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June 15, 2011

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WHITE PLAINS OFFICE

Ms. Rosalie K. Rusinko
Senior Attorney
New York State Department of Environmental Conservation
Region 3
100 Hillside Avenue, Suite 100
White Plains, New York 10603-2860

Re: Town of Oyster Bay as Responsible Party at Bethpage Community Park

Dear Ms. Rusinko:

Northrop Grumman Systems Corporation ("Northrop Grumman") submits the following information and legal authority to the New York State Department of Environmental Conservation ("NYSDEC") regarding why the Town of Oyster Bay (the "Town") should be named as a responsible party for both soil and groundwater contamination at Bethpage Community Park ("Park") in the OU-3 Proposed Remedial Action Plan ("PRAP"). This letter is submitted as part of our confidential settlement discussions and should not be used for any other purposes.

Based on the following material and indisputable facts, the Town should be named by the State as a potentially responsible party at OU3:

(1) the Town has liability for OU-3, as the current owner and operator of the Park and as the owner and operator of the Park at the time of disposal. The Town has been the sole owner and operator of the Park for nearly 50 years, a period of ownership that is twice as long as Northrop Grumman's past ownership of the Park;

(2) the Town has liability for OU-3, as a generator, because of its release of Freon at the Park in connection with its ice skating rink; the groundwater IRM, which was installed and has been operated by Northrop Grumman is primarily treating Freon; and

(3) the Town has liability, as a generator and arranger, because the Town brought to the site significant quantities of untested fill materials from undocumented sources and, therefore, has liability for the soil conditions.

I. The Town is essential to any comprehensive resolution of the environmental issues at the Park because it has owned and operated the entire Park since 1962 and because it disposed of significant quantities of hazardous substances at the Park.

The Town has owned the 18-acre Park for almost 50 years (1962-2011), twice the period of time that Northrop Grumman's predecessor, Grumman Aircraft Engineering Corporation, owned the same parcel (approximately 1937-62). Section 107(a) of the Superfund Law provides that "the owner and operator of a vessel or facility…shall be liable." 42 U.S.C.§ 9607(a). There is no question that the Town, as owner and operator, is statutorily liable for response costs at the Park. The only question is the Town's allocable share of such costs, which will be heavily influenced by its dual status as the owner/operator and waste generator. In any cost recovery or contribution action, the Town will likely be allocated a significant portion of response costs because of its status and past practices. Thus, the Town is an essential and indispensible party to any resolution of the issues related to the Park.

Under current case law, the courts typically hold the owner of a site responsible for a significant share of the response costs, even when the owner, unlike the Town, generates no waste at the site. See, e.g. *United States v. R.W. Meyer, Inc.*, 932 F.2d 568 (6th Cir. 1991) (allocating two-thirds to the operator and one-third to the current owner); *South Florida Water Management District v. Montalvo*, 84 F.3d 402 (11th Cir. 1996) (allocating 75% to the waste generators and 25% to the current owner); and *Weyerhauser v. Koppers*, 771 F. Supp. 1420 (D. Md. 1991) (allocating 60% to the operator who the court said was solely responsible for the environmental damage and 40% to the owner); and *United States v. Burlington Northern and Santa Fe Railway Co.*, 129 S. Ct. 1870 (2009) (9% allocated to party who owned less than 20% of the site for less than half the period of disposal).

In this case, however, the Town will have a significantly higher allocation because, in addition to being the long-term owner and operator, the Town arranged for the disposal of significant quantities of hazardous substances at the site. Attached hereto as Exhibit 1 is a chart showing that Freon accounts for almost 70% of the volatile organic compounds being removed from the site groundwater by the groundwater IRM. Freon is inextricably tied to the Town's activities. Based on the proximity of the Freon contamination to the ice skating rink and witness testimony regarding the deteriorated condition of piping associated with the ice skating rink and historic leaks, there is no doubt that the Town's ice skating rink is the source of the Freon contamination at and migrating from the Park. Further, Freon was not a chemical associated with the construction of military aircraft and is not a constituent of concern in groundwater at any other part of the former Northrop Grumman and Navy 600-acre war plant campus.

