

10 December 1996

Re: NEPA Call-In Technical Inquiry 0006 - Construction Near a  
Landfill

Dear NEPA Call-In User:

This letter is in response to your November 18, 1996 request for information on a lease/construction for Federal Bureau of Investigation (FBI) office space near a landfill. You stated GSA has been tasked with a lease/construction and one of the sites under consideration is adjacent to a 30 year old construction and demolition rubble landfill that has been closed for approximately 22 years. The landfill is owned by a city of in New York. You stated methane gas emanating from the landfill can be smelled at the potential construction site, however, the offerer has stated common municipal garbage was never disposed of at the landfill. Specifically you would like to know:

1. What is the property owners responsibility under the National Environmental Policy Act (NEPA) to report this?
2. What are GSA's disclosure requirements concerning the methane?
3. What concerns should GSA have regarding the methane gas?

Consideration of the property would commit GSA to prepare either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) in accordance with the NEPA. There are no specific reporting requirements under NEPA, however, there are implied reporting requirements. EAs and EISs are public documents, and Title 40 Code of Federal Regulations (CFR) Part 1503, "Commenting" (enclosed) specifically directs an agency to publicize the availability of their draft EIS. During the NEPA process all significant impacts to the human environment must be identified and assessed. Since an EA or EIS, developed in accordance with NEPA, is intended to be a decision document, pertinent information, including such issues as potential site contamination, is to be fully and fairly discussed. Potential environmental contamination at a site should be included and evaluated in the EA or EIS's discussion of impacts during construction.

If GSA decides to pursue the project, it must publish a notice in the Federal Register in accordance with 40 CFR 1501.7, "Scoping" (enclosed), announcing the decision to prepare an EA or EIS. NEPA Call-In's reference library contains copies of sample Scopes of Work (SOW) for these activities which can be provided upon request, or can be found on our World Wide Web home page at [www.gsa.gov/pbs/pt/call-in/nepa.htm](http://www.gsa.gov/pbs/pt/call-in/nepa.htm).

NEPA Call-In contacted the Resource Conservation and Recovery Act (RCRA), Superfund Amendments and Reauthorization Act (SARA) Title III, Superfund, and Emergency Planning and Community Right to Know (EPCRA) Hotline, (800) 424-9346, for further information on reporting requirements. Their representative stated there are reporting requirements under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) which apply to the owner or operator of a facility and would apply to the present owner of the landfill. The representative stated methane is not a hazardous substance, but CERCLA, Title 42 United States Code 9604, Section 104, "Response Authorities" (enclosed), requires removal and/or remedial action whenever there is a release or threat of

release of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare. The representative stated there are additional reporting requirements under RCRA. 40 CFR 258.23, "Explosive Gases Control" (enclosed), requires owners/operators of municipal solid waste landfills (MSWLF) to ensure the following:

1. Methane concentration generated by the facility does not exceed 25% of the lower explosive limit for methane in facility structures or at the facility property boundary;
2. A routine methane monitoring program is implemented; and
3. If methane gas levels exceeding the lower explosive limit are detected, the owner/operator notifies the State Director.

The lower explosive limit is defined as the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 degrees Celsius at atmospheric pressure.

GSA does not have an obligation to report site methane levels unless they acquire the site; it lies partially over the landfill; and is emitting methane at levels above the lower explosive limit.

We then contacted Dr. Dick Forgea, Environmental Engineer, Regional office, New York State Department of Environmental Conservation, (518) 357-2243, for information on any additional State disclosure requirements. Dr. Forgea stated the current owner/operator of the landfill and GSA would have no additional disclosure requirements for the State of New York concerning methane. Dr. Forgea also had specific information about the landfill in question and stated he would provide a copy of a 1993 site investigation report for the landfill, which we will forward upon receipt. Dr. Forgea stated the site investigation confirms the landfill, located in the city in New York, is emitting methane gas and did accept municipal solid waste (MSW) in addition to construction/demolition debris. He also stated the site investigation shows only approximate boundaries due to the age of the landfill. The State's site investigation report includes information on the levels of methane and other gases emanating from the site at the time of the investigation. You may be smelling these other gases since methane is odorless.

NEPA Call-In contacted Mr. Joel Kaplan, Research Scientist, Bureau of Toxic Substance Assessment, New York State Department of Health, (518) 485-6376, for information on the health effects of methane. Mr. Kaplan provided information (enclosed) developed by his office concerning methane. Methane is an explosive gas with a flammability and explosion limit in air in the range of 5% to 15% by volume. Methane is also an oxygen displacing asphyxiant, and if present in high concentrations, there is a danger of suffocation. Individuals who continue to breathe high levels of methane may become dizzy, lose consciousness, or experience difficulty in breathing due to lack of oxygen. The ingestion of drinking water containing methane has not been shown to produce any adverse health effects although the presence of contaminants in water supplies is undesirable. Lastly, there are no standards or guidelines for methane in drinking water, and no occupational standards or guidelines for acceptable levels of methane in the workplace air.

Because the proposed site for the FBI office space is adjacent to the landfill, NEPA Call-In recommends GSA conduct a Phase 2 Environmental Site Assessment (ESA), in accordance with the American Society for Testing and Materials (ASTM). NEPA Call-In can provide a copy of the

ASTM guidelines if needed.

In summary, GSA has no disclosure requirements for methane on property it does not own. If GSA prepares an EA or EIS, pertinent information including such issues as site contamination should be fully and fairly discussed and provided to the appropriate officials and the public. Before GSA decides to acquire the site, NEPA Call-In recommends conducting a Phase 2 ESA to determine what impact the landfill may have on the proposed building site and to further investigate the odiferous gases. If the site is not located on any part of the land fill, there are no disclosure requirements concerning methane. If the site is partially located on the landfill, acquisition of the site will trigger reporting requirements under CERCLA, RCRA, and the State which apply to the owner/operator of the facility.

The materials in this TI have been prepared for use by GSA employees and contractors and are made available at this site only to permit the general public to learn more about NEPA. The information is not intended to constitute legal advice or substitute for obtaining legal advice from an attorney licensed in your state and may or may not reflect the most current legal developments. Readers should also be aware that this response is based upon laws, regulations, and policies in place at the time it was prepared and that this response will not be updated to reflect changes to those laws, regulations and policies.

Sincerely,

(Original Signed)

NEPA Call-In Researcher