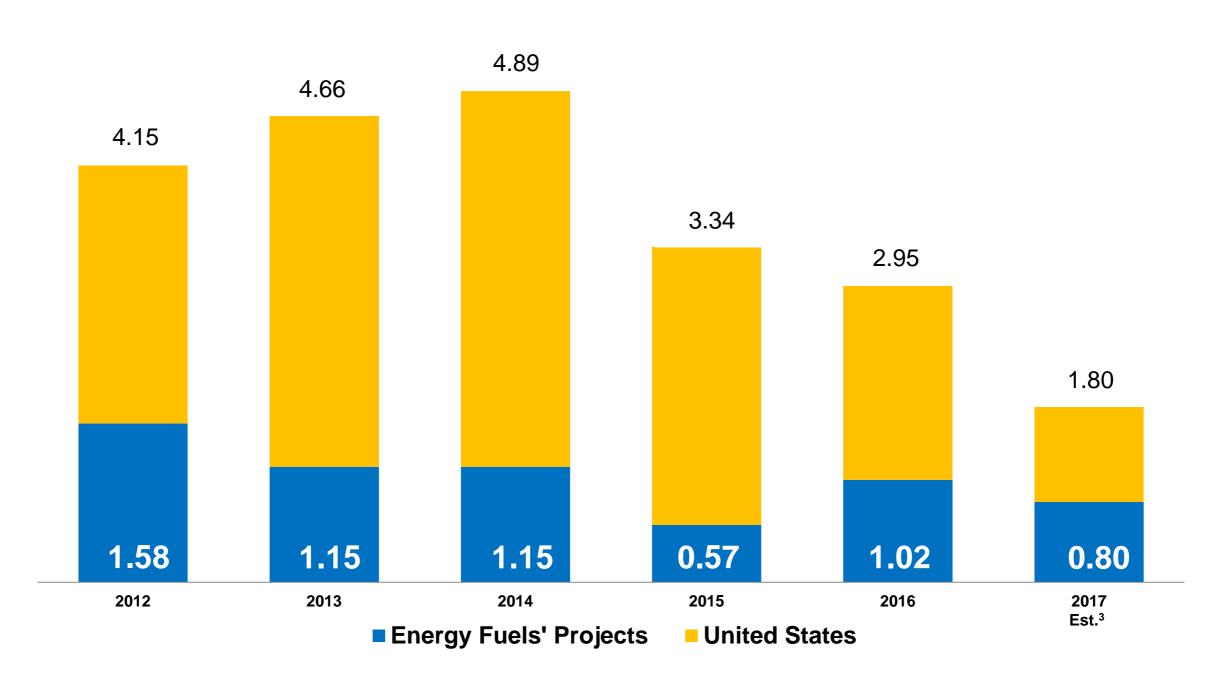
White Mesa Mill (Utah) **Nichols Ranch (Wyoming)** Canyon Mine (Arizona) **Alta Mesa (Texas)**

¹ Among producers and near-producers. Please refer to resource table at end of this presentation for more information about resources, including grade, tonnage, and classification

6-Year Production History¹

Energy Fuels' Projects & US²





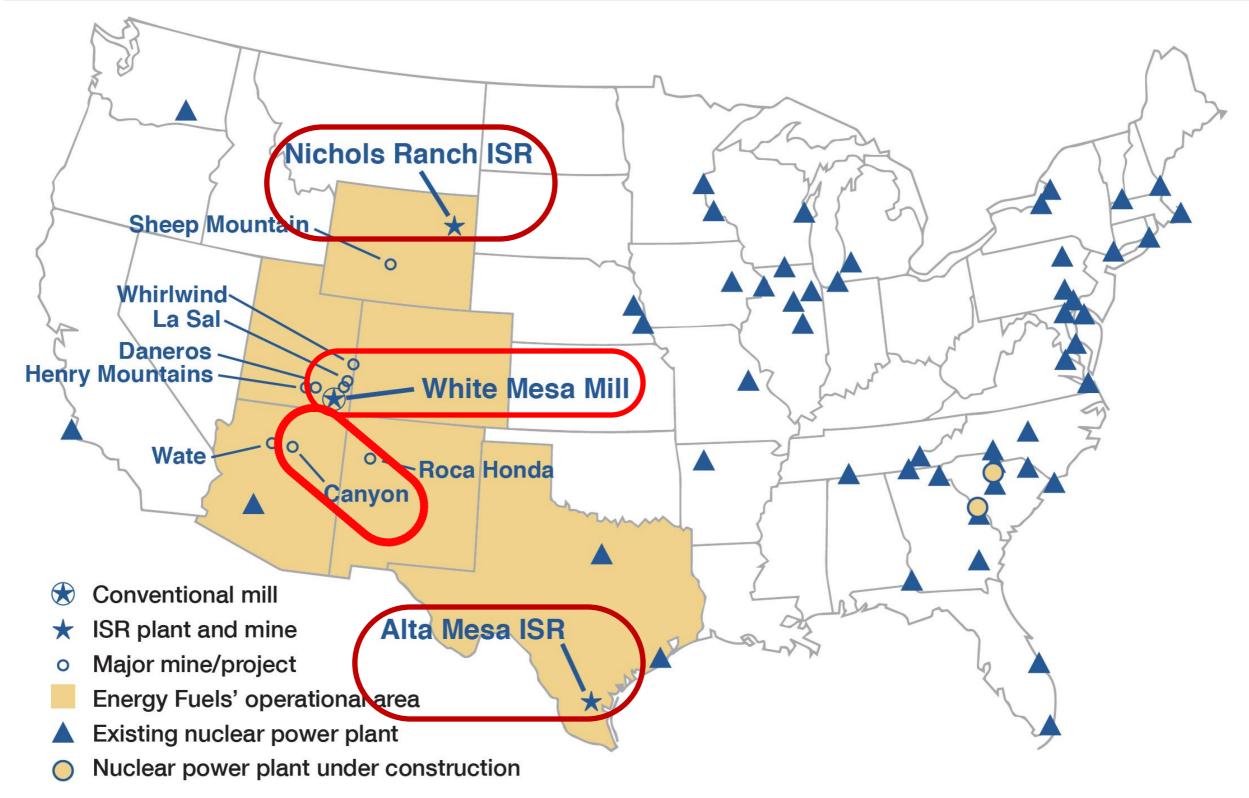
¹ In millions of lbs. U₃O₈

² EIA and company filings. Includes all production, including production prior to acquisition by Energy

