



Dear Interested Citizen:

This fact sheet provides a summary of a human health risk assessment conducted for a portion of the proposed Onondaga Lake Canalways Trail (also known as the "Loop the Lake" trail) Section extension.

The human health risk assessment and this fact sheet are available on-line at:

<http://www.epa.gov/region02/water/lakes/onondaga.htm>

and at the repositories noted below.¹

If you have any questions or would like more information about the risk assessment, please contact:

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Project Manager

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New York, New York 10007
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For questions concerning the trail extension project, please contact:

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Director

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Onondaga County
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Syracuse, New York 13202
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United States Environmental Protection Agency FACT SHEET

BIKE TRAIL HUMAN HEALTH RISK ASSESSMENT January 2009

Wastebeds 1-8 Site Geddes, New York

Introduction

The Onondaga County Departments of Parks and Transportation are developing plans to extend the Lake Canalways Trail Section 1 roughly 1.5 miles. A portion of the trail extension will be located on former Solvay waste beds along the southwestern shore of Onondaga Lake. The waste beds are southeast of the mouth of Ninemile Creek and north of Exit 7 on I-690, and are referred to as the Wastebeds 1-8 site ("Site"). (See figure which is also Figure 2 in the Bike Trail Human Health Risk Assessment). The trail extension will be approximately 14 feet wide, bordered by landscaping ranging from 8 to 32 feet on both sides. The area along the trail will be planted with grass, wetland, or wildflower mix.

The waste beds are composed of a series of perimeter dikes that were filled in with waste materials (primarily Solvay waste) consisting largely of calcium carbonate, gypsum, sodium chloride, and calcium chloride. These wastes were generated at the former Allied-Signal Main Plant as part of soda ash production. Solvay waste was hydraulically pumped into the waste beds from approximately 1916 to 1943.

Both baseline human health and ecological risk assessments are being conducted to support a remedial investigation/feasibility study being conducted for the Wastebeds 1-8 site. Since these risk assessments are not anticipated to be completed until later in 2009, a human health risk assessment ("Bike Trail HHRA") was performed using environmental quality data collected from the Site so as to determine the potential for increased cancer risks and non-cancer hazards associated with exposure to surface soil contamination from the future use of the recreational trail. The Bike Trail HHRA identifies the potential exposure pathways by which populations may be exposed to site-related contamination, the toxicity of the chemicals that are present, and the potential for cancer risks and non-cancer health hazards from exposure to those chemicals.

¹ Appendices C through H of the human health risk assessment are not available online.

The goal of the risk assessment is to estimate the RME (Reasonable Maximum Exposure) expected to occur under both current and future land-use conditions assuming no access or use controls and no remediation. In other words, the RME is the greatest exposure that is reasonably expected to occur. As a result, the risk assessment provides upper-bound estimates of the cancer risks and non-cancer health hazards for users of the bike trail, using health-protective assumptions so that these risks and hazards are not underestimated.

Risk Summary and Recommendations

The risk and hazard calculations for those individuals that use the bike trail as intended (*i.e.*, they abide by posted rules and signage and do not leave the bike trail) are below EPA's levels of concern. However, the risk assessment also considered the possibility that users may leave the bike trail. This assumption was justified based on evidence of all-terrain-vehicle (ATV) use at the Site and that the new bike trail will provide greater access to the Site by residents living in the vicinity of the northwestern shore of the Lake. Risk and hazard calculations for an individual that spends a portion of his or her time off the trail engaged in ATV riding indicate that the probability of developing cancer as a result of exposure to Site contaminants is at the upper end of, but does not exceed, EPA's target risk range for acceptable exposures and that the non-cancer health hazard is slightly above EPA's threshold, meaning that non-cancer health effects are possible. These risks and hazards are based on 30 years of exposure and were developed using health-protective assumptions. The non-cancer hazard comes primarily from inhalation of manganese in dust generated by ATV use. Since it is not known whether the manganese that is present at the Site is a component of waste materials or is naturally occurring (in the latter case it is also worth noting that manganese surface soil levels do not exceed background levels for native soils in New York State), EPA recommends ensuring off-trail use of the Site is effectively prohibited by fencing or other means. Demonstrated hazard from off-trail riding also suggests that ATV access to the Site should be prohibited. Currently, the gates are often unlocked and fencing is inadequate to effectively keep trespassers from using the Site.

As stated above, for those who use the trail as intended, risks and hazards do not exceed EPA's levels of concern. With the addition of the County's proposed controls, such as signage, physical barriers, and presence of park personnel to restrict riders from going off-trail, use of the bike trail by the general public would not be expected to result in unacceptable risks and hazards.

The risk and hazard calculations for workers who may be engaged in constructing the bike trail are below EPA's levels of concern.

Public Comment

The Bike Trail HHRA is being made available to the community for public comment. Comments should be directed to the EPA Project Manager whose address is provided above.

Document Repositories

NYSDEC, Region 7

615 Erie Blvd. West
Syracuse, NY 13204-2400
Phone: (315) 426-7400
Hours: M - Fri, 8:30 a.m. - 4:45 p.m.
Please call for an appointment

Atlantic States Legal Foundation

658 West Onondaga Street
Syracuse, NY 13204
Phone: (315) 475-1170 (call for hours)

NYSDEC

625 Broadway
Albany, NY 12233-7013
Phone: (518) 402-9676
Hours: M - Fri, 8:30 a.m. - 4:45 p.m.
Please call for an appointment

Onondaga County Public Library

Syracuse Branch at the Galleries
447 South Salina Street
Syracuse, NY 13202
Phone: (315) 435-1800
Hours: M, Th, Fri, Sat, 9:00 a.m. - 5:00 p.m.; Tu, W, 9:00 a.m. - 8:30 p.m.