

Meeting Minutes
Restoration Advisory Board
Former Schenectady Army Depot – Voorheesville Area
April 17, 2008
Lynnwood Reformed Church
Schenectady, New York

Restoration Advisory Board Members and Project Staff Attendees:

Ted Ausfeld, Alternate Acting Community Co-Chairman
Heather Bishop, New York State Department of Environmental Conservation (NYSDEC)
Joan Burns
Bridget Callaghan, New York State Department of Health (NYSDOH)
Gregory J. Goepfert, U.S. Army Corps of Engineers, Army Co-Chair
Sue Green
George Moreau, Parsons
Cliff Opdyke, U.S. Army Corps of Engineers, Louisville District
Hamid Rafiee, U.S. Army Corps of Engineers, Baltimore District
Charles Rielly, Acting Community Co-Chairman
Deb Volkmer, Weston

Other Attendees:

Saranac Hale Spencer, Altamont “Enterprise” newspaper
Ronald Groves, Albany County Department of Health

Introductions

G. Goepfert called the meeting to order at 6:30 p.m. and welcomed everyone for coming to the meeting. Restoration Advisory Board (RAB) members, project staff, and other attendees introduced themselves. G. Goepfert provided a fact sheet entitled *Corps Finalizes Remedial Investigation Report* that summarized the report. The fact sheet can be accessed on the FSADVA Website (www.fsadva.com). G. Goepfert also provided a handout that is duplicated at the end of the minutes. G. Goepfert said the following three reports are available to the public at the Guilderland Public Library, the Voorheesville Public Library, and on the FSADVA Website:

1. *Remedial Investigation Report – Volumes 1 and 2*; dated September 2007; prepared by Parsons
2. *Post-Removal Groundwater and Surface Water Sampling Report for October 2007; Area of Concern No. 2*; dated January 2008; prepared by Shaw Environmental, Inc.
3. *Groundwater Supplement to Appendix A1 – Post Remediation Human Health Risk Assessment at AOC 2 – Remedial Investigation Report*; dated April 2008; prepared by Parsons.

Summary of Remedial Investigation

G. Goepfert provided an overview of the work activities conducted on-site per the two handout sections entitled *Remedial Investigation Report*.

The following sections of the minutes correspond with the handouts at the end of the minutes.

Summary of Remedial Investigation – AOC 1 U.S. Army Southern Landfill

G. Goepfert provided an overview of AOC 1 per the handout.

C. Rielly asked for an explanation of the term “monotonous nature” of the pond.

C. Opdyke said “monotonous nature” means conditions are the same all over the pond.

G. Moreau added that the pond had a uniform bottom and there is no diversity in the pond.

C. Rielly asked if there was no unacceptable risk for groundwater.

T. Ausfeld said there are wells in the area.

G. Goepfert responded that the wells are shut down.

R. Groves said he will check to make sure the wells are shut down.

C. Opdyke said the risk to human health is through ingesting groundwater.

C. Rielly asked about water quality in the main pond and sediments.

B. Callaghan said the NYSDOH is looking at soil regarding cleanup and the sediment criteria is for wildlife purposes.

C. Rielly asked if criteria was different between wildlife and humans

H. Bishop said yes, state criteria are different for the microscopic bugs in sediment and surface water for wildlife from criteria for ingestion for humans.

C. Rielly asked if it was possible for pesticides and PCBs in sediment are all right for humans but not bugs and animals.

H. Bishop said the state has cleanup criteria.

S. Green asked if there was access for surface water and groundwater to reach Black Creek.

G. Moreau said there is potential for surface water from the wetlands to enter Black Creek.

G. Goepfert said the Corps is proposing a remedial action for contamination in the groundwater. He added that the concern is exposure risks to humans – ingestion could cause a negative effect. He said right now no one is using that area so exposure risk would be low. He said a feasibility study will be prepared for AOC 1.