³ Based on announced production guidance

Energy Fuels Projects





The Canyon Mine

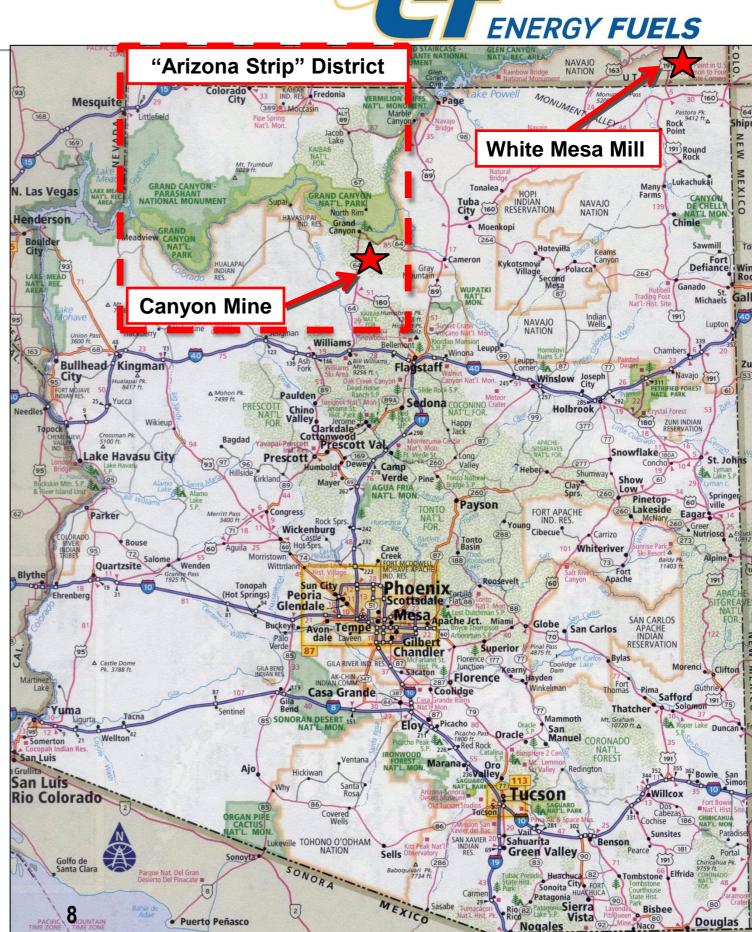




Location

ENERGY FUELS

- "Arizona Strip" Mining District
- ~300 road miles to our White Mesa Mill
- Excellent existing infrastructure
- Over 20 million pounds of historic uranium production from the "Arizona Strip" brecciapipe deposits



Aerial Photo

Tiny footprint; A lot of clean energy

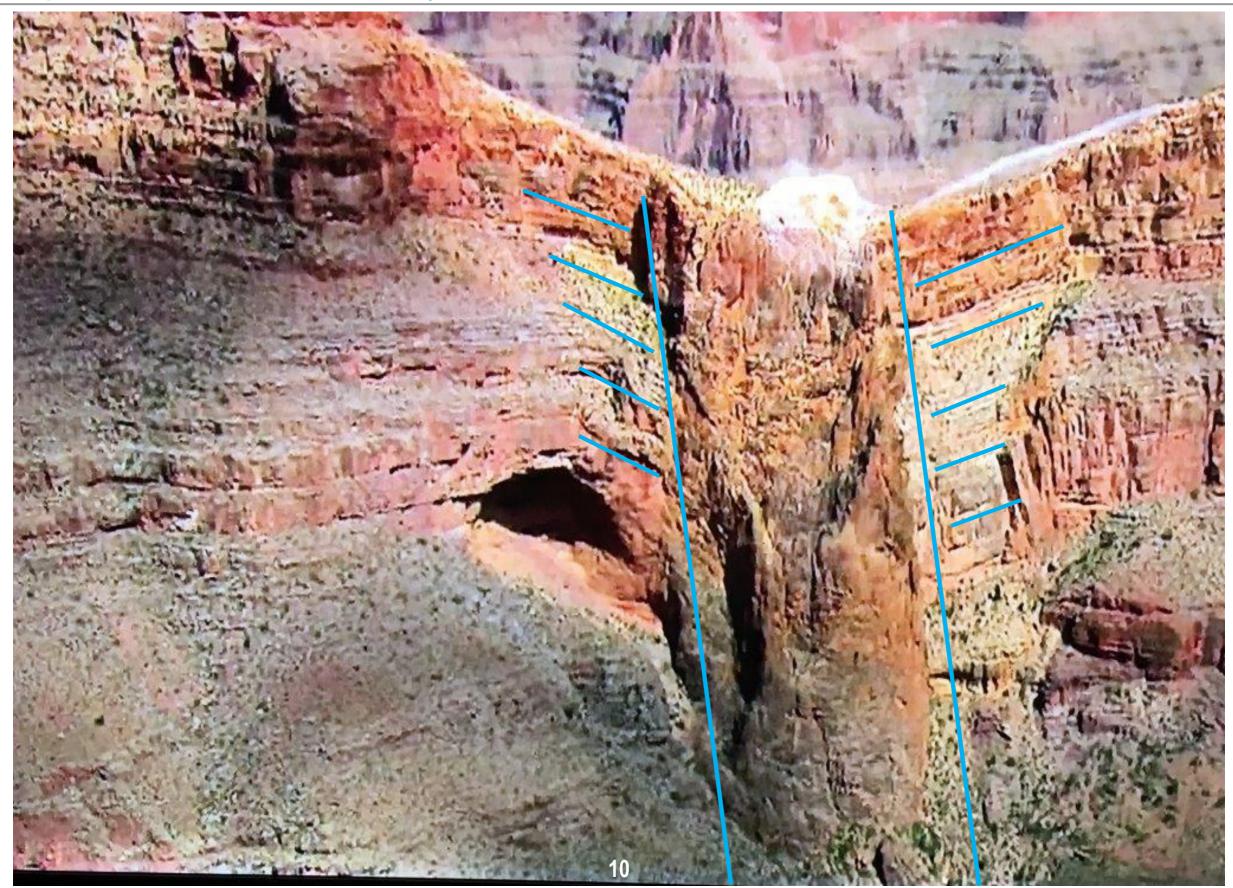




Typical "Breccia Pipe"