Respectfully, Northrop Grumman does not believe that a decision by the State to carve-out the Town from the forthcoming PRAP would be consistent with the facts, the law or fundamental equities. Further, any decision by the State to exclude the Town from the PRAP will seriously complicate and, in fact, substantially and adversely impact the State's efforts to achieve a comprehensive solution of the issues at the Park.

II. The Town is likely to be responsible for the PCB remediation in the southwest corner of the Park.

As the State moves toward an extremely expensive, non-risk-based PCB cleanup in the southwest corner of the Park, it is important for the State to recognize that the Town is likely to be primarily responsible for the PCB soil contamination. The State is aware that the Town already performed some remedial work (primarily soil removal due to PCB contamination) and sued Northrop Grumman and the Navy to recover its costs. The Town has been unsuccessful in its efforts to recover its costs from Northrop Grumman or the Navy. Thus, without the Town's involvement in the PRAP, the State could be creating a substantial future orphan share.

The State needs the Town's involvement because there is very little evidence that anyone other than the Town is the source of the PCBs. In the Town's Statement of Material Facts in the litigation against Northrop Grumman and the Navy, (attached hereto as Exhibit 2), the Town presented a theory that the source of the PCBs is contaminated recharge basin scrapings from the Navy property. This theory was suggested in a deposition by Jean-Pierre Cofman (attached hereto as Exhibit 3), a Northrop Grumman employee who admittedly had no firsthand knowledge and a letter from Larry Leskovjan, a former employee who also had no firsthand knowledge. While the Town, in its Statement of Material Facts (paragraph 91), states that Northrop Grumman deposited recharge basin scrapings in the Park and cites the Cofman deposition as its sole support for that proposition, a review of the deposition transcript shows that there is no support for the Town's so-called facts. Mr. Cofman was asked, "How did you come to the understanding that this material was placed upon Park property?" In response he said, "Well, I never really came to that understanding, other than it's a possibility." (page 78). Thus, the Town's theory of Northrop Grumman responsibility for the PCBs at the Park is nothing more than a mere "possibility," with no corresponding facts.

The most plausible scenario is that the PCBs were disposed of at the site by the Town in connection with the large quantity of untested fill materials imported by the Town from unknown sources.

If the State continues to question whether Northrop Grumman and/or the Navy are also responsible for the disposal of PCBs at the site, the State should look to the Navy, and not Northrop Grumman. After all, it is black letter law that, if a property owner (the Navy) hires a contractor (Northrop Grumman) to remove hazardous substances (recharge basin scrapings) from that same government-owned property, the property owner is liable as a person who arranged for disposal, even if the property owner does not direct the contractor where to dispose of the waste

and even if the property owner does not know where the waste was disposed. See, e.g. *United States v. Ward*, 618 F. Supp. 884 (E.D. N.C. 1985) (party who retains a contractor to "get rid" of something has arranged for disposal); *United States v. Conservation Chemical Co.*, 619 F. Supp. 162 (W.D. Mo. 1985); *United States v. Hardage*, 761 F. Supp. 1501 (D. Okla. 1990.)

In any case, as the State considers the important question as to whether it should purposely exclude the Town from the PRAP, Northrop Grumman wants to reiterate and be clear that it is not in a position to assume responsibility for third-party wastes, such as the Town's PCBs. The State's present course of proposing a highly expensive, non-risk-based PCB remedy makes that option cost-prohibitive for Northrop Grumman. If the State nonetheless adopts a high-cost remedy (which appears to be the course that it is on, in spite of Northrop Grumman's technical support for a risk-based cleanup) and does not name the Town as a potentially responsible party under the PRAP, the State should be prepared to perform that selected remedy without full recourse and reimbursement of its costs.

III. The Supreme Court's 2009 *Burlington Northern* Decision Provides a Strong Reason for the State to Name the Town as a PRP.

In *Burlington Northern*, the government attempted to impose joint and several liability on Shell as a waste generator and Burlington Northern as an owner. The District Court found Shell responsible for only one product that had been disposed of on-site and Burlington Northern responsible only for 9% of the costs. The result was a huge orphan share that the government could not recover. The Ninth Circuit reversed, noting that that making the government whole was one of the goals of CERCLA and the Supreme Court reversed, leaving the government with a large unrecovered share.

