rates received by someone trespassing in Building 8 (for 4 hours a week for 6 months of the year for 10 years) could exceed acceptable targets, the actual radiological doses received by the Corps and contractor investigators taking samples in that building were below health and safety monitoring detection limits. Uranium in groundwater below some areas of the site could pose unacceptable risks if the site groundwater were to be used as a source of potable drinking water.

Screening Level Ecological Risk Assessment (SLERA)

A Screening Level Ecological Risk Assessment (SLERA) was also performed to evaluate potential risks to plants and animals (ecological receptors) from both external and internal exposure to radionuclides and total uranium from soil, sediment, surface water, and food items that may have bioaccumulated site-related contaminants. Some potential risks to ecological receptors at the site were identified based on the SLERA. However, given the localized nature of the exceedances of the screening levels used in the assessment, as well as the current and future use of the site, further assessment and considerations of ecological risks are not necessary. Although some limited patches of habitat exist on abandoned portions of the site, much of the Guterl Site is actively disturbed or occupied by buildings and paved areas. There are no sensitive habitats on site which require protection. The site is not currently managed for ecological purposes and the creation of an ecological preserve on-site in the future is unlikely.

Next Steps

Since FUSRAP-related materials have been identified at the Guterl Site in excess of media-specific HHRA and SLERA screening levels, the appropriate next step is to conduct a Feasibility Study which will use the data gathered during the RI to evaluate actions that may be taken to reduce the risk from exposure to the FUSRAP-related contamination to an acceptable range.

Administrative Record File

The Corps maintains an Administrative Record File which contains documents that will form the basis for the selection of response actions at the Guterl Specialty Steel Corporation Site.

We maintain two locations listed below for the convenience of the public. If you would like to review the file at the public library, please call ahead to check on their operating hours. If you would like to visit the USACE office, please call ahead for an appointment.

Lockport Public Library
23 East Avenue
Lockport, New York 14095
716-433-5935

U.S. Army Corps of Engineers
1776 Niagara Street
Buffalo, New York 14207
800-833-6390 (Option 4)

U.S. ARMY CORPS OF ENGINEERS – BUFFALO DISTRICT FUSRAP TEAM
1776 NIAGARA STREET, BUFFALO, N.Y. 14207
Phone: 800-833-6390 (Option 4)
Email: fusrap@usace.army.mil
Website: www.lrb.usace.army.mil/fusrap/nfss/index.htm

Former Guterl Specialty Coporation Steel Site Remedial Investigation Fact Sheet

U.S. Army Corps of Engineers
Buffalo District

Building Strong®

Formerly Utilized Sites Remedial Action Program (FUSRAP)

August 2010

Site Description

The Former Guterl Specialty Steel Corporation Site (Guterl Site) is located 20 miles northeast of Buffalo, New York, in Lockport, Niagara County, New York. The U. S. Army Corps of Engineers (Corps) Buffalo District recentlycompleted a Remedial Investigation of this site under the Formerly Utilized Sites Remedial Action Program (FUSRAP).

The 70-acre site is comprised of a combination of parcels that make up three general areas: the 52-acre Allegheny Ludlum Corporation property [also referred to as the Niagara County Industrial Development Agency (NCIDA) property], the 9-acre Landfill Area, and the 9-acre Excised Area. In addition, the FUSRAP investigation included areas adjacent to these properties, i.e., a privately owned lot to the north of the landfill, a railroad right-of-way to the north of the NCIDA property, and a stretch of the Erie Canal directly southeast of the site.

The Allegheny Ludlum Corporation operates a specialty steel manufacturing facility in the southwest portion of the property. The 9-acre landfill area ceased operations as a waste disposal area in 1981. The 9-acre Excised Area that contains the buildings once used to roll uranium metal is abandoned and chain link security fence surrounds the dormant buildings.