Exposed in Grand Canyon walls





History



1978 Low-grade uranium discovered by Gulf Oil

1982 – 1987 Energy Fuels Nuclear Inc. ("EFNI") discovered high-grade uranium, permitted the mine, and placed on "standby" for next 25 years

2012 Energy Fuels Inc. ("EFI") acquired the mine from Denison Mines

2013 EFI completed surface development, partially-sunk the production shaft, and placed on "standby" for 2 years

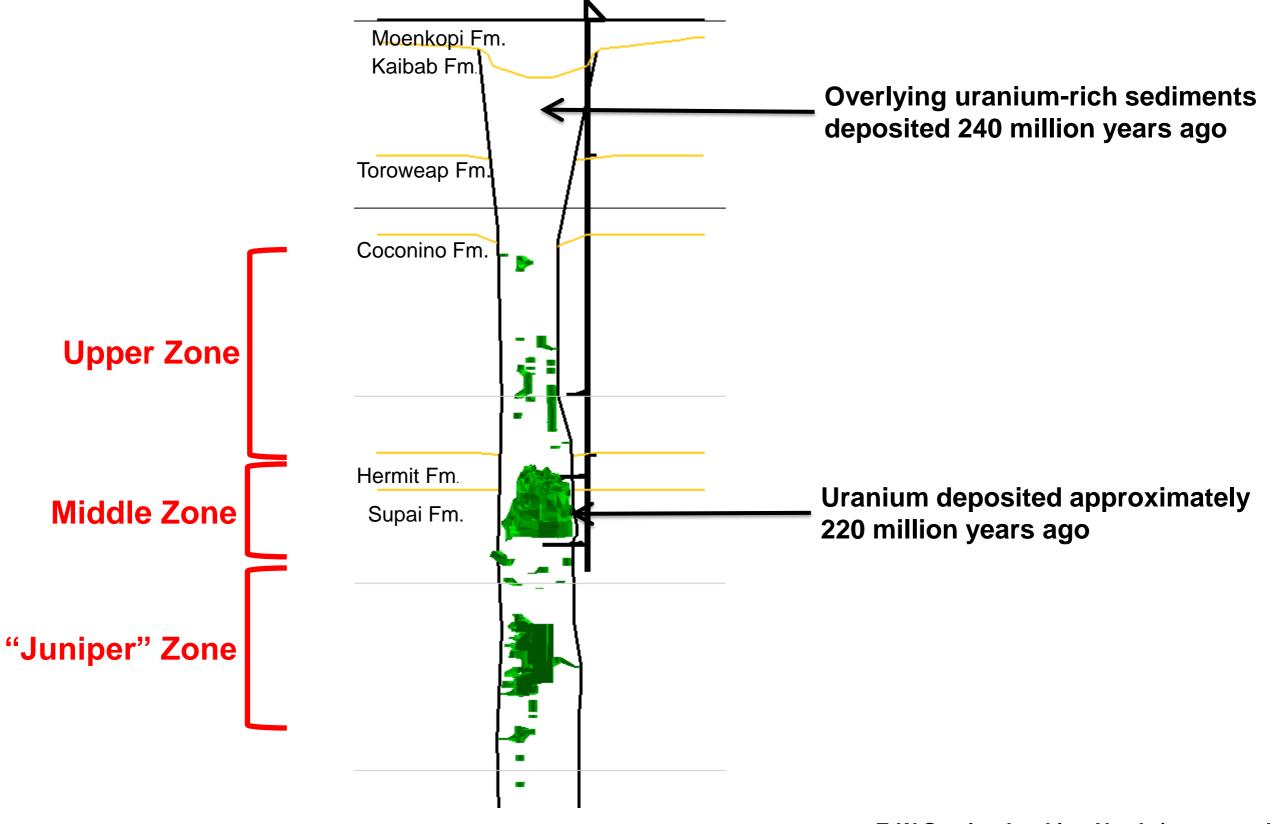
2015 – 2017 EFI finishes production shaft and conducts an underground drilling program

Late – 2016 EFI discovers large areas of very high-grade uranium – and copper – mineralization