Prior to the Supreme Court's decision in *Burlington Northern*, the State could reasonably expect that responsible parties would be held to be jointly and severally liable and could therefore proceed against one responsible party, leaving others on the sidelines. In *Burlington Northern*, however, the Court stated that where there is a reasonable basis for division and allocation of liability, as at the Park, each party will be responsible only for the waste it contributed to the site. Thus, in 2007, the Town had more latitude to theorize that Northrop Grumman disposed of, for example, chromium-containing waste[1] in the Park and is therefore potentially liable for remediation of all wastes, including PCB-containing waste. However, because the PCBs in the Park are in an area geographically distinct from the chromium-containing material, a court today is far more likely to find that there is a basis for divisibility, and the party who is found to have disposed of one chemical, but not the other, will be responsible for costs related to that one chemical and not the other. This presents the State with a significant probability that, if the Town is not named as a PRAP, the State will be unable to

[1] Nothing contained herein should be viewed as an admission that Northrop Grumman disposed of chromium-containing waste at the site. We merely note that the Town believed that its evidence regarding chromium-containing waste was significantly stronger than its evidence regarding PCB-containing waste.

recover its costs related to PCB remediation, costs which will be excessive because no consideration was given to risk and cost-effectiveness.

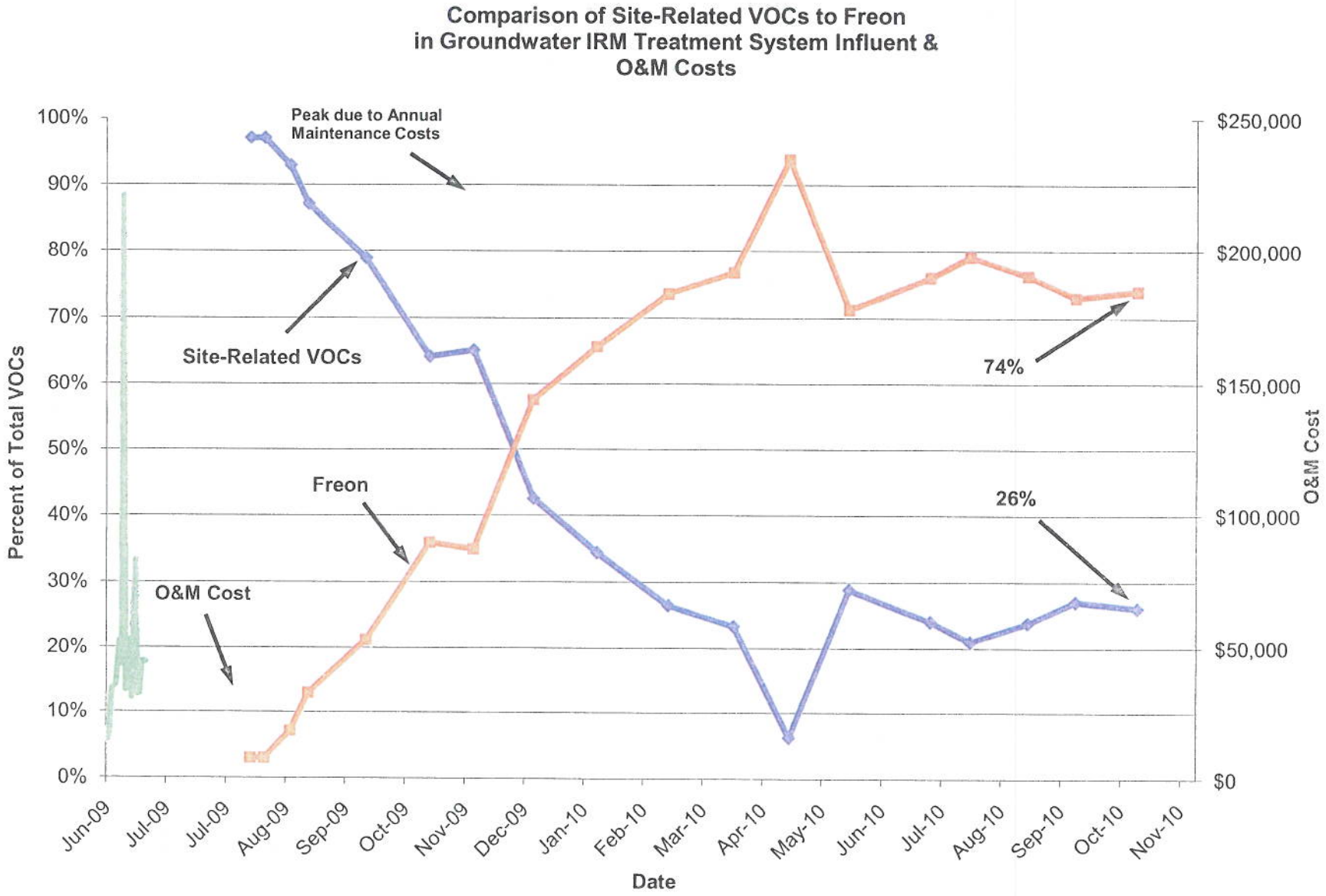
IV. Conclusion

