Subject: RE: Solvay (Rhodia) - Port Access Road Project

Date: Thursday, November 5, 2015 at 10:25:46 AM Eastern Standard Time

From: Button, Rich

To: Gene McCall, Moore, Natalie J

CC: Davis, Amber, Generette, Lloyd, Worley, Gregg, Rosnick, Reid

Hi Gene,

Good speaking with you earlier. As noted in previous emails and communications relative to the Solvay Inc. phosphogypsum stack located in North Charleston, SC, the activities (drilling debris and the removal-redistribution of phosphogypsum material/soils within the stack boundary) described below can be considered analogous to stack maintenance, thus would **not** impact the current stack status of "inactive". However, depending on the amount of material removed, it may necessitate additional radon emissions testing. As note before, removing just enough material to construction the support ramp would not require additional testing. But any more than this, could require addition radon monitoring. Please contact me if you have any further questions.

Of note, I am retiring effective 11/30/15 and Lloyd Generette will be assuming my NESHAPS regulatory role. He can be reached at 404-562-9138 and his email is <u>generette.lloyd@epa.gov</u>.

Rick Button Health Physicist Regional Radiation Safety Officer US EPA Region 4 404-562-9135

From: Gene McCall [mailto:gene@mccallenv.com]
Sent: Thursday, November 05, 2015 9:51 AM
To: Button, Rich <Button.Rick@epa.gov>
Cc: Moore, Natalie J <MooreNJ@scdot.org>
Subject: FW: Solvay (Rhodia) - Port Access Road Project

Rick,

It was good speaking with you again. As Natalie and I mentioned, we are running to wire. SCDOT needs to issue the RFP at the end of today.

Would you please confirm that for the drilled pilings, as we discussed at the September 10, 2015 meeting, because no phosphogypsum (PG) would be added to the stack, even if several hundred to several thousand cubic yards were excavated, that excavation through the stack for the drilled piles would not activate the stack. Additionally, please confirm that it is acceptable to place mixed material containing PG back onto the stack, which could occur because of excavation right at the transition from PG to native soils, and that it is acceptable to place soil on top of the stack as an appropriate management technique to prevent erosion.

We understand that a work plan would need to be submitted to the EPA, for EPA's approval, prior to beginning work in the PG stack area.

Please send your email back to both Natalie and me. If you're fine with this, please send without calling, however, if you have any questions or concerns, please call either Natalie (803-737-1252) or me on my cell, as I may be out watching some LIF borings (864-567-1477).

Thank you for your assistance,

Gene

Eugene C. McCall, Jr. McCall Environmental, PA PO Box 3027 Greenville, SC 29602-3027

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gene@mccallenv.com www.mccallenv.com

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From: Rick Button <<u>button.rick@epa.gov</u>>
Date: Friday, August 28, 2015 at 8:26 AM
To: Gene McCall <<u>gene@mccallenv.com</u>>
Subject: Fw: Solvay (Rhodia) - Port Access Road Project

And probably the most relevant email that you needed.

Rick Button Health Physicist Regional Radiation Safety Officer US EPA R4 404-562-9135

From: Button, Rich
Sent: Wednesday, October 15, 2014 1:14 PM
To: Mary Beth Cline
Cc: Rosnick, Reid; Rinck, Todd; Generette, Lloyd
Subject: RE: Solvay (Rhodia) - Port Access Road Project

Mary Beth Cline S&ME, Inc 620 Wando Park Blvd Mt. Pleasant, SC 29464

Dear Ms Cline,

Thank you for your email regarding your request to clarify the potential for classification status change

under the 40 CFR 61.201, Subpart R, or for Radium 226 analysis due to sampling and testing, of the phosphogypsum stack located at the Solvay (formerly Rhodia, Inc) facility 2151 King St Extension, North Charleston, SC, 29405. This activity is being conducted in support of the Charleston, SC Port Authority's Port Access Road Project for which the SC Department of Transportation is considering the construction of an interstate off ramp to support the expansion of the Charleston Port Authority operations.

As noted in my previous emails of March 7 & 20, 2012, per the regulation (40 CFR Part 61, Subpart R), phosphogypsum (PG) can be removed forinvestigative/research purposes (up to 7000 llbs). The rule (61.205) hasspecific handling requirements and any unused PG should be returned to the stack. However, since PG is not being removed for **commerce** (agricultural uses), radium 226 sampling would not be required.I would stress that any PG removed duringdrilling activities, should remain on the stack. But based on theinformation provided thus far, the described activity as it applies tostack status (active vs inactive), would not constitute a change in thestack status per 61.201 or necessitate retesting per 61.203(e), as it is the removal of amounts (of PG) that exceed 7000 lbs for the purpose of **commerce** that triggers the required Radium 226 testing (Section 61.205c & 61.208).

Thus, based on the information provided, the activities described in the Rhodia Inc, Port Access Road Project attachment, would not change the current stack "inactive" classification of the stack, nor necessitate Radium 226 sampling and analysis.

We ask that you please give advance notice to myself and the State of SC prior to testing so that we can observe this testing if necessary. Thank you. If you have any further questions I can be contacted at the number below or via email.