Finish mine planning and new resource estimate

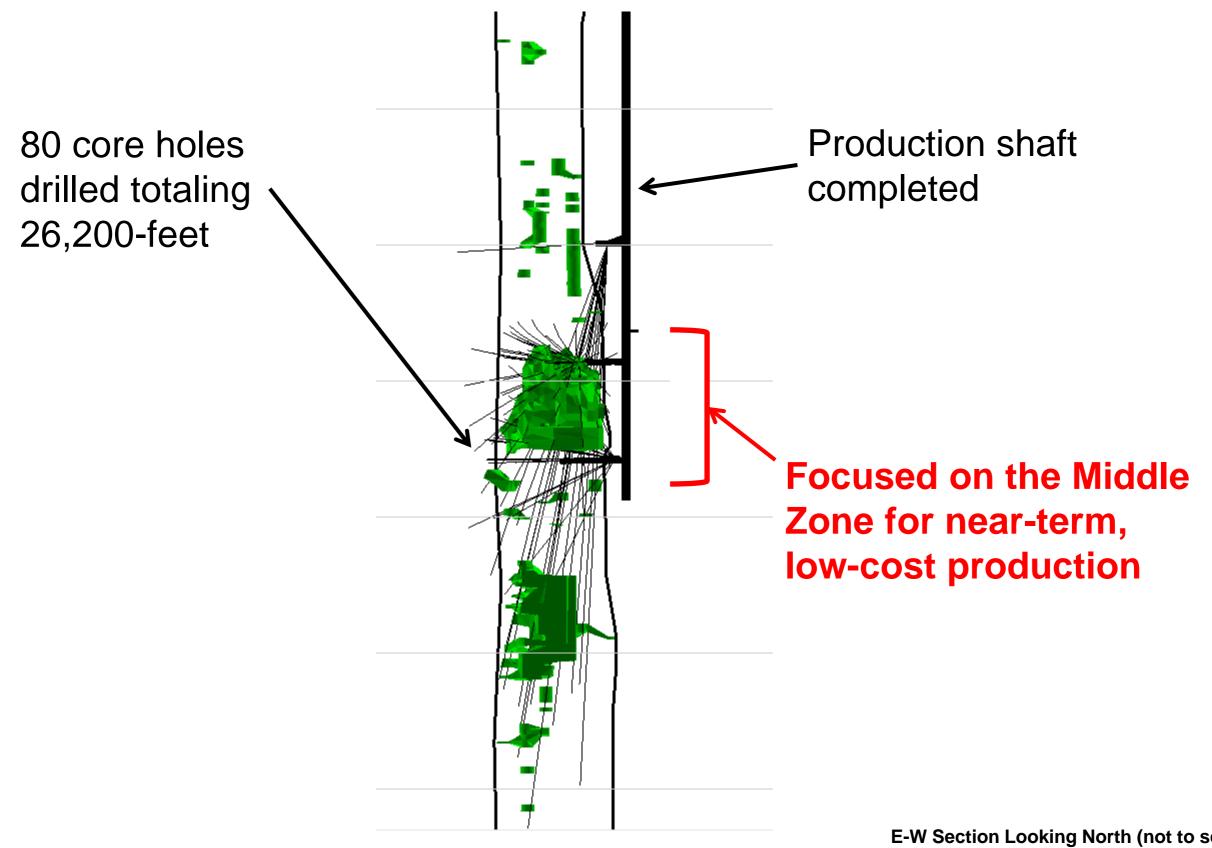
Geology





Underground Exploration





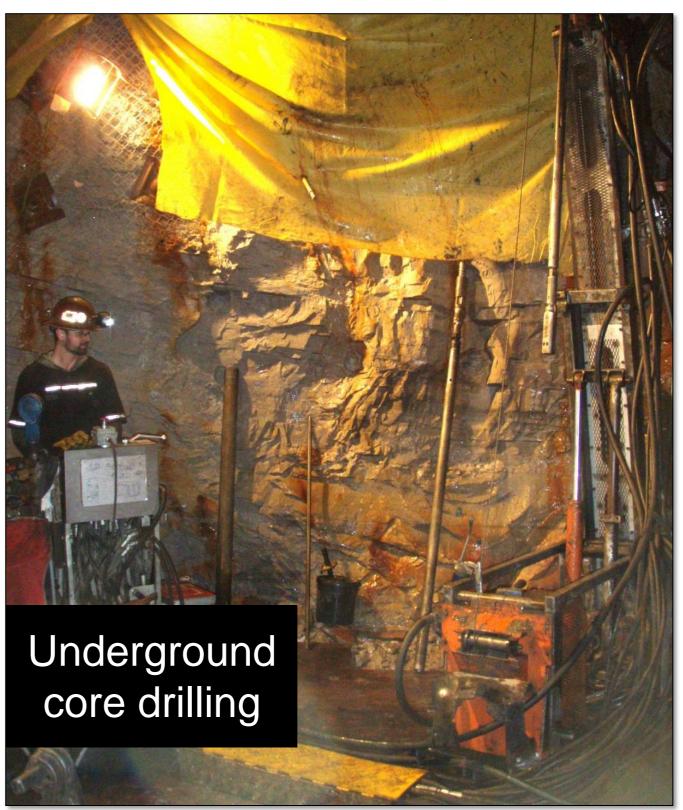
Exploration Results

Selected Intercepts



Top 10 Uranium Intercepts	Hole	Length (Feet)	%U O	%Cu	Donth
intercepts			%U ₃ O ₈		Depth
l	11	6.0	16.99%	1.20%	1,618
2	7	46.0	1.37%	13.52%	1,287
3	4	41.0	1.09%	2.75%	1,285
4	8	58.0	0.75%	13.91%	1,305
5	5	54.0	0.72%	9.19%	1,250
6	14	4.0	8.35%	1.64%	1,281
7	6	44.0	0.74%	10.22%	1,284
8	16	58.0	0.51%	5.57%	1,221
9	11	18.0	1.23%	7.74%	1,360
10	12	12.0	1.78%	3.81%	1,294
		341.0	1.26%		

Top 10 Copper		Length			
Intercepts	Hole	(Feet)	%U ₃ O ₈	%Cu	Depth
1	2	105.0	0.17%	9.55%	1,190
2	8	58.0	0.75%	13.91%	1,305
3	7	46.0	1.37%	13.52%	1,287
4	5	54.0	0.72%	9.19%	1,250
5	3	60.0	0.02%	7.66%	1,182
6	6	44.0	0.74%	10.22%	1,284
7	26	24.0	0.56%	18.17%	1,221
8	27	32.0	0.29%	11.54%	1,216
9	16	58.0	0.51%	5.57%	1,221
10	25	28.0	0.61%	10.08%	1,221
		509.0		10.31%	



