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Alexander B. Grannis  
Commissioner

**M E M O R A N D U M**

June 3, 2010

TO: Attached Service List

FROM: Edward Buhrmaster, Administrative Law Judge

RE: Chemung County Landfill Permit Modification  
DEC Project No. 8-0728-00004/00013

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This confirms the conference call held on June 1 with counsel for the issues conference participants. The call was held primarily to address NEWSNY's request that I strike submittals made on behalf of RFPLC in response to the following April 2010 reports received at the issues conference on April 28: (1) the Barton & Loguidice sound level monitoring summary report (Exhibit No. 9) and (2) the CoPhysics radiological survey report on Marcellus shale drill cuttings (Exhibit No. 10). Because these reports were not part of the application materials available prior to the petition deadline, and were not available for careful review prior to the issues conference, I set a May 19 deadline for RFPLC and DEC Staff to make submittals responding to the information contained in the reports. As confirmed in a memorandum of May 6, I set the same deadline for RFPLC and DEC Staff to provide their positions as to how use of radiation detectors, discussed in Exhibits No. 13 and 14, may address RFPLC's concern about the disposal of potentially highly radioactive Marcellus shale gas drilling wastes (Item No. 1 in RFPLC's petition, Exhibit No. 7.)

DEC Staff responded in a letter of May 18, 2010, from counsel Lisa Schwartz, as to which there is no objection. RFPLC responded in a letter of May 18, 2010, from counsel Gary Abraham, which was accompanied by letter from RFPLC's noise expert, Stephen Szulecki; a report by Dr. Marvin Resnikoff, RFPLC's previously identified expert on radioactive waste management; and a letter from Dr. Anthony Ingraffea, a newly identified engineering expert. An additional letter, from Dr.

Conrad Volz, an environmental health expert, was provided by RFPLC under separate cover.

In its May 21 letter, NEWSNY objects to RFPLC's submittals as going above and beyond a response to Exhibits No. 9 and 10. According to NEWSNY, the submittals evidence a blatant attempt to bolster RFPLC's petition by raising new arguments not previously advanced, rearguing arguments previously made and offering further information (which NEWSNY says preexisted the issues conference) in an attempt to bolster such arguments, while offering two proposed expert witnesses (Dr. Ingraffea and Dr. Volz) not previously disclosed. NEWSNY moves to strike the aforementioned submittals and, to the extent they are not stricken, requests an opportunity to respond to them. During our conference call, DEC Staff said that it joins NEWSNY's motion, noting that I had restricted Staff's and RFPLC's responses to the information in the two reports, and that addressing additional information in RFPLC's papers would be a drain on Staff resources.

I hereby strike portions of RFPLC's submittals, as discussed below, and afford NEWSNY and DEC Staff an opportunity to respond to the material not stricken.

#### Radioactivity Issue

As noted above, the submittals of Dr. Resnikoff, Dr. Ingraffea and Dr. Volz bear on the proposed radioactivity issue, where RFPLC offers to prove that disposal of Marcellus shale gas waste streams in the Chemung County landfill does not comply with Part 360, and argues that the permit should be modified to specifically prohibit acceptance of these waste streams. RFPLC's claims were raised in its petition on the basis of Dr. Resnikoff's analysis and proffered testimony. NEWSNY responded with the CoPhysics report, which involved a screening analysis of confirmed Marcellus shale samples collected at rig sites in the northern tier of Pennsylvania, and drill cuttings as delivered to three of NEWSNY's landfills. After analysis for total radioactivity levels, the report concluded that the rock cuttings from the Marcellus shale gas drilling operations have radionuclide levels so low that they do not pose any environmental health problem and are acceptable for disposal at NEWSNY's Part 360 landfills, particularly with the installation of portal radiation monitors at the truck scales. The CoPhysics report did not include an evaluation of pipe scale, brine filtrates and associated sludges, and the report said that the detection system is to ensure that only acceptable drilling cut

rock is received at the landfills, and that pipe scale, filtrates or sludges, which the report said are known to contain elevated levels of naturally occurring radioactive material, are not inadvertently disposed.

RFPLC has offered three submittals in response to the information in the CoPhysics report, each of which is discussed below.

