DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name: GE Hornell

Facility Address: Between Canisteo River & Railroad, Hornell, NY 14843

Facility EPA ID #: NYD000632471

1. Has all available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination? (Note: This determination addresses contaminated media regulated under New York State's Inactive Hazardous Waste Disposal Site Remedial Program.)

<u>X</u>	If yes - check here and continue with #2 below.
	If no - re-evaluate existing data, or
	if data are not available skip to #6 and check the "IN" status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved) to track changes in the quality of the environment. The two EI developed to date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be "**contaminated**" above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	<u>Yes</u>	No	?	Rationale / Key Contaminants
Groundwater		X		
Air (indoors) ²		X		
Surface Soil (e.g., <2	(ft) <u>x</u>			lead and PAHs (see below)
Surface Water		X		
Sediment	_X_			lead and SVOCs (see below)
Subsurf. Soil (e.g., >	2 ft) <u>x</u>			lead and PAHs (see below)
Air (outdoors)		X		
If no (for all media) - skip to #6, and enter "YE," status code after providing of appropriate "levels," and referencing sufficient supporting documentation dented that these "levels" are not exceeded.				g sufficient supporting documentation demonstrating
"co dete	If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.			
If u	If unknown (for any media) - skip to #6 and enter "IN" status code.			

Rationale and Reference(s):

The site has been used primarily for railcar repair and construction. Spills of No. 2 diesel fuel occurred on this property over the years. Following the discovery of a significant release of diesel fuel in 1980, the NYS Department of Transportation (NYSDOT) conducted an investigation and installed and operated five groundwater recovery wells from 1981 to April 1986. The General Electric Co. (GE) leased the service shops from 1978-83 and had a RCRA interim status permit. A closure plan was submitted by GE to the USEPA in 1983 and was approved. The wastewater treatment plant was dismantled by GE during these closure activities. The USEPA prepared a Preliminary Assessment Report under the RCRA program.

¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

²Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

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A State Superfund (SSF) Remedial Investigation/Feasibility Study (RI/FS) was conducted between March 1992 and January 1994 in two phases. Two reports, entitled "Phase I RI Report" (Dvirka and Bartilucci, November 1992) and "Phase II RI Report" (Dvirka and Bartilucci, December 1993), have been prepared describing the results of the SSF investigations. The RI activities consisted of installation of soil borings and monitoring wells, excavation of test pits, sampling of sediment and surface water from Canisteo River, and sampling of surface soils from the site and from the adjacent residential area. The results of the investigation indicated that surface and subsurface soils are the primary media of concern at the site. Results from off-site surface soil samples collected by NYSDOH confirmed the presence of elevated lead levels in soils near the site. The following tables summarize the chemicals of concern (COCs) identified in surface soil (Table 1) and subsurface soil (Table 2) at the site and their relation to established remedial goals.

Table 1. Average Contaminant Concentrations in Surface Soil (ppm)

Contaminant (Total)	Remedial Goal	Grease Pit	Tank Area	North Area	South Area	Resid. Area	Back- ground
SVOCs	500	14	15.35	7.3	2.3	24.94	6.3
Lead	500(in) 250(out)	11,700	570.5	343	363.8	282	64.0
PAHs	10	12	7.9	14.2	1.92	4.85	1.32
Carc. PAHs	5	6.8	2.18	7.03	0.82	2.63	0.52

Table 2. Average Contaminant Concentrations in Subsurface Soil (ppm)

Contaminant (Total)	Remedial Goal	Grease Pit	Tank Area	North Area	South Area	Resid. Area
VOCs	10	5.88	16.67	1.26	0.789	0.04
SVOCs	500	203		39.4	3.54	1.8
Lead	500(in) 250(out)	33,218	43.13	13.66	82.8	230
PAHs	10	72.5		11.33	2.04	ND
Carc. PAHs	5	9.1		ND	0.009	ND

Groundwater samples did not contain any contamination above groundwater standards, except for lead and total recoverable petroleum hydrocarbons (TRPHs) which exceeded standards at very marginal levels. These exceedances do not represent a threat to human health and do not warrant implementation of a groundwater remediation program.

The completed RI/FS also noted some contamination in surface water and sediment from the Canisteo River and in samples collected from storm drains which discharge to the river. The contamination in the sediment and surface water appear to be related to past spills of diesel fuel. Six of the thirteen sediment samples collected exceeded remediation guidelines for TRPHs of 250 ppm, with concentrations ranging from ND to 3,500 ppm. Surface water samples contained benzene (0.5 to 2.0 ppb) and lead (8.0 to 20 ppb), below health-based levels.