Underground Exploration

Assay Results





Hole #2, 226 - 236 feet

 $0.95\% U_3O_8$ 21.36% Cu 1.83 oz/t Ag

Hole #7, 313 – 323 feet

12.35 % U₃O₈ 9.18 % Cu 2.34 oz/t Ag



Hole #7, 333 – 342 feet

 $0.20\% U_3O_8$ 41.62% Cu 2.76 oz/t Ag

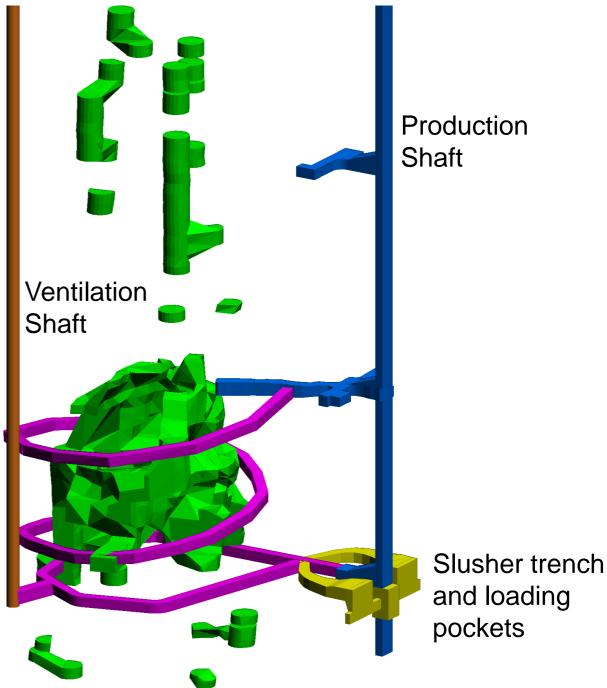


Preliminary Mine Plan

Middle Zone

- Small-scale underground mining
- Simple and inexpensive
- Unique mining methods
- Energy Fuels has recent experience mining Arizona's "breccia pipes"
 - Pinenut Mine (2014 2016)
 - Arizona 1 Mine (2009 2014)
- Current personnel has mined several other "breccia pipes"
 - Kanab North, Hack I, Hack II, Hack III, Pigeon, Hermit







The White Mesa Mill

Ready to process Canyon ore

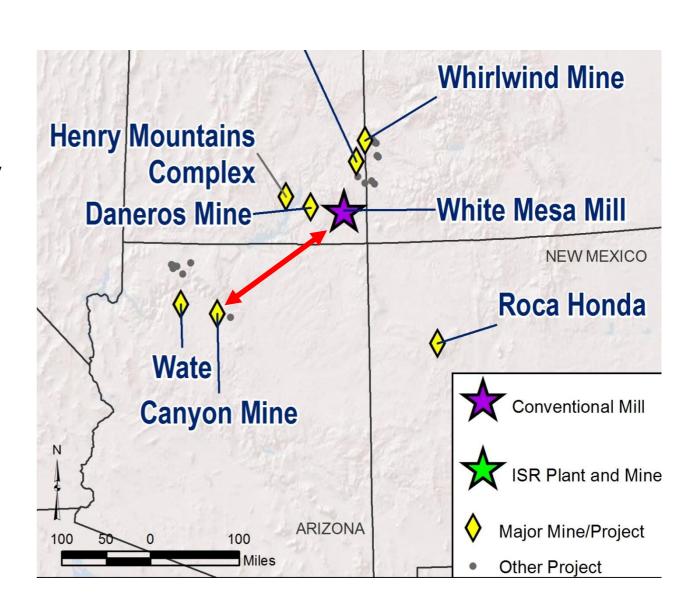




White Mesa Mill



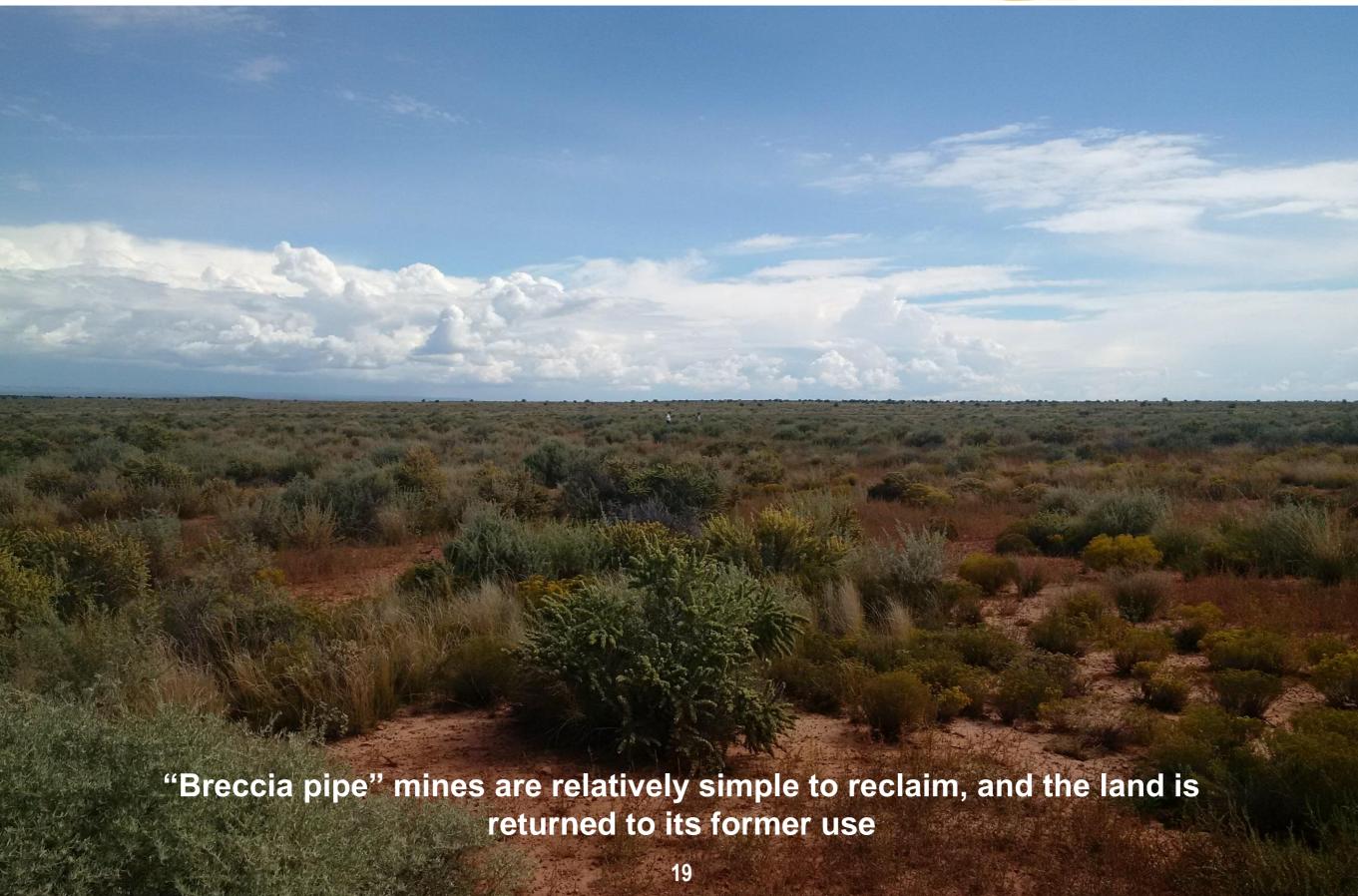
- The <u>only</u> operating conventional uranium mill in US
- 8+ million lbs. of annual capacity
- Reliable long-term uranium production facility since 1980
- Within trucking distance of the Canyon Mine
- Currently in production
- Experienced personnel