- - Resnikoff report of May 19, 2010

Dr. Resnikoff's report contains sections that address NEWSNY's proposed use of radiation detectors (Section 5.3) and alleged mistakes in the methodology employed in the CoPhysics report (Section 6.0). During the conference call, NEWSNY and DEC Staff acknowledged no objection to these sections, and, since they clearly respond to NEWSNY's submittals offered at the issues conference, I shall receive them as part of the conference record. The remainder of Dr. Resnikoff's report is not a response to NEWSNY's submittals and contains information that could have been provided in his initial memorandum. Also, that memorandum already contains an overview of the drilling and production processes, which were discussed at the issues conference as well. Therefore, except for the two sections identified above, I hereby strike the May 19 report, and it will not be considered in my issues rulings.

- - Ingraffea letter of May 17, 2010

Dr. Ingraffea writes that whether the CoPhysics report is accurate is less important than whether it is relevant to this matter, as he claims there is no information in the CoPhysics report that allows the reader to determine whether the waste sampled and tested, as reported, originates from Marcellus shale. During our call, NEWSNY counsel said that the rig site samples were derived from horizontal drilling, citing references in the report to data having been collected about the lateral distance into the formation from which cuttings were taken. To the extent that the Ingraffea letter challenges the relevance of the CoPhysics report, I am receiving it as responsive to my directive, and allowing NEWSNY the opportunity to provide whatever additional information it has about where the samples were taken. However, the rest of the report purports to be a characterization of the process by which drill cuttings are generated at a Marcellus shale gas well, the nature of cuttings waste, and the processes that explain how the waste becomes concentrated with natural radioactivity in the shale. This

discussion and an overview of Dr. Ingraffea's observations at a drilling pad last month are not responsive to the information in the CoPhysics report, and are hereby stricken.

- - Volz letter of May 19, 2010

Like Dr. Ingraffea, Dr. Volz writes that it is not clear from the CoPhysics report that samples were taken from and are scientifically representative of waste that originates from the horizontal portion of a Marcellus shale drilling operation, which he says is known to be enriched in various naturally occurring radionuclides in the uranium-238 decay chain. These claims are responsive to the information in the CoPhysics report, and the letter shall be received as confirmation of them, with an allowance for NEWSNY to respond. On the other hand, the letter also claims that drill cuttings should be assessed for radon activity prior to a determination whether to accept the cuttings at the landfill. This claim, included at the end of the letter, goes beyond a response to the analysis actually contained in the CoPhysics report; for that reason it is hereby stricken.

NEWSNY objects to any consideration of the Volz and Ingraffea submittals because these experts were not identified in RFPLC's petition. However, my allowance for a response to the information in the CoPhysics report was not limited in terms of who could respond; it was limited only in terms of scope.

NEWSNY also objects to any consideration of RFPLC's submittals responding to the CoPhysics report, on the ground that the radioactivity issue proposed by RFPLC is not properly before me. As I confirmed during our conference call, while I maintain reservations about whether this issue is relevant to consideration of the proposed permit modification (which is to raise the landfill's maximum waste acceptance limit) I have not yet ruled on that point. I appreciate that NEWSNY is requesting summary dismissal of any issue relating to the particular wastes that are currently being received at the landfill, including wastes containing naturally occurring radioactive material.

Finally, NEWSNY objects to the argument in Mr. Abraham's letter of May 18, noting that it should have been part of RFPLC's petition. To the extent that Mr. Abraham's letter questions whether the CoPhysics report addresses wastes originating from horizontal drilling in the Marcellus shale (as these wastes are understood to be more radioactive than wastes from the vertical drilling leg) I shall receive at as responsive

to the CoPhysics report. On the other hand, I hereby strike the portion of the letter that continues the argument from the petition and issues conference as to whether cutting wastes are processed and concentrated and therefore inappropriate for disposal in a Part 360 landfill. The conference participants' positions on this point are already known, and additional elaboration is not necessary. I shall allow and will consider Mr. Abraham's argument defending Dr. Resnikoff's expert credentials in light of NEWSNY's criticism based on the Finestone matter, as I do not think Mr. Abraham had an adequate opportunity to offer such argument at the issues conference. I hereby strike the excerpt from the hazardous waste permit (referenced in Abraham footnote 3) and the Scientific American article (referenced in Abraham footnote 6) as beyond the scope of the response I solicited and irrelevant to the particular issues proposed in the petition.