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3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **<u>Human Receptors</u>** (Under Current Conditions)

"Contaminated"	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food ³
Groundwater							
Air (indoors)							
Soil (surface; <2 ft)	no	no	no	<u>no</u>	no	no	no
Surface Water							
Sediment	no	no			no	no	no
Soil (subsurface, >2 ft)				<u>no</u>			no
Air (outdoors)							

Instructions for Summary Exposure Pathway Evaluation Table:

- 1. Strike-out specific Media including Human Receptors' spaces for Media which are not "contaminated" as identified in #2 above.
- 2. enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

 skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional <u>Pathway Evaluation Work Sheet</u> to analyze major pathways).
 If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.
 If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

A Record of Decision (ROD) was signed on March 21, 1994, calling for removal of contaminated soil from the grease pit and placement of a clean soil cover over the former tank area. The remedial action

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish)

objectives for the site were to:

- eliminate the potential for direct human or animal contact with the contaminated soils and waste on the site, and
- eliminate the threat to surface waters by eliminating any further contaminated surface water run-off from contaminted soils at the

The remedy was completed in July 1998. Waste and approximately 2,100 cubic yards of contaminated soil from the grease pit area was excavated and disposed. The grease pit was backfilled with clean soil, eliminating exposure to the public. Access to the site is also restricted by fencing and on-site security personnel. Approximately 1,500 cubic yards of contaminated soil was also removed from the former storage tank areas and from the residential area located adjacent to the tank area. These off-site areas were subsequently covered with clean soil and sod to eliminate off-site exposure concerns. In addition, sediment from the storm drains was removed to minimize impacts to the Canisteo River.

As part of the remedy, a long-term maintenance and monitoring program has been implemented to evaluate the effectiveness of the remedy. Cover soils at the site are inspected and maintained. Surface water and sediment from the Canisteo River is being sampled annually (until 2003) to monitor potential site impacts to the river. There is no groundwater monitoring component to the plan.

l.	"significant" (i greater in magni "levels" (used to even though low	es from any of the complete pathways identified in #3 be reasonably expected to be i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) tude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable identify the "contamination"); or 2) the combination of exposure magnitude (perhaps and contaminant concentrations (which may be substantially above the acceptable result in greater than acceptable risks)?
		If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."
		If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."
		If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

⁴ If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

Can the "signi	ificant" exposures (identified in #4) be shown to be within acceptable limits?
	If yes (all "significant" exposures have been shown to be within acceptable limit continue and enter "YE" after summarizing <u>and</u> referencing documentation justified why all "significant" exposures to "contamination" are within acceptable limits site-specific Human Health Risk Assessment).
	If no (there are current exposures that can be reasonably expected to be "unacce continue and enter "NO" status code after providing a description of each potent "unacceptable" exposure.
	If unknown (for any potentially "unacceptable" exposure) - continue and enter "status code
Rationale and	Reference(s):

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(CA725), and	Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):						
<u>X</u>	review of the information contained in the Exposures" are expected to be "Under C Between Canisteo River & Ra	ontrol" at the GE Hornell facility located at ilroad, Hornell 14843 under current is determination will be re-evaluated when the					
	NO - "Current Human Exposures" are	NOT "Under Control."					
	_ IN - More information is needed to ma	ake a determination.					
Completed by		Date					
	Eric Hausamann Environmental Engineer 2						
Supervisor		Date					
1	James Harrington Environmental Engineer 3 New York State Department o Environmental Conservation						
Locations wh	ere References may be found:						
Reg 627	York State Department of Envi ion 8 Office 4 E. Avon-Lima Road n, NY 14414-9519	ronmental Conservation					
Contact telep	hone and e-mail numbers						
(71	y Jane Peachey 6) 226-246 eache@gw.dec.state.ny.us						

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

Facility	Name:	GE	Hornell

Facility Address: Between Canisteo River & Railroad, Hornell, NY 14843

Facility EPA ID #: NYD000632471

	State's Inactive Hazardous Waste Disposal Site Remedial Program.)
	determination? (Note: This determination addresses contaminated media regulated under New York
	(SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI
	groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units
1.	Has all available relevant/significant information on known and reasonably suspected releases to the

X	If yes - check here and continue with #2 below.
	If no - re-evaluate existing data, or
	if data are not available, skip to #8 and check the "IN" status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2.	Is groundwater known or reasonably suspected to be " contaminated " above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?		
	_	If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.	
	<u>X</u>	If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."	
		If unknown - skip to #8 and enter "IN" status code.	