T. Ausfeld asked how many remedial alternatives were there.

G. Goepfert said several remedial alternatives will be identified in the feasibility study; the exact number has yet to be determined. He added in conjunction with the feasibility study a proposed plan will be prepared; an announcement will be published in the local newspapers; a public meeting will be held; and associated documents will be placed in the local repositories.

T. Ausfeld asked if funding was available for this work.

G. Goepfert said funds that addressing AOC 1 may be expensive, however, the Corps has a successful track record of getting things done and informing the public. He added the FSADVA site is one of the top three sites in the Corps' New York District.

Summary of Remedial Investigation – AOC 2 Post Commander's Landfill

G. Goepfert provided an overview of AOC 2 per the handout.

B. Callaghan said with Mrs. Burns' permission the state requested one more sampling round to confirm no more contamination existed in the area.

T. Ausfeld asked when the sampling would occur.

B. Callaghan said it would be spring.

G. Goepfert said the Corps will do the sampling and will have results a month after the sampling was conducted.

C. Rielly said it should be mentioned in the RI report history that AOC 2 was chosen because of the accessibility to Black Creek and through the persistence of Mrs. Joan Burns to investigate the property which resulted in finding contamination.

T. Ausfeld said it was important Mr. Rielly's comment be included in the minutes. Mr. Ausfeld added that it was important the minutes also note his concern for the potential of site development in accordance with Galesi Group's Environmental Impact Statement. He added there should be a procedure for the situation of opening a pit or finding contamination.

C. Rielly said it was important to keep the Town of Guilderland informed because of the potential for the Galesi Group to find contamination.

T. Ausfeld said the Galesi Group could find something that no one was aware had existed like what happened at the school (i.e., items buried) and at Mrs. Burns' property (because not all of the test pits at AOC 2 identified all areas impacted by buried wastes).

S. Green said she was amazed representatives of the Town of Guilderland did not attend the RAB meetings to keep informed.

T. Ausfeld said the Town of Guilderland doesn't keep up with environmental issues.

G. Goepfert said if it involves the Department of Defense he was sure he would be contacted.

Summary of Remedial Investigation – AOC 3 Former Burn Pits

G. Goepfert provided an overview of AOC 3 per the handout.

C. Rielly asked if there was any contamination in monitoring well 2.

T. Ausfeld asked if any barrels of TCE were found.

G. Goepfert responded no, it was a septic tank area.

C. Opdyke said it doesn't take much to contaminate groundwater – 1 drop in an Olympic-size swimming pool equals 1 part per billion.

G. Goepfert said the Corps will monitor well # MW-09 once a year for the next four years.

Summary of Remedial Investigation – AOC 4 Construction and Demolition Landfill

G. Goepfert provided an overview of AOC 4 per the handout.

C. Rielly asked what "limited characterization" means.

G. Goepfert said the Corps took some samples and the results were not hazardous.

T. Ausfeld asked if NYSDEC would oversee AOC 4.

H. Bishop said the solid waste department would handle that issue.

T. Ausfeld asked about the BEHP in the plastic materials in Black Creek.

H. Bishop said NYSDEC would have to take a look at that.

Summary of Remedial Investigation – AOC 5 Defense National Stockpile Center (DNSC) Voorheesville Depot

G. Moreau provided an overview of AOC 5 per the handout. He noted all of the commodities were removed and the trailers and railroad ties will be removed by summer.

T. Ausfeld said the Town of Guilderland should consider acquiring the AOC 5 property.

C. Rielly asked if the state had finished its review and concurred with DNSC's finished remedial investigation report.

B. Callaghan said the state is still reviewing the report.

G. Moreau said the future use of the site will need to be identified before the property could be deemed acceptable or not.