In a post-*Burlington Northern* world, the only way the State can have confidence that the responsible parties will implement the remediation, or that the State will be able to recover its costs after performing the remediation itself, is to bring all the responsible parties together—the Navy, the Town and Northrop Grumman. The facts demonstrating Town liability at the Park are straightforward and not subject to serious dispute. Northrop Grumman therefore respectfully requests the State to name the Town as a PRP, along with the Navy, when it issues the OU-3 PRAP.

Very truly yours,

AARON GERSHONOWITZ

AG:lvb


Comparison of Site-Related VOCs to Freon
in Groundwater IRM Treatment System Influent &
O&M Costs
Peak due to Annual
Maintenance Costs
Site-Related VOCs
Freon
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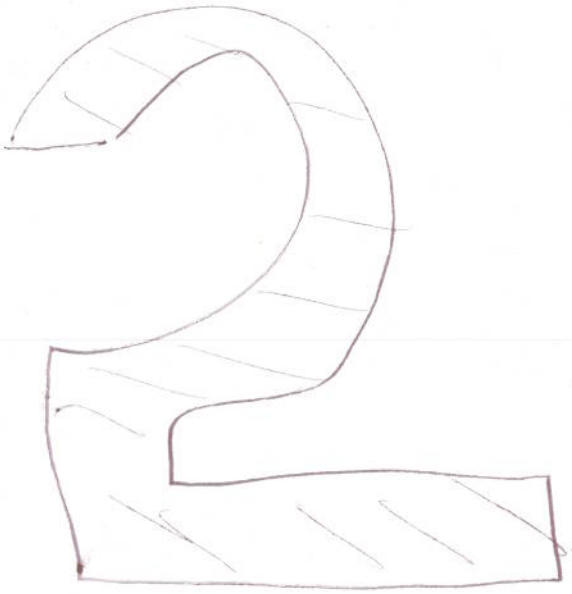


PLAINTIFF, THE TOWN OF OYSTER BAY'S STATEMENT OF MATERIAL FACTS UNDER FED. R. CIV. P. 56 AND LOCAL RULE 56.1

1. The Bethpage Community Park (the "Park") is located on an 18-acre parcel of land in Bethpage, New York and is currently owned and operated by the plaintiff, Town of Oyster Bay (the "Town"). Deed No. 7083, p. 539 (Aug. 21, 1962), Bates No. BETPARK00918, NGSC-TOB0000306 (Exhibit 1); Deed No. 7083, p. 542 (Aug. 21, 1962), Bates No. BETPARK00921, NGSC-TOB0000304 (Exhibit 2); Town of Oyster Bay Resolution (Jan. 3, 1963), Bates No. TOB 012279 (Exhibit 3).

2. The land upon which the Park is located (the "Park Property") was formerly owned and operated by the predecessor in interest of defendant Northrop Grumman Systems Corporation ("NGSC"), Grumman Aerospace Corporation. Deed No. 7083, p. 539 (Aug. 21, 1962), Bates No. BETPARK00918, NGSC-TOB0000306 (Exhibit 1); Deed No. 7083, p. 542 (Aug. 21, 1962), Bates No. BETPARK00921, NGSC-TOB0000304 (Exhibit 2); Grumman Draft Minute Re Gift of Land to Bethpage Park District, Bates No. NGSC-TOB0001738 (Exhibit 4); In the Matter of the Development and Implementation of a Remedial Program for Operable Unit 3 of an Inactive Hazardous Waste Disposal Site, NGSC Respondent, Order on Consent, para. 2 (Exhibit 5).