Reclaimed "Breccia Pipe" Mine

The Hermit Mine





Quantity and Cost



A How much recoverable uranium is there?

- 2012 Resource Estimate (Old) = 1.6 million lbs. of uranium
- Recent drilling expected to significantly increase contained resources
- New resource estimate to be released in mid-2017
- Annual production of 500,000 to 1 million lbs. per year for 3 5 years¹

A How much will it cost?

- Similar to the lowest-cost conventional mines in the World today¹
- If copper can be monetized as a byproduct, costs will drop further

20

¹ Current, in-house estimate. Not 43-101 or Guide 7 compliant

Canyon Mine

Ready to enter production in 2017



Completed Milestones:

- ✓ Fully licensed & permitted
- ✓ Most upfront development completed
- ✓ Production shaft completed
- ✓ Underground drilling completed
- ✓ Initial resource estimate completed
- ▼ The White Mesa Mill ready to process ore into finished yellowcake

▲ Final Remaining Tasks:

- Complete new resource estimate
- Determine path to monetization for copper resources
- Finalize underground mine plan

Path Forward



Potential ore production at the Canyon mine in 2017

- Fully-licensed
- Development nearly complete with minimal remaining cap-ex required
- The White Mesa Mill is ready to process ore into finished yellowcake
- Uranium could be "in-the-can" as soon as 2018

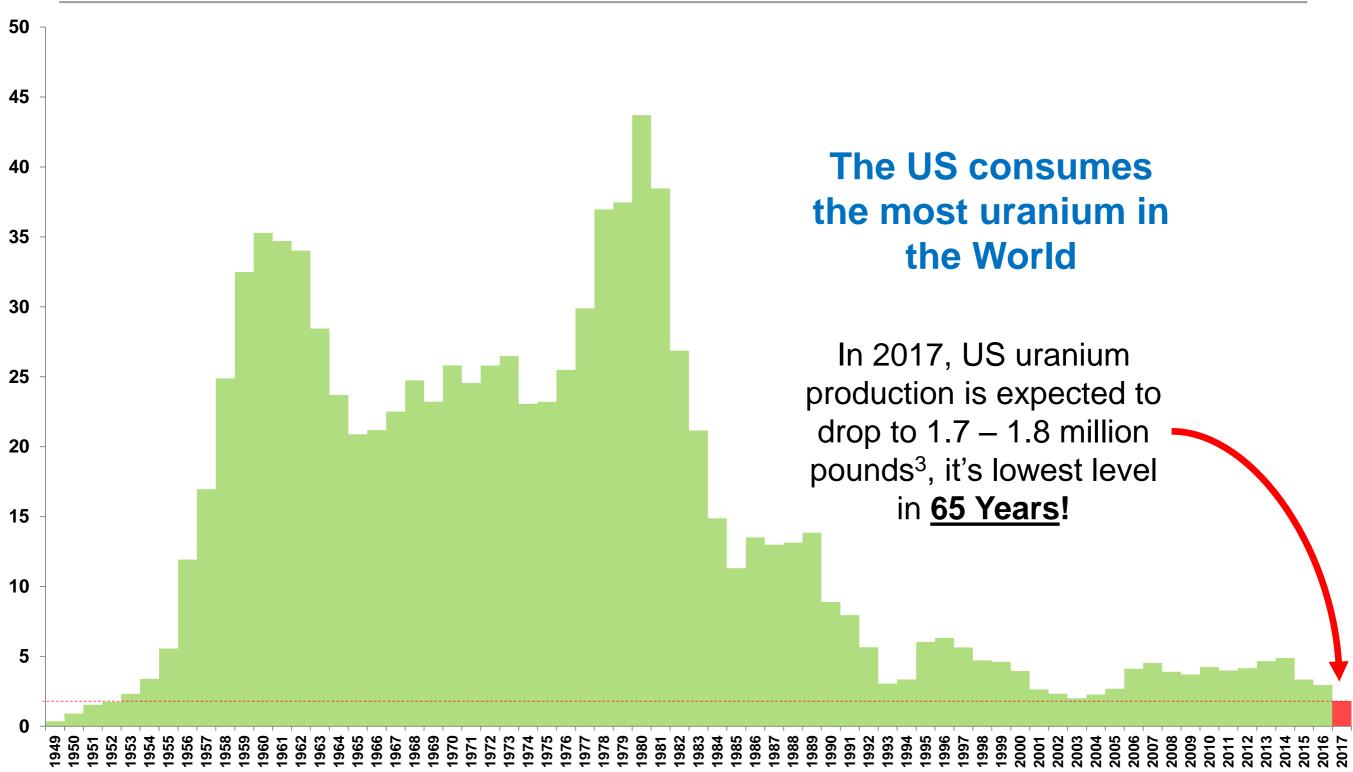
Critical Factors

 Adequate sales prices, market support, and/or contractual commitments for a portion of production