Summary of Remedial Investigation – AOC 6 Former SADVA Wastewater Treatment Plant

G. Goepfert provided an overview of AOC 6 per the handout.

T. Ausfeld said he has been treated for three different cancers and that he didn't know the area was hazardous.

S. Green said both she and her neighbor have been treated for cancer.

T. Ausfeld asked if the reason for "no further action" was because of low levels of metals.

G. Moreau replied yes, no further action was needed.

Summary of Remedial Investigation – AOC 7 Triangular Disposal Area

G. Goepfert provided an overview of AOC 7 per the handout.

T. Ausfeld said the area was used to store transformers in the late 1970s.

G. Moreau said the Corps completed a risk assessment for AOC 7.

G. Goepfert said the Corps determined there was no human health risk for AOC 7.

C. Rielly asked if the Corps believed the lead contamination in the water samples came from the storage site.

G. Goepfert said that thought is still open on AOC 1 and 7. He added that a feasibility study for AOCs 1, 7, and 8 will be prepared by August 2008.

Summary of Remedial Investigation – AOC 8 Black Creek

G. Goepfert provided an overview of AOC 8 per the handout.

T. Ausfeld recommended Black Creek to be the last area on this project to closeout on remediation because everything flows or drains to Black Creek. He said the Corps needs to be certain contamination does not reach Black Creek.

S. Green said the Village of Watervliet is considering raising the reservoir to sell drinking water to other communities and asked if that would be an issue. She then asked why not collect samples at the dam on Route 158.

C. Rielly said the data in the RI report section 3.8 needs clarification. He added that he agrees with Mr. Ausfeld that Black Creek should be the last AOC addressed.

G. Goepfert said in looking at Black Creek from a different perspective, if there is concern for human health in AOC 8 then the Corps needs to address those issues first. He added the feasibility study will address the need for remediation and the public will have the opportunity to review the remedial alternatives and comment on the selected alternative.

T. Ausfeld said the state should look at what is going into and coming out of Black Creek.

G. Moreau said the Corps did that investigation in 2003.

S. Green said standards are constantly changing and asked if the criteria had changed in the last eight years.

B. Callaghan said the standards are constantly being reevaluated. She added if there was discharge from the Northeast Industrial Park it would be covered under the State Pollutant Discharge Elimination System (SPDES).

T. Ausfeld said he couldn't think of closing work on Black Creek until all of the other AOCs are finished because everything flows to Black Creek.

C. Rielly asked that at the point the Corps is considering Black Creek to let the RAB members know instead of waiting for a meeting once a year.

G. Goepfert said each AOC will be studied and evaluated according to the law – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and public participation will be invited when feasibility studies / proposed plans are drafted.

T. Ausfeld said the U.S. Government will spend \$4 to \$5 million dollars and still not have a clean Black Creek.

C. Rielly said that isn't the U.S. Government's problem – the contamination has to be connected to Department of Defense activities.

G. Goepfert said yes, the Corps is not the environmental police of an area or region. He added the Corps is responsible for former Department of Defense activities.

T. Ausfeld said maybe Mr. Rielly and he could get the local governments together on the Black Creek issue.

G. Goepfert said the Corps is responsible to produce a good feasibility study and recommend necessary remedial alternatives.

T. Ausfeld said it is not the same water in Black Creek. He said heavy rainstorms affect the creek and what goes in is different than what comes out.

Summary of Remedial Investigation – AOC 9 Building 60 Area

G. Goepfert provided an overview of AOC 9 per the handout. He said in addition to the activities completed on the handout, the Corps conducted a screening level ecological risk assessment.

Overview of a Risk Assessment

C. Opdyke presented a brief overview of risk assessments corresponding to the handout sections entitled *Quantitative Human Health Risk Assessments*.

S. Green said there is a higher rate of cancer in this area of the state. She added that dogs are dying of cancer and her 14-year old dog had died.

B. Callaghan said cancer rates in the State of New York are determined by zip codes.

T. Ausfeld said in the 1960s there were huge lead piles and everything drained to the Black Creek which is a few miles from our drinking water source.

C. Rielly asked for the costs to date of the Former Schenectady Army Depot-Voorheesville Area project.

G. Goepfert said he presently didn't have the figures with him and estimated the cost between \$3 and \$5 million. [The actual cost to-date is approximately \$4 million].

T. Ausfeld said he hopes the children in the area have a future in light of his concern for the reservoir and upcoming activities.