3. NGSC owned the Park Property from on or about 1939 to October 1962. Letter from Larry L. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (July 25, 2002), Bates No. NGSC-TOB 0020910 (observing that Grumman operated at Bethpage since "the late 1930s") (Exhibit 6); Northrop Grumman Systems Corporation, Site Specific Work Plan (April 2003), Bates No.

NGSC-TOB0001882, 1907 (observing that Grumman acquired the Park "around" 1940, and that Grumman donated the Park to the Town on October 17, 1962) (Exhibit 7).

4. Grumman transferred the Park Property to the Town in October 1962. Deed No. 7083, p. 539 (Aug. 21, 1962), Bates No. BETPARK00918, NGSC-TOB0000306 (Exhibit 1); Deed No. 7083, p. 542 (Aug. 21, 1962), Bates No. BETPARK00921, NGSC-TOB0000304 (Exhibit 2); Letter from John J. Burns, Supervisor, Town of Oyster Bay, to Grumman Aircraft Engineering Corporation (October 16, 1962), Bates No. NGSC-TOB0001850 (Exhibit 8); Grumman Aircraft Engineering Corporation, Interoffice Memorandum, para. 1 (April 21, 1964), Bates No. NGSC-TOB0001784 (Exhibit 9); Northrop Grumman Systems Corporation, Site Specific Work Plan (April 2003), Bates No. NGSC-TOB0001907 (observing that Grumman donated the Park Property to the Town on October 17, 1962) (Exhibit 7).

5. In 2002, the New York State Department of Environmental Conservation ("DEC") requested that NGSC obtain soil samples from the Park Property. Letter from Richard M. Walka, Vice President, Dvirka & Bartilucci Consulting Engineers, to John Cofman, Lead Engineer, Environmental Technology and Compliance, Northrop Grumman Corporation (July 18, 2002), NGSC-TOB0018949, 18950 (observing that on May 7, 2002, the DEC and New York State Department of Health "requested additional soil sampling be performed within the park") (Exhibit 10).

6. NGSC obtained soil samples from the Park Property in 2002 and 2003. New York State Department of Environmental Conservation, Community Update, Bethpage Community Park, Operable Unit 3: Former Grumman Settling Ponds (June 2004), Bates No. NGSC-TOB0000038, 39 ("Northrop Grumman's first round of soil sampling in the park took place in March 2002") (Exhibit 11); Northrop Grumman, Town of Oyster Bay Bethpage

Community Park, Soil Sampling Program: Report of Findings (June 2002), Bates No. NGSC-TOB0002798 (Exhibit 12); Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Investigation Sampling Program: Site-Specific Work Plan (April 2003), Bates No. NGSC-TOB0001882 (Exhibit 7).

7. NGSC caused the soil samples from the Park Property that it obtained to be analyzed for the presence of certain contaminants. Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Steven M. Scharf, P.E., Project Engineer, New York State Department of Environmental Conservation, Division of Environmental Remediation (December 22, 2004), Bates No. NGSC-TOB0018908, 18913 (observing that in May/June of 2003, "NGC conducted a second soil sampling program within the Bethpage Community Park that . . . analyzed for PCBs, hexavalent chromium and metals . . . .) (Exhibit 13); Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Investigation Sampling Program: Site-Specific Work Plan (April 2003), Bates No. NGSC-TOB0001882, 1913-1916 (March 2002 Soil Sampling Program, Summary of Detected Contamination, showing PCB and chromium contamination on the Park Property) (Exhibit 7).

8. The analysis of such soil samples showed levels of chromium were present in the soils of the Park Property. Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Soil Sampling Program: Report of Findings (June 2002), Bates No. NGSC-TOB0002798, 2828-2837 (showing chromium and other RCRA metal concentrations detected at various depth intervals on the Park Property) (Exhibit 12); Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Investigation Sampling Program: Site-Specific Work Plan (April 2003), Bates No. NGSC-TOB0001882, 1913-1916 (March 2002 Soil Sampling Program, Summary of Detected Contamination, showing PCB and chromium contamination on the Park Property)

(Exhibit 7); Letter from G. Stephen Hamilton, Hazardous Waste Compliance Counsel, New York State Department of Environmental Conservation, to F. Franklin Amanat, Assistant United States Attorney (May 6, 2003), NGSC-TOB0000170, 172 (observing that a "contaminant typically found in the Park is chromium") (Exhibit 14).