US Production History¹

1949 - 2017

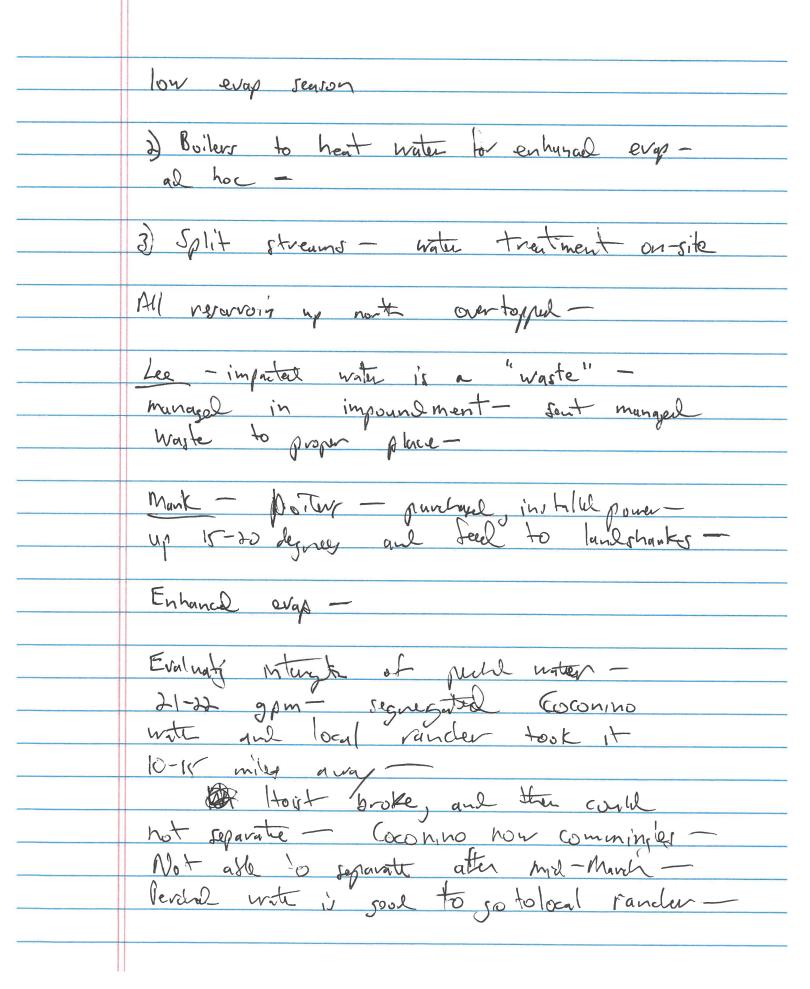




¹ Sources: EIA and company filings. In millions of lbs. U₃O₈

² Based on publicly-announced company production guidance

Campon Mine 6/19/17 her Reku -Charten Finks rimit 1.5 years ago -down 1000' - pendod aguilar in Cocomino wat winter -Site is 12-17 any - all self contained pond 2 2 acres - January WL-1 - Various to 1 freeboal - March Truck to what mera mil in Markimpacted water - mildy - evapor ovation to truck to mill Volume equivant to 2 of grand -ADEQ permit to mange impacted water -poul upsicul 1.5 - 2 rue 3-5 years ago -Not planning to ship additional water -25 d/gallon to transport -Future: D'Get poul day prion to



Stoppe trucky 3-4 necks ago -Will separate Coconino as Leit pratica.

exput pendid agrifu to diminish

over time --Ventreuts system can evap 15-20 gpmFrom: sarah@uraniumwatch.org

To: <u>Jeff Trembly</u>
Cc: <u>Michelle A. Moreno</u>

Subject: RE: Response to complaint to ADWR Number 051517Fields

Date: Thursday, August 03, 2017 8:39:59 AM

Attachments: <u>image001.png</u>

Dear Mr. Trembly,

Thank you for your response regarding Uranium Watch's complaint.

However, I expected to receive a response specifically directed to myself that explains how the complaint was resolved.

One thing I would like to point out is that is is doubtful that Energy Fuels could have directly dispose of the mine water and ground water from the Canyon Mine at the White Mesa Mill, because the water was not 11e.(2) byproduct material (waste from the processing of uranium ore for its uranium content), as defined by the Atomic Energy Act and Nuclear Regulatory Commission and Environmental Protection Agency Regulation. They could "use" the water, but not directly dispose of it in a tailings cell or liquid effluent impoundment.

The Utah Div. of Waste Management and Radiation Control might have given Energy Fuels authorization to directly dispose of the water, but Energy Fuels would have had to submit a license amendment request. If the DWMRC agreed to allow the disposal, there would have been an opportunity for public comment and a hearing, with the possibility of administrative and legal challenges. Energy Fuels did not submit such a license amendment request. However, as Energy Fuels stated, the water was used to process feed material or for other purposes at the Mill.

Given the situation and the misinformation provided by Energy Fuels, it is disappointing that there was no fine imposed, at least to cover the staff time expended by the Arizona Department of Water Resources on this matter.

Sincerely,

Sarah Fields Program Director Uranium Watch PO Box 344 Moab, Utah 84532 435-260-8384

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

Subject: Response to complaint to ADWR Number 051517Fields

From: Jeff Trembly < <u>JTrembly@azwater.gov</u>>

Date: Wed, August 02, 2017 2:44 pm

To: "sarah@uraniumwatch.org" <sarah@uraniumwatch.org>

Cc: "Michelle A. Moreno" < <u>mamoreno@azwater.gov</u>>

Dear Ms. Fields:

The Arizona Department of Water Resources (ADWR) has concluded it inquiries into

the matter raised in your complaint received on May 15, 2017. ADWR's letter to Energy Fuels regarding this matter is attached.