G. Goepfert listed the following upcoming Corps activities:

- Finish the feasibility study in late July/early August 2008
- Conduct additional sampling at AOC 2 this spring and provide results four to six weeks after sampling
- Conduct ground water monitoring at the school at MW-09.
- Closeout AOCs 4, 6, and 9
- U.S. General Services Administration will handle AOC 5 -- the Town of Guilderland may have interest in that property; however, the Corps is out of the loop on any property transaction.

Presentation to Mr. Rielly and Mr. Ausfeld

G. Goepfert expressed his thanks and gratitude to Mr. Rielly and Mr. Ausfeld for their support and participation to the FSADVA project and presented the two RAB members with the District Coin of the U.S. Army Corps of Engineers, New York District.

C. Reilly thanked Mr. Goepfert for his hard work on the project.

G. Goepfert said he is thankful to the Baltimore Corps which have been supporting the project by reviewing data and technical reports. He added that Mr. Opdyke is one of the most respected risk assessors in the Corps.

Adjournment

G. Goepfert said in closing that the next RAB meeting might be in the early part of August.


T. Ausfeld asked if there would be any remedial actions this summer.

G. Goepfert said none are expected. He said this summer the Corps will finish reports and issue feasibility studies/proposed plans for AOCs 1, 7 and 8, and a proposed plan / record of decision for AOC 2. He added, if required remedial actions may begin in spring 2009, subject to the availability of funds. He said he will keep RAB member informed of future actions.

The meeting was adjourned at approximately 8:15 p.m.

Handouts

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**Former Schenectady Army Depot-
Voorheesville Area**

Restoration Advisory Board Meeting
April 17, 2008
Schenectady, New York

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Summary of Remedial Investigation

- RI field work began in 2001; other investigations were conducted in the late 1990s.
- Several phases of data assessment and additional data collection ensued.
- Nine Areas of Concern (AOCs) were identified for in-depth characterization.

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Summary of Remedial Investigation

- Over 350 soil, groundwater, surface water and sediment samples were collected and analyzed for as many as 150 contaminants.
- Human health and ecological risk assessments were completed.
- The Final Remedial Investigation Report was issued, is located in the Guilderland and Voorheesville Libraries, and posted on www.fsadva.com.
- Summaries for each AOC follow

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**Summary of Remedial
Investigation – AOC 1**
U.S. Army Southern Landfill

- The landfill is about 10 acres in size and wastes are buried about 6 feet deep.
- Volatile organic compounds (VOCs) identified in groundwater at southern portion of landfill.
- VOC concentrations have naturally decreased by 50% over six years; no offsite migration.
- Groundwater and pond water would be considered a health risk, if used as a drinking water source (presently, not used for this purpose).

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Summary of Remedial Investigation – AOC 1 U.S. Army Southern Landfill

- Sediments in the pond and surrounding area have concentrations above NYSDEC sediment screening criteria (for protection of aquatic life).
- Two biological assessments were performed to assess the health of the pond and surrounding area and found no adverse impacts on quantity and diversity of wildlife.
- Soils and sediments do not pose unacceptable human health risks.
- A feasibility study to evaluate alternatives to address AOC 1 is underway.

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Summary of Remedial Investigation – AOC 2 Post Commander's Landfill

- RI found areas of buried wastes (salt/iodine pill bottles, tar, paint residue, and bottles of solvent-like liquid).
- Soils, groundwater, surface water, and sediments were impacted.
- A human health risk assessment found the soil and groundwater posed unacceptable human health risks, if ingested. Surface water and sediment did not pose unacceptable health risks.
- Removal action completed in 2006.

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Summary of Remedial Investigation – AOC 2 Post Commander's Landfill

- Groundwater and surface water sampling/analysis was conducted after the removal action.
- A post-remediation human health risk assessment was performed.
- The removal action was deemed effective, as there are no longer unacceptable human health risks posed by soils and groundwater.
- We will propose that no further actions are necessary at AOC 2.