The link below can provide additional information on the applicable regulatory requirements. <u>http://www.epa.gov/radiation/neshaps/subpartr/subpartr.html#Sec</u>. 61.202 Standard.

Rick Button Health Physicist Regional Radiation Safety Officer US EPA 404-562-9135

Sec. 61.205 Distribution and use of phosphogypsum for research and development. [64 FR 5574 February 3, 1999]

Phosphogypsum may be lawfully removed from a stack and distributed in commerce for use in indoor research and development activities, provided that it is accompanied at all times by certification documents which conform to the requirements of Sec. 61.208. In addition, before distributing phosphogypsum to any person for use in indoor research and development activities, the owner or operator of a phosphogypsum stack shall obtain from that person written confirmation that the research facility will comply with all of the limitations set forth in Sec. 61.206(b).

Any person who purchases and uses phosphogypsum for indoor research and development purposes shall comply with all of the following limitations. Any use of phosphogypsum for indoor research and development purposes not consistent with the limitations set forth in this section shall be construed as unauthorized distribution of phosphogypsum.

Each quantity of phosphogypsum purchased by a facility for a particular research and development activity shall be accompanied by certification documents which conform to the requirements of Sec. 61.208. No facility shall purchase or possess more than 7,000 pounds of phosphogypsum for a particular indoor research and development activity. The total quantity of all phosphogypsum at a facility, as determined by summing the individual quantities purchased or possessed for each individual research and development activity, may exceed 7,000 pounds, provided that no single room in which research and development activities are conducted shall contain more than 7,000 pounds.

Containers of phosphogypsum used in indoor research and development activities shall be labeled with the following warning: Caution: Phosphogypsum Contains Elevated Levels of Naturally Occurring Radioactivity. For each indoor research and development activity in which phosphogypsum is used, the facility shall maintain records which conform to the requirements of Sec. 61.209(c).

Indoor research and development activities must be performed in a controlled laboratory setting which the

general public cannot enter except on an infrequent basis for tours of the facility. Uses of phosphogypsum for outdoor agricultural research and development and agricultural field use must comply with Sec. 61.204. **Phosphogypsum not intended for distribution in commerce may be lawfully removed from a stack by an owner or operator to perform laboratory analyses required by this subpart or any other quality control or quality assurance analyses associated with wet acid phosphorus production.**

From: Mary Beth Cline [mailto:MCline@smeinc.com]
Sent: Wednesday, October 15, 2014 9:33 AM
To: Button, Rich
Subject: RE: Solvay (Rhodia) - Port Access Road Project

Good Morning Rick,

Per my voicemail, please see below correspondence from 2012 regarding S&ME conducting environmental assessment for the SCDOT's Port Access Road Project. Solvay has requested an updated response from EPA prior to the assessment. Please respond with your confirmation the planned scope of work will not change the status of the Solvay phosphogypsum stack.

Thank you, Mary Beth.

Mary Beth Cline, P.E.

Project Engineer



S&ME, Inc. 620 Wando Park Boulevard Mt. Pleasant SC 29464 Map Ph: 843.884.0005 Fax: 843.881.6149 Mobile: 843.609.5547 mcline@smeinc.com www.smeinc.com

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From: Rick Button [mailto:Button.Rick@epamail.epa.gov]
Sent: Wednesday, May 02, 2012 7:26 AM
To: Mary Beth Cline
Cc: Kathleen Forney; Todd Rinck
Subject: RE: Rhodia - Port Access Road Project

Mary,

Thanks for the response. The description noted is pretty much what I had presumed, but I wanted to clarify the fact that the phosphogypsum (PG), if any would be mixed in with the various types of industrial derived waste (IDW) as part of the drilling sampling activities on the Rhodia Inc PG stack.

As this use/disposal of PG is similiar to what occurs during laboratory testing, etc, I see no issue with this limited amount of PG in the IDW. Please let both this office and the State of SCDHEC know when you expect sampling to take place. Thank you.

Rick Button Health Physicist/Environmental Scientist Regional Radiation Safety Officer Region 4 EPA, Atlanta, GA 404-562-9135

-----"Mary Beth Cline" <<u>MCline@smeinc.com</u>> wrote: -----

To: Rick Button/R4/USEPA/US@EPA From: "Mary Beth Cline" <<u>MCline@smeinc.com</u>> Date: 05/01/2012 05:08PM Subject: RE: Rhodia - Port Access Road Project Rick,

We intend to collect groundwater samples from the borings. To meet the requirements of the South Carolina Well Standards and Regulations, R.61-71, S&ME will obtain Temporary Monitoring Well Approval from SCDHEC. Well approvals issued by the SCDHEC state that well construction and sampling derived waste including drill cuttings, drilling fluids, and development/purge water should be managed properly and in compliance with applicable requirements. I have attached an copy of the letter for reference.

Sorry for the delayed response. I attempted to get additional information from the Section of SCDHEC that will issue monitoring well approval for this assessment- but, to date haven't gotten a response.

Thanks, Mary Beth.

Mary Beth Cline, P.E.