Please contact me if you have any comments or questions. Thank you for contacting ADWR.

Sincerely,

Jeff Trembly, RG

Special Projects Coordinator
Adjudications Program Director
Arizona Department of Water Resources
(602) 771-8425



We have moved. Our new office is located at: 1110 W. Washington St. Suite 310, Phoenix, AZ 85007 Mailing Address: PO BOX 36020, Phoenix, AZ 85067

*Our staff's phone numbers and email addresses will stay the same

Arizona Department of Water Resources Complaint

Complaint ID: 051517Fields **Date:** 5/15/2017 3:38:12 PM

Complaint Filed by

First Name: Sarah Last Name: Fields

Address: PO Box 344

City: Moab

State: UT **Zip:** 84532 **eMail:** sarah@uraniumwatch.org

Confidentiality Request: No

Complaint:

- 1. Violator: Energy Fuels Resources (USA) Inc. (or subsidiary). 225 Union Blvd., Suite 600, Lakewood, Colorado 80228. Phone: 303-974-2140. Fax: 303-974-2141.
- 2. Violation: Violation of Arizona Statute 45-292. Approval required to transport water out of state; application; fee; criteria; hearing. Also violation of 45-293.

Since at least December 2016, Energy Fuels has transported mine water from the Canyon Uranium Mine (Sec. 20, T 29 N, R 3 E), Kaibab National Forest, Coconino County, Arizona, to the White Mesa Uranium Mill, San Juan County, Utah, for use at the Mill. The Canyon Mine and White Mesa Mill are both owned by Energy Fuels.

Over 100 tanker trucks of mine water have been transported to the Mill. The Utah Div. of Waste Management and Radiation Control, which regulates the Mill, does not seem to know what is being done with the water. It is either directly disposed of in tailings impoundments and/or used in the mill processing circuit. Direct disposal of the mine water into tailings impoundments would be a violation of Utah and federal regulations that apply to the mill.

- 3. As far as I can tell from ADWR website, the only current water right used for the Canyon Mine is 55-515772, for their culinary, sanitary, and mine related water use. The water is being withdrawn from the mine shaft. The USFS is in the process of drilling a monitoring well at the mine site. In the future, Energy Fuels must drill another shaft that will be used for ventilation and an emergency escape. It is unclear to me whether the Energy Fuels must have a drilling permit to drill the main shaft and ventilation shaft.
- 4. Duration of violation: From late 2016 to 2017. I do not know if mine water is still being trucked to the White Mesa Mill.
- 5. I have not attempted to contact the violator. The USFS is aware of the transport of excess mine water to Utah. They have been inspecting the mine. The ADEQ is also

Adwr Id: 8780 1 of 2

Arizona Department of Water Resources Complaint

aware of the situation.

6. Related articles and information:

http://www.sierraclub.org/arizona/blog/2017/03/uranium-mine-near-grand-canyon-filling-contaminated-water

http://azdailysun.com/news/local/uranium-mine-deals-with-excess-water/article_1f35d 10b-3802-5083-a5bd-1c3f255363fc.html

https://www.grandcanyonnews.com/news/2017/mar/28/activists-concerned-canyon-mines-disposal-excess-w/

https://www.grandcanyonnews.com/news/2017/apr/04/canyon-mine-completes-drilling-1475-foot-mine-shaf/

USFS Canyon Mine Website:

https://www.fs.usda.gov/detail/kaibab/home/?cid=fsm91_050263

Adwr Id: 8780 2 of 2

From: <u>Jeff Trembly</u>

To: <u>"sarah@uraniumwatch.org"</u>
Cc: <u>Michelle A. Moreno</u>

Subject: Response to complaint to ADWR Number 051517Fields

Date: Wednesday, August 02, 2017 1:44:00 PM

Attachments: <u>image001.png</u>

2017 07-27 Canyon Mine letter.pdf

Dear Ms. Fields:

The Arizona Department of Water Resources (ADWR) has concluded it inquiries into the matter raised in your complaint received on May 15, 2017. ADWR's letter to Energy Fuels regarding this matter is attached.

Please contact me if you have any comments or questions. Thank you for contacting ADWR.

Sincerely,

Jeff Trembly, RG

Special Projects Coordinator
Adjudications Program Director
Arizona Department of Water Resources
(602) 771-8425



We have moved. Our new office is located at: 1110 W. Washington St. Suite 310, Phoenix, AZ 85007 Mailing Address: PO BOX 36020, Phoenix, AZ 85067

*Our staff's phone numbers and email addresses will stay the same

With ce Decker and Energy Fuels Requestelnes I Ensure that poul is expety started in set 2-3 the formal bould be enliance lenguester who net 2-3 the services with treatment on setes. The training water from a perchal early will continue to be separted from months continued when repair is made in reflacion months with a popul was full at the beginning of this willer. This would not have Energy Fields = This isn't reglie water, it is continuated water with water with. Silliens ! to avoid haceles water to Enlaging the poid would require BEPA process (possibly 5 years) There is not assuch room to expand one they don't have plans to do So. Utale this year

TIC with Lee Decker, the for Energy Fuels 5/23/17 Energy vels Resources Canyon Mine near Grand Canyon Mine 30 miles before Tursian con Forest Service Land - respected waste water that mill process

in that the mill process

at its used in Emronne tel congline - No costly to Ship Emronne tel congline - ted of multipartes of site. Wapartes of site. - Doesn't believe the purpose is not - Mondie because April is use - No well of last thuslay

- No well pred to in

They future

the future Freelland Dave Chalmers

D'addy elec livilers to entrain evip in wenter - operational both wither D'alue adv of running evap.

D'alue adv of running evap.

Considera water treatest in site.

This year almost It of paid was full.

Expension to drawsperd the water.

I law of approximate way.

Lis year - unerseed circuems & precip.

hour failed heeds a new part - Red-heired.

Should structed to 4 who ago. mills

Water do transher for free.

(A) - West practice - F12 - Segregate. - KOV!?