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Summary of Remedial Investigation – AOC 3 Former Burn Pits

- Former dump and burn area less than 10 acres in size; soils and groundwater were impacted.
- Impacted groundwater and disposal of wastes extended onto the adjacent Guilderland school property.
- In 2002, an emergency action was completed to remove buried medical supplies and lead-containing wastes in soils.
- An interim removal measure was completed in 2003, soils and wastes were removed as planned within the current fence line of the Northeast Industrial Park (NEIP).

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Summary of Remedial Investigation – AOC 3 Former Burn Pits

- Groundwater at AOC 3 was sampled and analyzed for three years after the removal actions were completed.
- A post-remediation human health risk assessment were effective and no unacceptable risks are posed by the soil at the site.
- One of seven monitoring wells will continue to be monitored over the next four years, since concentrations of trichloroethene slightly exceeds State standards (water from monitoring well is not used for consumption).
- We will pursue a Record of Decision, upon completion of groundwater monitoring events.

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Summary of Remedial Investigation – AOC 4 C&D Landfill

- The construction and demolition (C&D) landfill was not active during the Army's operation of SADVA.
- Limited characterization was performed during the RI to assess whether hazardous materials may have been left behind by the Army.
- High levels of contamination were not found and there is no evidence of direct connection to SADVA operations.
- We will coordinate a Record of Decision for AOC 4.

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**Summary of Remedial Investigation – AOC 5
DNSC Voorheesville Depot**

- This area is the only part of the former SADVA that was still operated by the government, until 2007 (now inactive).
- Used for storage of materials critical to national defense (metals and ores).
- DNSC conducted their own RI for the site in cooperation with the SADVA RI.

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**Summary of Remedial Investigation – AOC 5
DNSC Voorheesville Depot**

- Soils, groundwater, surface water and sediment were characterized.
- The primary way contamination left the site was in sediment suspended in storm water discharges from the stormwater detention ponds.
- DNSC improved and expanded the onsite ponds to limit offsite discharges of stormwater and alleviate site flooding.
- DNSC has submitted a Final RI Report to NYSDEC for the Voorheesville Depot.

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**Summary of Remedial Investigation – AOC 6
Former SADVA Wastewater Treatment Plant**

- Historical aerial photos suggested this may have been a dumping ground.
- Waste materials were found and disposed of during construction of the new Guilderland wastewater treatment plant in mid-1990s.
- Test pits were excavated during the RI; buried wastes were not found.
- Some metals concentrations in soils were slightly above background and NYSDEC criteria; however there no obvious signs of buried waste sources or significant contamination that would warrant further action.

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**Summary of Remedial Investigation – AOC 7
Triangular Disposal Area**

- Area near AOC 1.
- Fill observed in test pits consisted of glass, railroad ties and charred wood.
- Metals in soils slightly above background and NYSDEC soil quality criteria.
- Semi-volatile compound (BEHP) and iron above NYSDEC groundwater standard; an upgradient source is possible.

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**Summary of Remedial Investigation – AOC 7
Triangular Disposal Area**

- No unacceptable human health risks specifically associated with AOC 7.
- A feasibility study for AOC 7 is combined with AOC 1, because they are located close together, and groundwater quality impacts at AOC 7 may be related to wastes in AOC 1.
- Feasibility Study is underway.

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**Summary of Remedial Investigation – AOC 8
Black Creek**

- Black Creek receives stormwater runoff from the former SADVA AOCs.
- Black Creek is Class C along the site (protected for fishing and fish propagation).
- Farther downstream, Black Creek is Class B (protected for recreational use) and water in the creek eventually flows into Watervliet Reservoir.
- Watervliet Reservoir is Class A and is the local drinking water source.

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Summary of Remedial Investigation – AOC 8 Black Creek

- Surface water and shallow/deeper sediments in Black Creek and several drainage ditches leading to the creek were characterized.
- Surface water in the Western Ditch has degraded water quality, primarily for metals.
- Surface water quality in Black Creek is not adversely impacted; samples downstream from SADVA meet the NYSDEC Class C water quality standards.