9. Chromium is a hazardous substance as defined by the Comprehensive Environmental Response Compensation And Liability Act ("CERCLA"). 42 U.S.C. § 9601(14) (cross referencing statutes that define "chromium" and "chromium compounds" as CERCLA hazardous substances); 40 C.F.R § 302.4 (identifying chromium" and "chromium compounds" as CERCLA hazardous substances).

10. The levels of chromium present in the soils at the Park Property exceeded criteria deemed acceptable by the DEC, as set forth in TAGM 4046. *Compare* New York State Department of Environmental Conservation TAGM 4046, Table 4 (stating that background concentrations for chromium in the Eastern USA is 1.5-40 ppm) (Exhibit 15), *with* Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Steven M. Scharf, P.E., Project Engineer, New York State Department of Environmental Conservation, Division of Environmental Remediation (December 22, 2004), Bates No. NGSC-TOB0018908, 18913-14 ("constituents detected at concentrations in excess of the TAGM 4046 criteria include . . . chromium (max. 1,780 ppm)") (Exhibit 13).

11. The analysis of such soil samples also show that levels of polychlorinated biphenyls ("PCBs") were present in the soils of the Park Property. Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Steven M. Scharf, P.E., Project Engineer, New York State Department of Environmental Conservation, Division of Environmental Remediation (December 22, 2004),

Bates No. NGSC-TOB0018908, 18913-14 (discussing the NGSC soil sampling program in May/June 2003 at the Park, in which PCBs were detected (max. 44 ppm)) (Exhibit 13); Letter from Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials, to Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp. (June 11, 2002), Bates No. NGSC-TOB0020271, 20271 ("results from both the supplemental Park samples and the previous Park samples indicate that PCBs are present in surface soil above 1 ppm . . . .") (Exhibit 16); Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Soil Sampling Program: Report of Findings (June 2002), Bates No. NGSC-TOB0002798, 2823-2828 (showing PCB concentrations detected at various depth intervals on the Park Property) (Exhibit 12); Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Investigation Sampling Program: Site-Specific Work Plan (April 2003), Bates No. NGSC-TOB0001882, 1913-1916 (March 2002 Soil Sampling Program, Summary of Detected Contamination, showing PCB and chromium contamination on the Park Property) (Exhibit 7).

12. PCBs are hazardous substances as defined by Section 9601(14) of CERCLA. 42 U.S.C. § 9601(14) (cross referencing statutes that define PCBs as a CERCLA hazardous substance); 40 C.F.R. § 302.4 (identifying PCBs as a CERCLA hazardous substance).

13. The levels of PCBs present in the soils at the Park Property exceeded criteria deemed acceptable by the DEC, as set forth in TAGM 4046. *Compare* New York State Department of Environmental Conservation TAGM 4046, Table 4 (stating that the cleanup objectives for PCBs are 1.0 ppm for surface soils and 10 ppm for subsurface soils) (Exhibit 15), *with* Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Soil Sampling Program: Report of Findings (June 2002), Bates No. NGSC-TOB0002798, §§ 4.3.1.1, 4-5-4-10

(showing soil samples from the Park Property contaminated with PCBs in concentrations exceeding TAGM standards of 1.0 ppm for surface soils and 10 ppm for subsurface soils) (Exhibit 12).

14. Other hazardous substances as defined by Section 9601 of CERCLA were also found in such soil samples. These substances include, but are not limited to, arsenic, barium, cadmium, lead, mercury, and selenium. *Compare* Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Soil Sampling Program: Report of Findings (June 2002), Bates No. NGSC-TOB0002798, 2828-2837 (observing concentrations of arsenic, barium, cadmium, lead, mercury, and selenium at various depth intervals on the Park Property) (Exhibit 12), *and* Northrop Grumman Systems Corporation, Site Specific Work Plan (April 2003), Bates No. NGSC-TOB0001882, 1913-1916 (noting the presence of cadmium, mercury, and arsenic on the Park Property) (Exhibit 7), *with* 40 C.F.R. § 302.4 (identifying these metals as CERCLA hazardous substances).

