

From: [Frame, Jason R](#)
To: [Partridge, George \(EEC\)](#)
Cc: [Pendergrass, Curt \(CHFS DPH\)](#)
Subject: RE: TNORM disposal in KY
Date: Monday, February 01, 2016 11:36:11 AM
Attachments: [image001.png](#)
[Fairmont Brine plan.pdf](#)

- Number and type of trucks/ volume, etc. of the wastes. 35 vac boxes, unsure of volume but tractor trailer size.
- Dates and time period the shipments were sent. Shipments occurred during August 2015.
- The form or appearance of the waste when it was shipped (before solidification). What does it look like? Varied but typically a brown sludge, with a water layer on top.
- Level of radioactivity. Exposure rates were between 500 uR/hr and 2 mR/hr
- Name of company in Fairmont along with County that contracted with Advanced TENORM Services. Fairmont Brine
- Any knowledge where it was sent for solidification in Ashland, KY (?) prior to being sent to the landfill. See attachment

Jason R. Frame B.S. R.T. (R), Chief Radiological Health Program
Office of Environmental Health Services/Radiation, Toxics and Indoor Air Division
350 Capitol Street, Room 313
Charleston, West Virginia 25301
Office: (304)356-4303
Fax: (304) 558-0524
Email: Jason.R.Frame@WV.gov



From: Partridge, George (EEC) [mailto:George.Partridge@ky.gov]
Sent: Friday, January 29, 2016 3:48 PM
To: Frame, Jason R
Cc: Pendergrass, Curt (CHFS DPH)
Subject: RE: TNORM disposal in KY

Jason;

I will be joining our field inspectors at landfills and waste sites in Eastern Kentucky to investigate our

concerns regarding TENORM disposal.

If you could provide additional information related to our conversation about the shipments by Advanced TENORM Services to Kentucky that would be helpful.

As much detail as possible will be helpful as we review manifests, etc. at the landfills.

Information such as:

- Number and type of trucks/ volume, etc. of the wastes.
- Dates and time period the shipments were sent.
- The form or appearance of the waste when it was shipped (before solidification). What does it look like?
- Level of radioactivity.
- Name of company in Fairmont along with County that contracted with Advanced TENORM Services.
- Any knowledge where it was sent for solidification in Ashland, KY (?) prior to being sent to the landfill.

I know some of the above items we discussed in our conversation but I was so floored with the news I want to be sure I confirmed the understanding we have of the situation before we move forward with site visits.

Also our Assistance Director for the DWM is aware of the situation along with our Hazardous Waste Branch.

I appreciate all you and Curt do for our respective states.

Thanks again for all the time you devoted to corresponding and following up with us.

Look forward to hearing from you!

George

George P. Partridge Jr., PhD, P.E., QEP

Department for Environmental Protection
KY Division of Waste Management
200 Fair Oaks Lane; 2nd Floor (SWB)
Frankfort, KY 40601
(502) 564-6716 ext. 4651



From: Frame, Jason R [<mailto:Jason.R.Frame@wv.gov>]
Sent: Thursday, January 28, 2016 11:09 AM
To: Partridge, George (EEC)
Subject: FW: TNORM disposal in KY

Jason R. Frame B.S. R.T. (R), Chief Radiological Health Program
Office of Environmental Health Services/Radiation, Toxics and Indoor Air Division
350 Capitol Street, Room 313
Charleston, West Virginia 25301
Office: (304)356-4303
Fax: (304) 558-0524
Email: Jason.R.Frame@WV.gov



From: Pendergrass, Curt (CHFS DPH) [<mailto:Curt.Pendergrass@ky.gov>]
Sent: Tuesday, January 19, 2016 4:33 PM
To: Frame, Jason R
Cc: McKinley, Matthew W (CHS-PH); Brock, Stephanie C (CHS-PH)
Subject: RE: TNORM disposal in KY

Hello Mr. Frame,

Thank you for the follow-up e-mail on the purported disposition of WV TENORM wastes here in KY by Advanced TENORM Services of Liberty, KY (<http://advtenorm.com/>). We will follow up with the company's president, Cory Hoskins, and ascertain the nature and extent of their activities. We will also reach out to our colleagues in the Energy and Environment Cabinet Division of Waste Management since they regulate landfills here in KY.

Thanks again for reaching out to me regarding this matter.

Curt Pendergrass PhD
Supervisor, Radioactive Materials Section
Kentucky Radiation Health Branch
275 East Main Street
Mailstop HS1C-A
Frankfort, KY 40621
Tel: 502-564-3700 ext. 4183
Fax: 502-564-1492
E-mail: curt.pendergrass@ky.gov
Website: <http://www.chfs.ky.gov/dph/radioactive.htm>
Pay your fees on line at https://prd.chfs.ky.gov/rad_epay/
Be notified of proposed regulation changes <https://secure.kentucky.gov/Regwatch/>
Dispose of unwanted sources <http://www.crcpd.org/StateServices/SCATR.aspx>