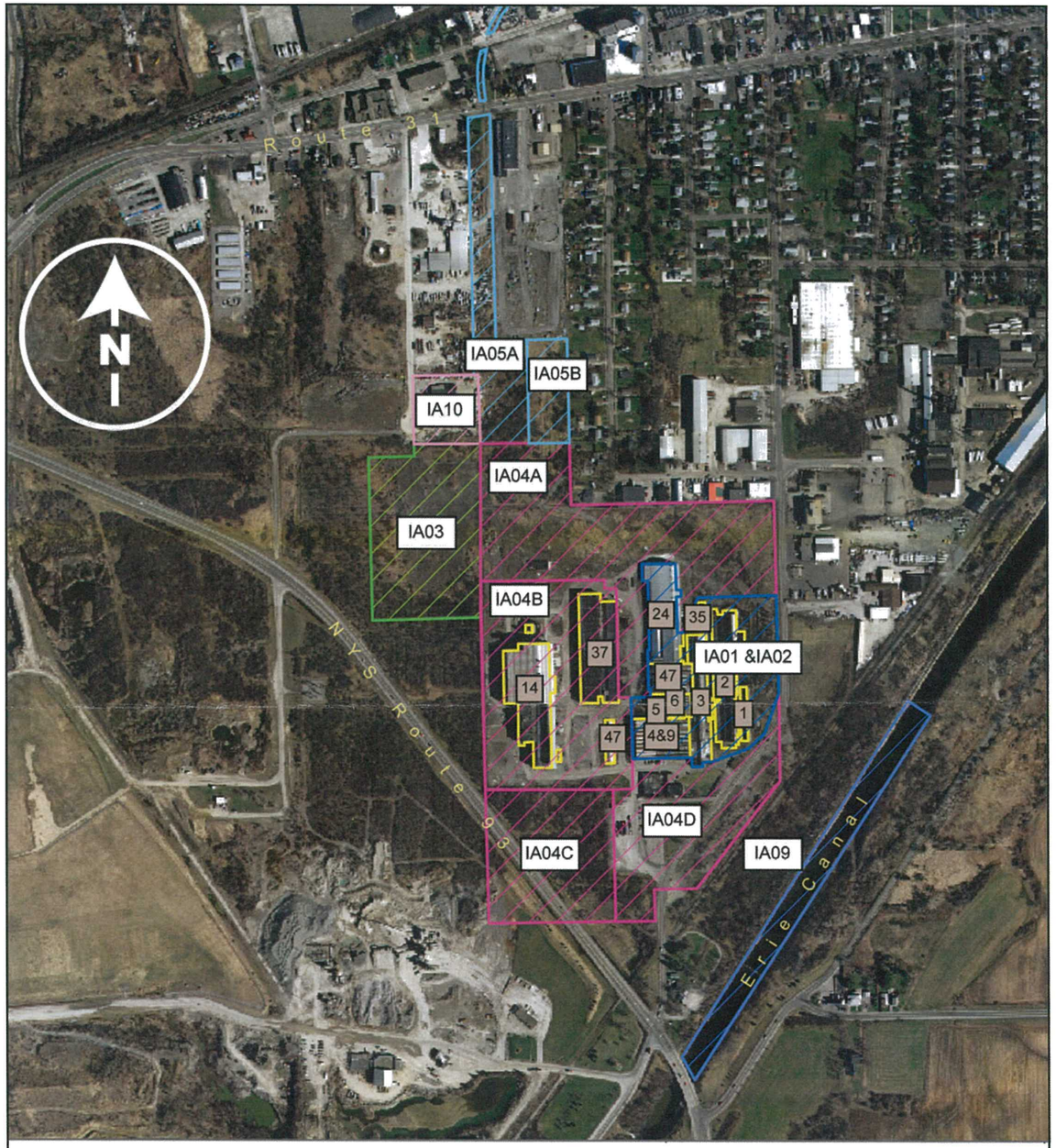
The northern portion of the Guterl Site contains large swaths of fields that occupy the former building and landfill sites, and are currently strewn with construction debris. The southwest portion of the site contains limited wooded and scrub/shrub area habitats. Other small habitats of unmanaged open areas occur randomly in the eastern portion of the site around the abandoned buildings and a rail spur.

Land use near the Guterl Site is mixed, consisting of private residences, small farms, and light industries. To the south-southeast of the Guterl Site, the Erie Canal separates the Guterl Site from private farmlands.

