

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

APR 17 2012

REPLY TO ATTENTION OF

Special Projects Branch

SUBJECT: Sewer Sampling Results as part of the current Data Gap Investigation for the Former Guterl Specialty Steel Corporation, City of Lockport, Niagara County, New York

Mr. Norman Allen Director of Engineering City of Lockport One Locks Plaza Lockport, NY 14094

Dear Mr. Allen:

As part of the current Data Gap Investigation for the Former Guterl Specialty Steel Formerly Utilized Sites Remedial Action Program (FUSRAP) Site, the U.S. Army Corps of Engineers performed radionuclide sampling of unfiltered liquids and solids from within the City of Lockport's sanitary sewer at two locations (sampling locations are identified in Figure 1). The sampling results are presented in the attached Tables 1 and 2.

The results for radionuclides in solids are presented in Table 1. The maximum radionuclide concentrations detected in the solids are 0.44 picocuries per gram (pCi/g) of thorium-232 and 4.77 pCi/g of uranium-238.

The results for radionuclides in liquids are presented in Table 2. The maximum radionuclide concentrations detected in the liquids are 0.02 pCi/L of thorium-230 and 10.9 pCi/L of uranium-234.

For the city's informational purposes only, the Corps has provided as a point of reference the following screening levels developed by the United States Nuclear Regulatory Commission and the New York State Department of Environmental Conservation. These levels were developed to protect human health and the environment from exposure to radioactivity which may be released to the environment. For the solid results, surface soil screening values were developed by the United States Nuclear Regulatory Commission for screening sites which hold a license for radioactive material and are undergoing decommissioning, following 10 CFR Part 20. Although the Guterl Site is not subject to this regulation, these screening values are useful in evaluating the relative risk posed from the subject radionuclides. These surface soil screening values are found in Table 1. The concentrations of radioactivity measured in solid samples collected by the Corps from the sewer are below these screening levels.

The United States Nuclear Regulatory Commission and the New York State Department of Environmental Conservation regulate the discharge of licensed radioactive materials to sanitary sewer systems under 10 CFR Part 20 and 6NYCRR Part 380, respectively. Both regulations provide the same discharge limits. Although these regulations are not directly applicable to these results, they are provided for comparison purposes. Table 2 presents the discharge limit for thorium and uranium isotopes as presented in 10 CFR Part 20. None of the liquid samples collected by the Corps in the City of Lockport's Sewer System exceed the discharge limits for radionuclides established by 10 CFR Part 20.

A copy of this correspondence is being provided to the City Mayor. Please contact me at (716) 879-4395 if you have any questions about the information discussed above, or general questions about ongoing investigations at the former Guterl Specialty Steel Site.

Sincerely,

Linda M. Houston, P.G., PMP Project Manager

Enclosures

TABLE 1 CITY OF LOCKPORT SEWER SAMPLING RESULTS SOLIDS

	-		3	OLIDO		
Field Sample ID Sample Date		City of Lockport Sewer #1 US-0001		City of Lockport Sewer #2 US-0002		10 CFR Part 20. 1402 ^a Soil Screening Levels
Thorium- 228	pCi/g	0.27		0.47		4.7
Thorium- 230	pCi/g	0.44		0.32		1.8
Thorium- 232	pCi/g	0.22		0.44		1.1
Uranium- 234	pCi/g	3.55		4.37		13
Uranium- 235	pCi/g	0.2		0.21		8
Uranium- 238	pCi/g	3.72		4.77		14

TABLE 2 CITY OF LOCKPORT SEWER SAMPLING RESULTS LIQUIDS

	-		No. 1	COIDO		
Field Sample ID Sample Date		City of Lockport Sewer #1 UW-0001		City of Lockport Sewer #2 UW-0002		10 CFR Part 20. 2003 ^b Sewer Discharge
Thorium- 228	pCi/L	-0.002	U	0.050	UJ	2,000
Thorium- 230	pCi/L	0.020	J	-0.005	UJ	1,000
Thorium- 232	pCi/L	0.009	U	-0.005	UJ	300
Uranium- 234	pCi/L	10.900		0.430		3,000
Uranium- 235	pCi/L	0.610		0.030		3,000
Uranium- 238	pCi/L	10.400		0.440		3,000

a- The Nuclear Regulatory Commission screening levels for soils are provided for comparison only.
 b- The Nuclear Regulatory Commission screening levels for discharge to sewers are provided for comparison only.
 pCi/g= picoCuries per gram

pCi/L= picoCuries per liter

J= Estimated

U= Non-detect

