

COUNTY OF SUFFOLK

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NWIRP CALVERTON
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STEVE LEVY
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

HUMAYUN J. CHAUDHRY, D.O., M.S.
COMMISSIONER

June 20, 2008

Ms. Lora Fly
Remedial Project Manager (Code OPNEEV)
Facilities Engineering Command, Mid-Atlantic Naval Facilities
Engineering Command Building Z-144
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Engineering Evaluation/Cost Analysis (EE/CA)
Site 2-Fire Training Area, April 2008
Naval Weapons Reserve Plant, Calverton, NY

Dear Ms. Fly:

The Suffolk County Department of Health Services (SCDHS) has reviewed the EE/CA for the Site 2-Fire Training Area at the Naval Weapons Reserve Plant in Calverton, NY dated April 2008. Although the SCDHS concurs with the concept of the removal action, there are concerns that known areas of soil contamination are not being addressed in this EE/CA, and that some contamination areas need to be further delineated. Areas of contamination not being addressed will likely act as a continuing contamination source impacting the groundwater. Groundwater samples collected by the SCDHS in early 2008 identified a groundwater contaminant plume migrating from the Site 2-Fire Training area offsite onto the Swan Lake Country Club property (see attachment).

- Page 2-9, 3rd paragraph
"The deep petroleum-contaminated soil covers an area approximately 0.5 acres, but may not be completely delineated to the southeast."

The extent of the deep petroleum-contaminated soil needs to be further delineated.

- Page 4-3 Alternative 3: Excavation and Off-site Disposal
"The excavation limits were developed by determining the horizontal extent of shallow petroleum-contaminated soil from soil borings installed during the May 2005 supplemental sampling event."

According to laboratory data included in Appendix A of the report, soil samples taken from FB-SB-226 contained semi-volatile organics that exceeded the TAGMs from 3'-5' (shallow

zone), yet this area is not included in the excavation. This area needs to be included in the excavation.

- Page 4-3 Alternative 3: Excavation and Off-site Disposal

Alternative 3, the selected alternative, consists of excavating only the shallow petroleum-contaminated soil and does not address the deep petroleum contaminated soil. The report does not mention any rationale for not addressing the deeper contamination at this time. Considering that contamination has impacted the groundwater, and a groundwater plume emanating from this area has migrated off-site, the SCDHS believes that the deeper contamination needs to be addressed.

Although the SCDHS understands that the delineation of the groundwater plume from this site is outside the scope of this EE/CA, in light of the attached SCDHS groundwater sampling conducted in early 2008, full delineation of the groundwater contamination plume needs to be conducted in a reasonable timeframe to assure that all current and/or potential future receptors are identified.

If you would like to discuss these comments, please contact me at (631) 852-5810.