Site History

Between 1948 and 1956, the New York Operations Office of the Atomic Energy Commission (AEC) managed contracts with Simonds Saw and Steel, a previous owner of the property, to roll uranium steel billets into rods. The uranium metal billets were received from offsite sources via rail car and were shipped back offsite via rail car after rolling to contract specifications. Records indicate that Simonds Saw and Steel processed between 25 million and 35 million pounds of natural uranium metal and approximately 30,000 to 40,000 pounds of thorium metal between 1948 and 1956.

The United States Department of Energy declared the Guterl Site eligible for FUSRAP in 2000. Under FUSRAP, the Corps is evaluating the Guterl Site consistent with the process and guidance established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).



IA01 - Excised Area - Building Surfaces and Interiors
IA02 - Excised Area - Building Exteriors
IA03 - Landfill Area
IA04 - NCIDA Property
IA05 - Railroad Right-of-Way
IA09 - Erie Canal
IA10 - Lot 7.1
Guterl Buildings

Guterl Specialty Steel Corporation Site

Investigative Areas

The Corps conducted a Preliminary Assessment/Site Inspection (PA/SI) in 2001. The purpose of the assessment was to review information to determine if the site posed a potential threat to human health or the environment, or if there was a need for further action by the Corps under FUSRAP. The PA/SI concluded that there was no immediate threat to human health or the environment at the Guterl Site; however, because of the potential for the FUSRAP-related contaminants to pose a threat to human health and the environment in the future, it was recommended that the Guterl Site proceed to the Remedial Investigation (RI) phase to further characterize radioactive residuals associated with past activities.

Field sampling data for the RI was obtained between June 2007 and December 2007. Activities performed during the RI field data collection consisted of sampling and analysis of soil, sediment, surface water, groundwater, and building materials. Sampled media were analyzed for radionuclides (uranium, radium, and thorium).

Remedial Investigation Field Investigation Results

Results from the RI field investigation activities are summarized below:

- There are currently no imminent threats to human health or the environment due to FUSRAP-related materials on the Guterl Site.
- The RI confirmed the presence of, and added new information about the nature and extent of thorium and uranium contamination at the Guterl Site.
- Soil and groundwater contamination was documented above RI screening levels (levels established by the US Nuclear Regulatory Commission (NRC) or U.S. Environmental Protection Agency (USEPA) to assist in defining nature and extent of contamination) within the Guterl Site boundary.
- Some degree of FUSRAP-related material was detected above background in the Excised Area including all the buildings, the soil, and the utility surface water/sediments. The most heavily contaminated buildings in the Excised Area are Buildings 6 and 8, primary buildings used for receiving, heating, rolling, packaging, and shipping uranium metal.
- Shallow bedrock groundwater on the Guterl Site is impacted by FUSRAP-related materials.
- Surface water and sediment samples collected from the Erie Canal did not indicate FUSRAP-related impacts.

Human Health Risk Assessment (HHRA)

A Human Health Risk Assessment (HHRA) was conducted as part of the RI. This HHRA evaluated potential cancer risks, radiological doses, and systemic effects to both current and potential future human receptors from exposure to FUSRAP-related contamination in building materials within the Excised Area, surface and subsurface soil, groundwater, and sediment and surface water within utilities, ditches, trenches, etc. and within the Erie Canal. While current receptors include the juvenile trespasser and the onsite worker, potential future receptors include the juvenile trespasser/recreational visitor, the onsite worker, the construction worker, and the hypothetical resident. The constituents of potential concern evaluated in the HHRA were 226Radium, 228Radium, 228Thorium, 230Thorium, 232Thorium, 234Uranium, 235Uranium, and 238Uranium. The potential routes of exposure include ingestion of all media, inhalation of particulates, and exposure to external gamma radiation.

Radiological doses and cancer risks were compared to target threshold risk or dose levels established by the NRC, New York State, and USEPA. Exposure to building materials and contaminated soils beneath Building 8 and a localized area of elevated activity in the railroad right-of-way posed the greatest potential human health risks of any areas on the site. Although the risk assessment estimated that potential lifetime cancer risks and yearly radiological dose