#### Noise Issue - - Szulecki letter of May 18

I shall receive the Szulecki letter in its entirety as responsive to the Barton & Loguidice sound level monitoring report of April 2010. The letter includes both a critical review of the report as well as additional straight line modeling to confirm RFPLC's contention that landfill operations will create an exceedance of the rural residential noise limit established at 6 NYCRR 360-1.14(p). The letter also claims that the Caterpillar D6R bulldozer, identified in the Barton & Loguidice report as one of the working face equipment pieces, exceeds the sound level allowed for it pursuant to 6 NYCRR 360-1.14(p)(4). No issue was proposed as to 6 NYCRR 360-1.14(p)(4) in the petition; however, it shall be considered as a possible issue for adjudication in conjunction with the broader proposed issue of noise from the entire landfill, given the identification of the bulldozer in the Barton & Loguidice report.

NEWSNY objects to the additional modeling in Mr. Szulecki's May 18 letter as a new offer of proof by RFPLC as opposed to an analysis and critique of the work done by Barton & Loguidice. However, I view the modeling as intended to show that a real question remains as to whether compliance with the Part 360 standard can be maintained [see definition of "substantive" issue at 6 NYCRR 624.4(c)(2)], and that Mr. Szulecki's criticisms are therefore meaningful.

During our conference call, NEWSNY proposed the possibility of real-time monitoring of noise throughout landfill operations, with a requirement that operations be throttled back

(accomplished by a temporary shutdown, with trucks kept from the working face) if any noise exceedance is projected. NEWSNY proposed that monitoring could be accomplished with a calibrated monitoring station, with data recorder and warning system, located on property controlled by the landfill and facing in the direction of the most sensitive off-site receptors. Though RFPLC would prefer modeling in the first instance to provide a reasonable assurance that noise would be kept within regulatory limits, RFPLC said it would be willing to discuss monitoring options with NEWSNY and DEC Staff. As I am not striking Mr. Szulecki's May 18 submittal, NEWSNY's response may include a real-time monitoring proposal as a basis for perhaps eliminating any issue that might be identified for adjudication under 6 NYCRR 360-1.14(p).

As discussed during our conference call, the schedule for additional submittals is as follows:

(1) NEWSNY shall have until June 9 to respond to any portions of RFPLC's submittals that have not been stricken.

(2) RFPLC shall have until June 30 to respond to any additional submittal that NEWSNY makes.

(3) DEC Staff shall have until June 30 to respond both to RFPLC's submittals to the extent not stricken, and any response to them by NEWSNY. This would include any response DEC Staff chooses to make in relation to Mr. Szulecki's May 18 letter.

#### DEC Staff Information Request

DEC Staff issued a letter (Exhibit No. 8) dated April 27, 2010, requesting that NEWSNY and the County provide additional information about two particular waste streams received at the landfill, both from producing natural gas well facilities. After our conference call, under a cover letter of June 1, NEWSNY provided its response to the April 27 letter, as well as a copy of a procedure that has been submitted to DEC relative to the operation of the radioactivity detectors installed at the landfill and a protocol to be followed if radioactivity is detected beyond a certain threshold. During our conference call, NEWSNY said it was experimenting with the detectors but that they would not be operational until Staff approves a protocol for them.

At the issues conference, DEC Staff said that the information provided in response to its April 27 letter could

affect Staff's position on NEWSNY's proposed permit modification and cause Staff to reassess the structure of its draft permit. To the extent DEC Staff adjusts its position, I and the other issues conference participants need to be notified. DEC Staff said it would respond by June 30 to the information provided by NEWSNY in response to its April 27 letter. I am not soliciting a response from RFPLC; I directed that NEWSNY provide the information to RFPLC at the same time it was transmitted to DEC Staff because RFPLC could request the information from DEC under the Freedom of Information Law (FOIL), and because transmittal from NEWSNY directly would be more expeditious.

If DEC Staff and NEWSNY agree on a detector protocol and the detectors begin operating, NEWSNY shall advise us. Should any truck carrying a Marcellus shale waste stream set off the detector alarm, NEWSNY shall advise us as to how the incident was handled, including any involvement by DEC Staff.

At this point I am reviewing the transcripts of the legislative hearing and issues conference, with the expectation that I will make one set of rulings on issues and party status. Once my transcript review is completed, I will circulate a list of proposed transcript corrections, and an opportunity will be provided to you to state any objections to my corrections, and to propose others of your own.

Thank you for your attention to this matter.