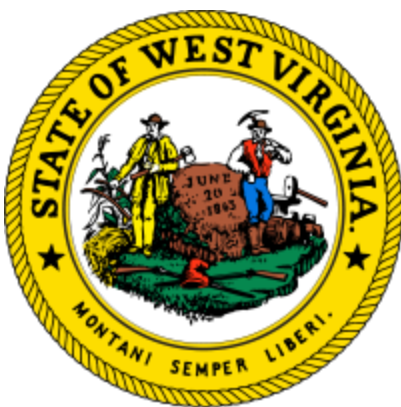


From: Frame, Jason R [<mailto:Jason.R.Frame@wv.gov>]
Sent: Tuesday, January 19, 2016 12:51 PM
To: Pendergrass, Curt (CHFS DPH)
Cc: Webb, April (EEC); George.Patridge@ky.gov; Loyselle, Maridely (EEC); Keffer, Christopher (CHFS Rad Hlth)
Subject: RE: TNORM disposal in KY

Mr. Pendergrass,

I apologize for digging up this old email, but I don't believe I received any further response. I believe a company operating as "Advanced TENORM Services" is continuing to facilitate the disposal of WV waste in KY landfills. Please advise on this issue. Thanks

Jason R. Frame B.S. R.T. (R), Chief Radiological Health Program
Office of Environmental Health Services/Radiation, Toxics and Indoor Air Division
350 Capitol Street, Room 313
Charleston, West Virginia 25301
Office: (304)356-4303
Fax: (304) 558-0524
Email: Jason.R.Frame@WV.gov



From: Pendergrass, Curt (CHFS DPH) [<mailto:Curt.Pendergrass@ky.gov>]
Sent: Tuesday, July 21, 2015 9:45 PM
To: Frame, Jason R
Cc: Webb, April (EEC); George.Patridge@ky.gov; Loyselle, Maridely (EEC); Keffer, Christopher (CHFS Rad Hlth)
Subject: RE: TNORM disposal in KY

Hello Mr. Frame,

While KY does not currently have any regulations dealing with the control and disposal of NORM/TENORM waste generated in the oil and gas industry from hydraulic fracturing, we do have statutes on the books establishing the Central Midwest Interstate Low Level Radioactive Waste Compact of which KY is a member with IL. The compact strictly forbids the disposal of any and all radioactive materials generated outside of IL and KY anywhere in our states. This obviously includes fracking wastes generated in West Virginia. I am Cc'ing my colleagues in the Division of Solid Waste on this e-mail since disposal of wastes containing hazardous materials including NORM/TENORM in landfills here in KY is their regulatory purview. Ohio and Pennsylvania both have regulations addressing the disposal of NORM/TENORM contaminated waste so Advanced TENORM Services might want to check with the authorities in those states to see what is required.

Regards,

Curt Pendergrass, Ph.D.
Supervisor, Radioactive Materials Section
Radiation Health Branch
275 East Main Street
Mailstop HS1C-A
Frankfort, KY 40621
Telephone: 502-564-3700 ext. 4183
Fax: 502-564-1492

This e-mail and any files are protected by the Electronic Communications Privacy Act, 18 U.S.C. Sections 2510-2521. Its intended to be delivered only to the named addressee(s) and its content is confidential and privileged. If you are not the intended recipient or the person responsible for delivering the e-mail to the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing, or copying of this e-mail is prohibited. If you have received this e-mail in error, please notify the sender by replying to this message and delete this e-mail immediately. Nothing in this communication, either written or implied, constitutes or should be construed as a legally binding agreement between the parties with respect to the subject matter herein.

From: Keffer, Christopher (CHFS Rad Hlth)

Sent: Tuesday, July 21, 2015 1:19 PM
To: Pendergrass, Curt (CHFS DPH)
Cc: jason.r.frame@wv.gov
Subject: TNORM disposal in KY

Dr. Pendergrass,

I was contacted this morning by Mr. Jason R. Frame; a member of the West Virginia radiation program. He was inquiring about a West Virginia company's intent to dispose of TNORM from a "fracking" operation here in Kentucky by using the services provided by Advanced TENORM Services L.L.C. ([https://app.sos.ky.gov/ftshow/\(S\(30yqolkfdaebcz4hporeemp4\)\)/default.aspx?path=ftsearch&id=0904260&ct=06&cs=99999](https://app.sos.ky.gov/ftshow/(S(30yqolkfdaebcz4hporeemp4))/default.aspx?path=ftsearch&id=0904260&ct=06&cs=99999)). From Mr. Frame's understanding, Advanced TENORM Services L.L.C. (located in West Liberty, KY) will be solidifying the "fracking" sludge in Ashland, KY and then sending it to a Class D landfill in Irvine, KY. Mr. Frame's question was in regards to whether or not we would allow the disposal of TNORM from other states in the state of Kentucky or send it back to the materials origins. I informed Mr. Frame that our office does not currently have regulation regarding TNORM in place and that each landfill may have their own limits on what they accept or turn away in regards to radiation levels.

If you have any input on this matter please contact Mr. Frame at the e-mail address provided (jason.r.frame@wv.gov).

Christopher J. Keffer
Radiation Health Specialist III
Radioactive Materials Section
275 East Main Street, HS1C-A
Frankfort, KY 40601
Ph: 502-564-3700 x4179
Cell: 502 330-7662
FAX: 502-564-1492

NOTICE OF CONFIDENTIALITY: This e-mail, including any attachments, is intended only for the use of the individual or entity to which it is addressed and may contain confidential information exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any review, use, disclosure, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please contact the sender by reply e-mail and destroy all copies of the original message.