

# *Draft Talking Points*

## **for DEC Hearing on Hakes Permit Applications and FSEIS Thursday, June 27, 2019,**

1. DEC must conduct an adjudicatory proceeding on the issue of radium in the Hakes landfill beginning with an issues conference to address the factual disputes between area residents and the landfill regarding the significance of the landfill's leachate test results.
2. Hakes is requesting less radioactivity testing in its permit application documents. Its proposed Environmental Monitoring Plan removes the requirement that the landfill test its leachate for gamma emitters such as Lead-214 and Bismuth-214. This is a change from the current Environmental Monitoring Plan which requires gamma spectroscopy tests using EPA Method 901.1.
3. Under the proposed change, the landfill will only have to test its leachate for Radium-226, Radium-228 and Total Uranium.
4. Previous tests have not found much radium in the leachate. But the presence of radium in the landfill is demonstrated by the presence of high levels of Lead-214 and Bismuth-214 which are breakdown products in the radium decay chain.
5. The gamma spectroscopy tests of the landfill's leachate show levels of up to 1.05 million pCi/liter of radon in the air of the landfill.
6. Contrary to claims in the FSEIS, the geology of this area is not an explanation for these high levels of radon in the landfill. Home radon tests show levels in the range of 4 pCi/liter, not levels of up to 1.05 million pCi/liter.
7. DEC and Hakes dispute the validity of the gamma spectroscopy tests using EPA Method 901.1 conducted by the landfill's laboratories despite the fact that this is a standard and widely used test method for gamma emitting radionuclides in drinking water and is appropriate to use for the landfill leachate.
8. The reason we think radium is not showing in the leachate test results is because the radium in the landfill is in a high and dry location, and is not directly dissolving into the leachate. But the radium is continuously decaying into radon, a heavy gas that is water soluble. The radon sinks through the pores of the landfill down to the leachate, dissolves in the leachate and decays into lead and bismuth.
9. The problem of the radium in the landfill needs to be addressed now, before the radium is exposed to water and dissolves into the leachate and local water supplies. This could happen when the proposed expansion is tied into the existing landfill.

10. DEC must address the evidence of radium breakdown products in the landfill's leachate test results before the Department issues a positive findings statement on the FSEIS for the Hakes expansion project.
11. SEQRA requires that DEC take a hard look at possible environmental impacts and DEC's failure to give serious consideration in the FSEIS to evidence of radium in the landfill does not meet that standard.
12. I urge DEC to conduct an issues conference on the factual issues regarding radium in the Hakes landfill.

06/24/19