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Summary of Remedial Investigation – AOC 8 Black Creek

- Sediments at the south end of SADVA near AOCs 4 and 5, and in the Western Ditch have elevated metals concentrations.
- Sediments in Black Creek adjacent to the site are not highly impacted, and most metal concentrations are below NYSDEC sediment quality criteria.
- Downstream of SADVA metal concentrations tend to be higher.

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Summary of Remedial Investigation – AOC 8 Black Creek

- A human health risk assessment was completed for AOC 8 and no unacceptable human health risks are posed by the surface water and sediment.
- A qualitative ecological risk assessment was completed for the SADVA, including AOC 8, and the site supports wildlife typical for a commercial/industrial site in this area.
- A feasibility study is underway to determine if any actions are necessary.

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Summary of Remedial Investigation – AOC 9 Building 60 Area

- USACE responded to discovery of an oil/water separator at Building 60 in 1999.
- The separator and a discharge pipeline leading to Black Creek were removed.
- The RI focused on assessing whether residual soil contamination remained along the former pipeline route.

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Summary of Remedial Investigation – AOC 9 Building 60 Area

- Soil and groundwater in the vicinity of the pipeline were characterized.
- Metal concentrations in soil were slightly above background and NYSDEC soil quality criteria.
- Groundwater results for AOC 9 do not show impacts associated with the former oil/water separator.
- Impacts to sediments will be examined in the feasibility study for AOC 8.
- We will propose no further action for AOC 9.

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Remedial Investigation Summary/Follow up Actions

- Complete feasibility studies for AOCs 1/7 & 8 [Summer 2008]
- Coordinate “no further action” proposed plan at AOC 2 [Fall 2008]
- Conduct 4 additional years of groundwater monitoring at AOC 3, MW-09 [June 2008, 2009, 2010, 2011]
- Coordinate “no further action” proposed plan for AOCs 4, 6 and 9 [2008].
- DNSC to address AOC 5.

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Quantitative Human Health Risk Assessments

- The objective is to predict the potential risk to human health posed by a site through a series of assumptions about how much, and for how long, a person is exposed to potential contamination.
- Involves a complex series of calculations and assumptions to distill a great deal of information down into a specific number that can be compared to an acceptable level of risk.

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Quantitative Human Health Risk Assessments

- Identifies the site users (residents, industrial workers).
- Calculates risk separately for each media: soil, groundwater, surface water and sediment.
- Identifies how users can be exposed to contamination (skin contact, ingestion, inhalation, etc).

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Quantitative Human Health Risk Assessments

- Uses very conservative (health-protective) assumptions about how often and how long people are exposed. For example, assumes a person will ingest a certain amount of soil, groundwater, surface water or sediment on a daily basis over the course of their lifetime.

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Quantitative Human Health Risk Assessments

- Uses all available sampling data to determine a typical concentration of each contaminant that a person might be exposed to in each media (soil, groundwater, etc.).
- Uses data from published medical studies about the health effects of each contaminant.
- Compares the site users' exposure to the published health effect data.

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Quantitative Human Health Risk Assessments

- Calculates the risk that the site could cause health effects as two numbers: *non cancer hazard* and *cancer risk*.
- Those two numbers are compared to USEPA "acceptable" risk thresholds:
 - 1.0 or less for *noncancer hazard* is acceptable
 - 10^{-4} to 10^{-6} or less for *cancer risk* is acceptable

10^{-4} = 1 in 10,000 probability

10^{-6} = 1 in 1,000,000 probability

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Quantitative Human Health Risk Assessments

- Therefore, human health risk assessment results are expressed as "acceptable risk" and "unacceptable risk".
- It should be noted that risk assessments use intentionally conservative (health-protective) assumptions, and sites that pose an "unacceptable risk" may not necessarily pose an immediate or short-term health threat.
- The risk assessment results should be viewed in the context of how realistically the exposure assumptions reflect actual conditions and practices.