Rationale and Reference(s):

The site has been used primarily for railcar repair and construction. Spills of No. 2 diesel fuel occurred on this property over the years. Following the discovery of a significant release of diesel fuel in 1980, the NYS Department of Transportation (NYSDOT) conducted an investigation and installed and operated five groundwater recovery wells from 1981 to April 1986. The General Electric Co. (GE) leased the service shops from 1978-83 and had a RCRA interim status permit. A closure plan was submitted by GE to the USEPA in 1983 and was approved. The wastewater treatment plant was dismantled by GE during these closure activities. The USEPA prepared a Preliminary Assessment Report under the RCRA program.

A State Superfund (SSF) Remedial Investigation/Feasibility Study (RI/FS) was conducted between March 1992 and January 1994 in two phases. Two reports, entitled "Phase I RI Report" (Dvirka and Bartilucci, November 1992) and "Phase II RI Report" (Dvirka and Bartilucci, December 1993), have been prepared describing the results of the SSF investigations. The RI activities consisted of installation of soil borings and monitoring wells, excavation of test pits, sampling of sediment and surface water from Canisteo River, sampling of groundwater, and sampling of surface soils from the site and from the adjacent residential area. The results of the investigation indicated that surface and subsurface soils are the primary media of concern at the site. Groundwater samples did not contain any contamination above groundwater standards, except for lead and total recoverable petroleum hydrocarbons (TRPHs), which exceeded standards at very marginal levels. These exceedances do not represent a threat to human health and do not warrant implementation of a groundwater remediation program.

¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

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Has the migration of contaminated groundwater stabilized (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater" as defined by the monitoring locations designated at the time of this determination)?		
	If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the horizontal or vertical dimensions of the "existing area of groundwater contamination").	
	If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination") - skip to #8 and enter "NO" status code, after providing an explanation.	
	If unknown - skip to #8 and enter "IN" status code.	
Ratio	onale and Reference(s):	
Does	"contaminated" groundwater discharge into surface water bodies?	
Does	"contaminated" groundwater discharge into surface water bodies? If yes - continue after identifying potentially affected surface water bodies.	
Does		
Does	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater 	
	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies. If unknown - skip to #8 and enter "IN" status code. 	
	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies. 	
	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies. If unknown - skip to #8 and enter "IN" status code. 	
	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies. If unknown - skip to #8 and enter "IN" status code. 	
	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies. If unknown - skip to #8 and enter "IN" status code. 	
	 If yes - continue after identifying potentially affected surface water bodies. If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies. If unknown - skip to #8 and enter "IN" status code. 	

² "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

5.	Is the discharge of "contaminated" groundwater into surface water likely to be "insignificant" (i.e., the maximum concentration ³ of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?		
	If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration ³ of <u>key</u> contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.		
	If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration ³ of <u>each</u> contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations ³ greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.		
	If unknown - enter "IN" status code in #8.		
	Rationale and Reference(s):		
	Rationale and Reference(s).		

³ As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

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Can the discharge of "contaminated" groundwater into surface water be shown to be "currently acceptable" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented ⁴)?			
	If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR 2) providing or referencing an interim-assessment, ⁵ appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.		
	If no - (the discharge of "contaminated" groundwater can not be shown to be "currently acceptable") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.		
	If unknown - skip to 8 and enter "IN" status code.		
Rationale and R	eference(s):		
-			
-			
-			