Sincerely,

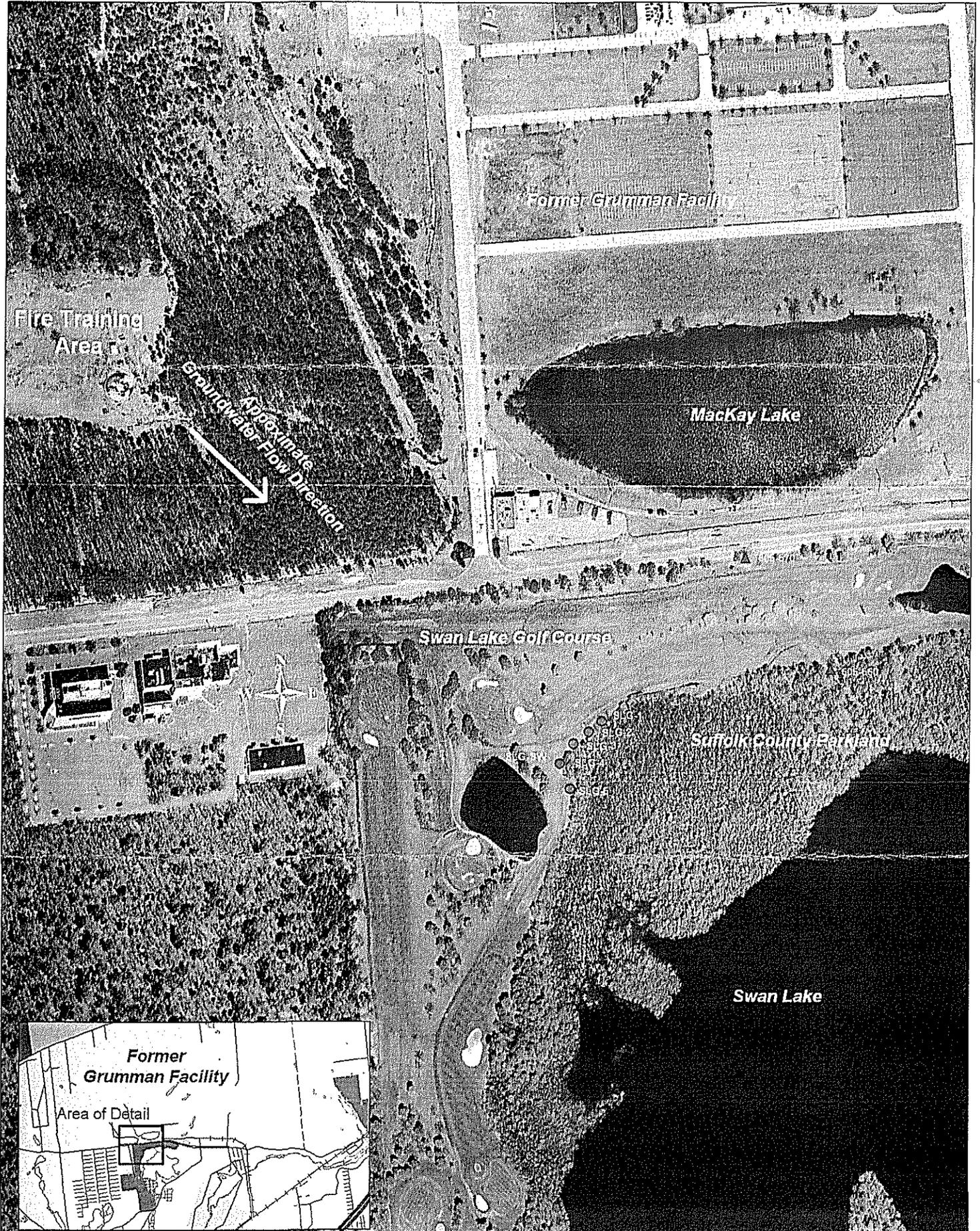


Andrew Rapiejko
Hydrogeologist
Office of Water Resources

cc: Vito Minei, P.E., SCDHS
Ron Paulsen, SCDHS
Mary Hime, SCDHS
Henry Wilke, NYSDEC
Larry Rosenmann, NYSDEC
Walter Parish, NYSDEC
Jacqueline Nealon, NYSDOH
Bill Gunther, RAB
Frank Anastasi, SCA Associated

SCDHS Profile Wells & Surface Water Sample Locations
January - April 2008

In the Vicinity of Site 2-Fire Training Area-Naval Weapons Industrial Reserve Plant (formerly Grumman), Calverton



Suffolk County Department of Health Services
 Division of Environmental Quality
 Swan Lake Golf Course Detected VOC Sample Results

DRAFT

Monitoring Well ID & Sampling Interval (feet below grade)	Location	Sample Type	Sample Date	Carbon disulfide	Chloroform	Trichloroethene	Chloroethane	Vinyl chloride	1,1-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichlorobenzene (o)	1,4-Dichlorobenzene (p)	tert-Butylbenzene	sec-Butylbenzene	Tetrachloroethene
				ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SL/G-1 (15-20)	Swan Lake Golf Course	Groundwater	1/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-1 (25-30)	Swan Lake Golf Course	Groundwater	1/31/2008	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-1 (35-40)	Swan Lake Golf Course	Groundwater	1/31/2008	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (20-25)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (30-35)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (40-45)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (50-55)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (60-65)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-3 (10-15)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-3 (20-25)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-3 (30-35)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	0.6	0.5	7.1	1.2	3	1	0.7	2.4	<0.5
SL/G-3 (40-45)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (10-15)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (20-25)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (30-35)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7
SL/G-4 (40-45)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (50-55)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (60-65)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	0.6	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (10-15)	Swan Lake Golf Course	Groundwater	4/8/2008	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (20-25)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (30-35)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	0.7	24	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (40-45)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (50-55)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (60-65)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SLG-SW	Swan Lake Golf Course	Surface Water	3/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
605-570	Swan Lake Golf Course	Surface Water	4/9/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
605-560	Swan Lake Golf Course	Surface Water	4/9/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Drinking water Maximum Contaminant Level of 5 ug/l exceeded

ug/l = micrograms per liter or parts per billion (ppb)