



# SIGNIFICANT THREAT DETERMINATION WORKSHEET



State Superfund Program  
6 NYCRR 375-2.7

Brownfield Cleanup Program  
ECL 27-1411.1(c)

Site Name: Town of Oyster Bay Ice Skating Center Site ID No. 130003D

City/Town: Oyster Bay County: Nassau

1. Has all available and relevant evidence regarding the Site been reviewed and the factors in 375-2.7(a)(3) considered?	<input checked="" type="checkbox"/> Yes (go to 2)	<input type="checkbox"/> No (stop)	<input type="checkbox"/> Unsure (stop)
2. Does Site contamination result in significant adverse impacts (375-2.7(a)(1)) to:			
a. species that are endangered, threatened, or of concern?	<input type="checkbox"/> Yes (go to b)	<input checked="" type="checkbox"/> No (go to b)	<input type="checkbox"/> Unsure (go to b)
b. protected streams, tidal/freshwater wetlands, or significant fish and wildlife habitat?	<input type="checkbox"/> Yes (go to c)	<input checked="" type="checkbox"/> No (go to c)	<input type="checkbox"/> Unsure (go to c)
c. flora or fauna from bioaccumulation or leads to a recommendation to limit consumption?	<input type="checkbox"/> Yes (go to d)	<input checked="" type="checkbox"/> No (go to d)	<input type="checkbox"/> Unsure (go to d)
d. fish, shellfish, crustacea, or wildlife from concentrations that cause adverse/chronic effects?	<input type="checkbox"/> Yes (go to e)	<input checked="" type="checkbox"/> No (go to e)	<input type="checkbox"/> Unsure (go to e)
e. the environment due to a fire, spill, explosion, or reaction that generates toxic gases, vapors, fumes, mists or dusts?	<input type="checkbox"/> Yes (go to f)	<input checked="" type="checkbox"/> No (go to f)	<input type="checkbox"/> Unsure (go to f)
f. areas where individuals or water supplies may be present and NYSDOH has determined there to be a significantly increased risk to public health (including from soil vapor)?	<input type="checkbox"/> Yes (go to 3)	<input type="checkbox"/> No (go to 3)	<input checked="" type="checkbox"/> Unsure (go to 3)
3. Does Site contamination result in significant environmental damage (375-2.7(a)(2))?	<input checked="" type="checkbox"/> Yes (go to 4)	<input type="checkbox"/> No (go to 4)	<input type="checkbox"/> Unsure (stop)
4. If any box in items 2 or 3 have been checked "Yes," the site presents a significant threat to public health or the environment; check here.	Significant threat to: <input type="checkbox"/> Public Health <input checked="" type="checkbox"/> Environment		
5. If no boxes in items 2 or 3 have been checked "Yes," the site does not present a significant threat to public health or the environment; check here.	<input type="checkbox"/> Not a Significant Threat		

John B. Swartwout  
Project Manager Name/Title (Print)

John B. Swartwout  
Project Manager Name (Signature)

3/9/2011  
Date

Jim Harrington, Dir, BURA  
Bureau Director/RHWRE Name/Title (Print)

Jim Harrington  
Bureau Director/RHWRE Name (Signature)