⁴ Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

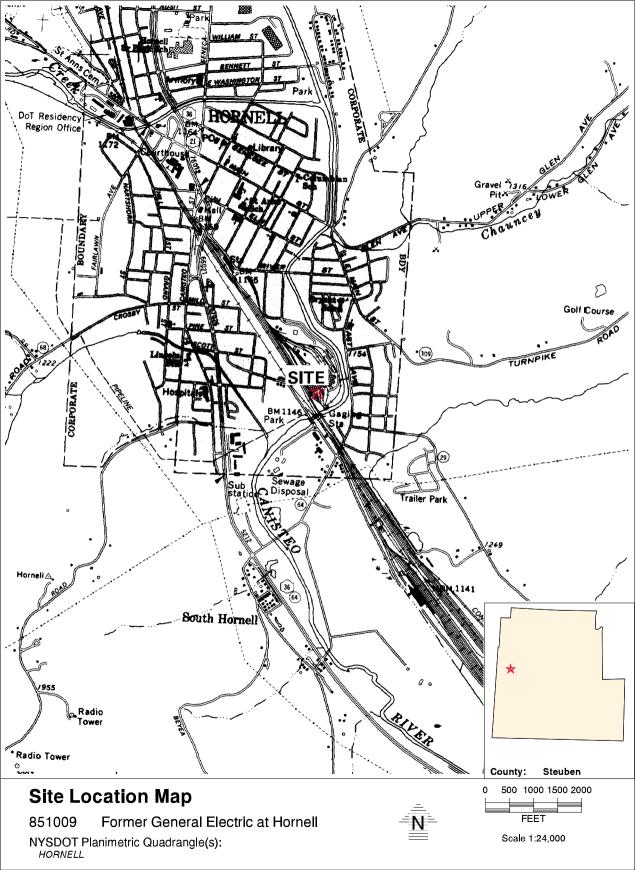
⁵ The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

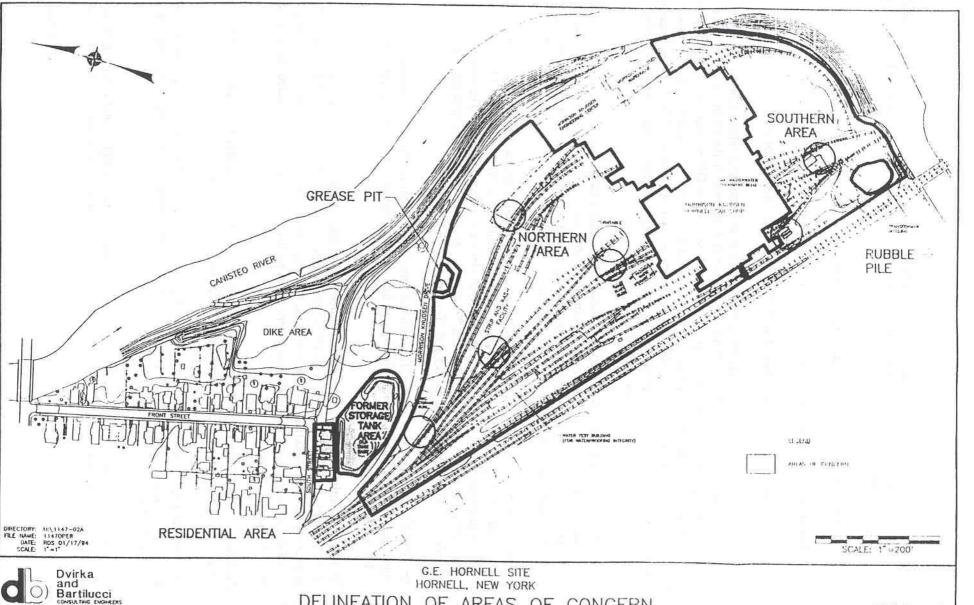
7.	Will groundwater monitoring / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"			
		If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."		
		If no - enter "NO" status code in #8.		
		If unknown - enter "IN" status code in #8.		
	Rationale and R	eference(s):		
	-			

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8.	Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).					
	<u>X</u>	YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the GE Hornell facility located at between Canisteo River & Railroad in Hornell, NY 14843. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater". This determination will be re-evaluated when the State becomes aware of significant changes at the facility.				
		NO - Unacceptable migration of contamina	ated groundwater is observed or expected.			
		IN - More information is needed to make a	a determination.			
	Completed by		Date			
	1	Eric Hausamann Environmental Engineer 2				
	Supervisor		Date			
		James Harrington Environmental Engineer 3 New York State Department of Environmental Conservation				
	Locations where References may be found:					
	Regio 6274	York State Department of Environ on 8 Office E. Avon-Lima Road NY 14414-9519	nmental Conservation			
	Contact telepho	ne and e-mail numbers				
	Mary	Jane Deachey				

Mary Jane Peachey (716) 226-246 mjpeache@gw.dec.state.ny.us





Dvirka and Bartilucci consultive exemples

DELINEATION OF AREAS OF CONCERN