Project Engineer



S&ME, Inc. 620 Wando Park Boulevard Mt. Pleasant SC 29464 Map Ph: 843.884.0005 Fax: 843.881.6149 Mobile: 843.609.5547 mcline@smeinc.com www.smeinc.com

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From: Rick Button [mailto:Button.Rick@epamail.epa.gov]
Sent: Wednesday, April 18, 2012 2:21 PM
To: Mary Beth Cline
Subject: RE: Rhodia - Port Access Road Project

Mary Beth,

I do have one followup question. Why is the soil/PG IDW being drummed up at all during drilling/sampling? Are

there contaminants in it that required disposal? Thanks.

Rick Button Health Physicist/Environmental Scientist Regional Radiation Safety Officer Region 4 EPA, Atlanta, GA 404-562-9135

^w "Mary Beth Cline" ---04/18/2012 02:00:59 PM---Rick,

From: "Mary Beth Cline" <<u>MCline@smeinc.com</u>> To: Rick Button/R4/USEPA/US@EPA Cc: <<u>humphrdm@dhec.sc.gov</u>> Date: 04/18/2012 02:00 PM Subject: RE: Rhodia - Port Access Road Project

Rick,

The purpose of this assessment is to understand 1) any potential environmental concerns and 2) the process and restraints a contractor will encounter during construction of the portion of the new Port Access Road that will be located within the footprint of the Rhodia PG stack.

Currently, we have proposed to collect samples using a direct push sampling rig. This method of sampling will not generate drilling mud similar to mud rotary techniques described in your email. We should be able to segregate PG from native soil during the environmental exploration. However, this may not be possible during construction. The contractor may not have a method of keeping the PG separate from the underlying soils. We can implement a plan for the contractor based on our findings from this assessment.

Under the current proposed scope of work, we anticipate generating approximately one (1) drum of IDW (PG and soil) from the boring on the stack. An additional drum may be required for decontamination water.

Thanks, Mary Beth.

From: Rick Button [mailto:Button.Rick@epamail.epa.gov]
Sent: Tuesday, April 17, 2012 10:32 AM
To: Mary Beth Cline
Cc: humphrdm@dhec.sc.gov
Subject: RE: Rhodia - Port Access Road Project
Dear Ms Cline,

I have a question about the removal of phosphogypsum as IDW from the stack. What is the purpose of drumming up this phosphogypsum (PG) as IDW? My assumption is that the PG is mixed with the drilling fluids and retained/stored in drums as it would be impossible to separate. Is this assumption correct? And if so, how much PG or how many drums do you estimate will be removed? I don't expect this to be a problem, but I do want to ensure that I understand exactly what is being done and how much PG may be removed that is not related to actual laboratory analysis. Thanks.

Rick Button Health Physicist/Environmental Scientist Regional Radiation Safety Officer Region 4 EPA, Atlanta, GA 404-562-9135

"Mary Beth Cline" ---04/17/2012 10:17:57 AM---Mr. Button, The attached letter from the SC Department of Health and Environmental Control (SCDHEC)

From: "Mary Beth Cline" <<u>MCline@smeinc.com</u>> To: Rick Button/R4/USEPA/US@EPA Cc: "Humphries, Diane" <<u>humphrdm@dhec.sc.gov</u>>, "Chuck Black" <<u>CBlack@smeinc.com</u>> Date: 04/17/2012 10:17 AM Subject: RE: Rhodia - Port Access Road Project

Mr. Button,

The attached letter from the SC Department of Health and Environmental Control (SCDHEC) was received in response to our March 6, 2012 Rhodia, Inc. – Port Access Road Project letter. The SCDHEC letter states any phosphogypsum that will not be collected for laboratory analysis is to remain on the stack unless prior EPA approval for the removal is obtained.

What additional information does the EPA need to give approval for removal and disposal of drummed IDW?

Thanks, Mary Beth.

Mary Beth Cline, P.E. Project Engineer

ENGINEERING INTEGRITY.

S&ME, Inc. 620 Wando Park Boulevard Mt. Pleasant SC 29464 Ph: 843.884.0005 Fax: 843.881.6149 Mobile: 843.609.5547 mcline@smeinc.com www.smeinc.com This electronic message is subject to the terms of use set forth at www.smeinc.com/email. If you received this message in error please advise the sender by reply and delete this electronic message and any attachments. From: Rick Button [mailto:Button.Rick@epamail.epa.gov] Sent: Tuesday, March 20, 2012 2:47 PM To: Mary Beth Cline Cc: Humphries, Diane; Ken Warren Subject: RE: Rhodia - Port Access Road Project Mary, That is correct. The testing & sampling activities noted in your letter of March 06, 2012 (Port Access Road Project) and below, would not change the status of the Rhodia phophogypsum stack. **Rick Button** Health Physicist/Environmental Scientist **Regional Radiation Safety Officer** Region 4 EPA, Atlanta, GA 404-562-9135 $\overline{}$ This Email message contained an attachment named image001.jpg which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted. This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email. If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name. For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900. *********************** ATTACHMENT NOT DELIVERED ********************************

[attachment "Temporary Monitoring Well Approval Example.pdf" removed by Rick Button/R4/USEPA/US]

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