3/9/2011  
Date



## SSF CLASSIFICATION WORKSHEET

Site Name: Town of Oyster Bay Ice Skating Center Site ID No. 130003D

City/Town: Oyster Bay County: Nassau

1. Has remediation been completed in accordance with a ROD including properly addressing institutional controls (ICs)?	<input type="checkbox"/> Yes (go to 7)	<input checked="" type="checkbox"/> No (go to 2)	
2. Has hazardous waste as defined in ECL §27-1301.1 been disposed at the Site?	<input checked="" type="checkbox"/> Yes (go to 3)	<input type="checkbox"/> No (stop)	<input type="checkbox"/> Unsure (go to 11)
3. Does the Site present a current or reasonably foreseeable significant threat to public health or the environment (complete Significant Threat Determination Worksheet)?	<input checked="" type="checkbox"/> Yes (go to 4)	<input type="checkbox"/> No (go to 6)	<input type="checkbox"/> Unsure (go to 11)
4. Is the significant threat causing or presenting an imminent danger of causing irreversible or irreparable damage to public health or the environment?	<input type="checkbox"/> Yes (Class 1)	<input checked="" type="checkbox"/> No (go to 5)	<input type="checkbox"/> Unsure (stop)
5. Is the Site presenting a significant but not imminent threat to public health or the environment?	<input checked="" type="checkbox"/> Yes (Class 2)	<input type="checkbox"/> No (reevaluate)	
6. Has hazardous waste been disposed but it does not present a significant threat to public health or the environment and the site is suitable for placement on the Registry?	<input type="checkbox"/> Yes (Class 3)	<input type="checkbox"/> No (go to 10)	
7. Is the site properly remediated but still requires continued active site management to maintain/achieve protectiveness?	<input type="checkbox"/> Yes (Class 4)	<input type="checkbox"/> No (go to 8)	<input type="checkbox"/> Unsure (stop)
8. Is the site properly remediated, does not require continued active site management, but is not suitable for delisting or a required IC is not yet in place?	<input type="checkbox"/> Yes (Class 5)	<input type="checkbox"/> No (go to 9)	<input type="checkbox"/> Unsure (stop)
9. Is the site properly remediated, required ICs are in place, the site does not require continued active site management, and is suitable for delisting?	<input type="checkbox"/> Yes (Class: C)	<input type="checkbox"/> No (go to 10)	<input type="checkbox"/> Unsure (stop)
10. Based upon investigation, is the degree of contamination such that the Site does not qualify to be placed on the Registry and that additional remedial work is not anticipated at this time?	<input type="checkbox"/> Yes (Class: N)	<input type="checkbox"/> No (reevaluate)	<input type="checkbox"/> Unsure (stop)
11. Does insufficient information exist to properly classify the site?	<input type="checkbox"/> Yes (Class P)	<input type="checkbox"/> No (reevaluate)	<input type="checkbox"/> Unsure (stop)

Current Classification: none

Proposed Classification: 2

<u>John B. Swartwout</u>		<u>3/9/2011</u>
Project Manager Name/Title - Print	Project Manager Name - Signature	Date
<u>Jim Harrington</u>		<u>3/9/2011</u>
Bureau Director/RHWRE Name/Title - Print	Bureau Director/RHWRE Name - Signature	Date



**SITE INVESTIGATION INFORMATION**

1. SITE NAME Town of Oyster Bay Ice Skating Center		2. SITE NUMBER 130003D	3. a. TOWNSHIP Town of Oyster Bay	b. CITY/VILLAGE	4. COUNTY Nassau
5. REGION 1	6. Proposed new Class 2 Registry site				
7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)					
a. Quadrangle- Huntington		b. Site Latitude 40° 45' 20"		Site Longitude 73° 29' 08"	
c. Tax Map Numbers: Section 46, Block G, Lot 43		d. Site Street Address 1001 Stewart Ave., Bethpage, NY 11714			
8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)					
<p>The Ice Skating Rink is in Bethpage Community Park and is located in an urbanized area of Bethpage, adjacent to the Northrop Grumman site (Grumman), formerly Grumman Aerospace, and near the Naval Weapons Industrial Reserve Plant. The only site feature is the new ice skating center building. The site has been utilized as a Town park since the mid-1960s. It is zoned for light industrial use. The surrounding parcels are used for a combination of industrial, commercial, and residential uses. Bethpage High School is located across Stewart Avenue from the site. Grumman has been operating in Bethpage since the early 1930s. The portion of Bethpage Community Park where the ice skating rink is located was owned by Grumman but was wooded and was not utilized by Grumman for industrial purposes. The 18-acre area which is now Bethpage Community Park was donated by Grumman to the Town of Oyster Bay in 1962 and was subsequently developed into a park. The current indoor ice skating facility was constructed by the Town in 2009 to replace the former outdoor ice skating facility which had been at this location since the 1960s. This was the 2<sup>nd</sup> time that the ice skating rink has been replaced.</p>					
a. Area 1.5 acres b. Completed: <input type="checkbox"/> Financial Assessment <input type="checkbox"/> PSA <input type="checkbox"/> IRM <input checked="" type="checkbox"/> RI/FS <input type="checkbox"/> Construction <input type="checkbox"/> O&M <input checked="" type="checkbox"/> Other- IRM:					
9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)					
Chlorodifluoromethane (Freon 22) and Dichlorodifluoromethane (Freon 12)- U075 and listed hazardous substance in Part 597					
10. ANALYTICAL DATA AVAILABLE <input type="checkbox"/> Air <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Sediment <input type="checkbox"/> Soil <input type="checkbox"/> Waste <input type="checkbox"/> Leachate <input type="checkbox"/> EPTox <input type="checkbox"/> TCLP					
Contravention of Standards or Guidance Values					
<p>The maximum Freon 22 concentration in groundwater was found to be 290 ug/L just downgradient of the ice rink with concentrations greater than 100 ug/L persisting to the downgradient extent of Bethpage Community Park. Freons 12 and 22 were found in soil gas in the vicinity of the ice rink at levels as high as 646,000 ug/m3. Freon 22 was found in soil gas on school property across the street from the ice rink at 98,100 ug/m3, immediately adjacent to the high school building at 526 ug/m3, in crawl space air at the high school at 49.7 ug/m3 and in first floor indoor air at 12 ug/m3.</p>					
11. CONCLUSION					
<p>A deposition from a former Town employee documented the leakage of Freon compounds from the refrigeration system of the old municipal ice rink at the park over a period of years. Field investigations conducted by the Town, Grumman, and DEC identified trace levels of Freon in the soil beneath the old rink and significant levels of Freon compounds in groundwater at and downgradient of the old rink. The Class GA groundwater standard is exceeded by a significant margin (290 ppb vs. 5 ppb). The Freon contamination is not being fully captured by Grumman's IRMs for groundwater and soil vapor at the Bethpage Community Park. The extent of contamination has not been determined. A park, a high school, and a residential area are downgradient of the rink. This site presents a significant threat due to the release of contaminants from the source area into groundwater and soil vapor.</p>					
If Institutional Controls are Required: describe:			If so, are they documented? Y ( ) N ( )		
12. SITE DATA					
a. Nearest Surface Water: Distance 3000ft.		Direction southeast		ID & Classification unknown	
b. Nearest Groundwater: Depth 50ft.		Flow Direction south		<input checked="" type="checkbox"/> Sole Source <input type="checkbox"/> Primary <input type="checkbox"/> High Yield <input type="checkbox"/> Low Yield <input type="checkbox"/> Non Yield	
c. Nearest Water Supply: Distance 8400ft.		Direction south		Active <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Character: _____	
d. Nearest Building: Distance 0ft.		Direction on-site		Use - recreation	
e. Documented fish or wildlife mortality?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N		h. Exposed hazardous waste? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
f. Impact on special status fish or wildlife resource?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N		i. EPA ID # _____ HRS Score _____	
g. Controlled Site Access?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N		j. WEB site address: <a href="http://oysterbaytown.com">http://oysterbaytown.com</a>	
13. SITE OWNER'S NAME Town of Oyster Bay		14. ADDRESS Town Hall, 54 Audrey Ave., Oyster Bay, NY 11771		15. TELEPHONE NUMBER 516-624-6350	
16. PREPARER <i>John B. Swartwout</i> 2/10/2011 Signature Date John B. Swartwout, P.E., EE3, Remedial Bureau A Name, Title, Organization			17. APPROVED Signature Date Name, Title, Organization		