15. Prior to February 2005, the Town requested that the DEC permit the Town to remediate a seven acre portion of the Park ("the Construction Area"), which would enable the Town to construct a new ice skating facility within such seven acre portion and return some of the Park facilities back into service for Town residents. Deposition of Matt Russo (January 9, 2007), pp. 54-55 (Exhibit 17).

16. In March 2005, the Town voluntarily entered into an Order on Consent with the DEC ("the Consent Order"). In the Matter of the Development and Implementation of an Interim Remedial Measure Program for an Inactive Hazardous Waste Disposal Site, Town of Oyster Bay, Respondent, Order on Consent (March 18, 2005), Bates No. NGSC-TOB0021273 (Exhibit 18).

17. The Consent Order required the Town to investigate the extent of the presence of contamination in the soil in the Construction Area. In the Matter of the Development and Implementation of an Interim Remedial Measure Program for an Inactive Hazardous Waste Disposal Site, Town of Oyster Bay, Respondent, Order on Consent (March 18, 2005), § C.3, Bates No. NGSC-TOB0021273, 21273-74 (Exhibit 18).

18. The Consent Order required the Town to develop a Work Plan, captioned "Site Characterization Work Plan", "Remedial Investigation/Feasibility Study Work Plan", "IRM Work Plan", "Remedial Investigation/Feasibility Study Work Plan", or "OM&M Work Plan", to address the presence of contamination in the soil in the Construction Area. In the Matter of the Development and Implementation of an Interim Remedial Measure Program for an Inactive Hazardous Waste Disposal Site, Town of Oyster Bay, Respondent, Order on Consent (March 18, 2005), § II.A, Bates No. NGSC-TOB0021273, 21275 (Exhibit 18).

19. The Consent Order required that all actions taken by the Town to discharge its obligations under the Consent Order be approved by the DEC. In the Matter of the Development and Implementation of an Interim Remedial Measure Program for an Inactive Hazardous Waste Disposal Site, Town of Oyster Bay, Respondent, Order on Consent (March 18, 2005), Bates No. NGSC-TOB0021273, 21274 (Exhibit 18).

20. The Consent Order required that all actions taken by the Town to discharge its obligations be consistent with CERCLA and the National Contingency Plan. In the Matter of the Development and Implementation of an Interim Remedial Measure Program for an Inactive Hazardous Waste Disposal Site, Town of Oyster Bay Respondent, Order on Consent (March 18, 2005), Bates No. NGSC-TOB0021273, 21274 (Exhibit 18).

21. The Town conducted an analysis of the soil samples in the Construction Area by way of its environmental consultants, H2M Group. Town of Oyster Bay, Interim Remedial Measure Investigation Report and Remedial Action Plan (November 2005), Bates No. H2M 003394, 003403 (Exhibit 19); Town of Oyster Bay, Supplemental Investigation Report (December 2005), Bates No. H2M 004158, 4166 (Exhibit 20); Town of Oyster Bay, Bethpage Community Park, Interim Remedial Measure – Construction Area: Addendum to the Remedial Action Plan (March 2006), Bates No. H2M 004295, 4304 (Exhibit 21).

22. The analysis of the soil samples in the Construction Area disclosed the presence of chromium at depths exceeding 40 feet below surface. Town of Oyster Bay, Interim Remedial Measure Investigation Report and Remedial Action Plan (November 2005), Bates No. H2M 003394, 3409, 3480-3574 (Exhibit 19).

23. The analysis of the soil samples in the Construction Area disclosed the presence of PCBs at depths exceeding at least 8 to 10 feet below surface. Northrop Grumman, Town of Oyster Bay Bethpage Community Park, Soil Sampling Program: Report of Findings (June 2002), Bates No. NGSC-TOB0002798, 2823-2828 (Exhibit 12). The concentration of PCBs exceeded 1 ppm in 48 of 141 boring locations, and exceeded 10 ppm in 10 of the 141 boring locations. One soil boring location revealed a PCB concentration of 550 ppm. Town of Oyster Bay, Interim Remedial Measure Investigation Report and Remedial Action Plan (November 2005), Bates No. H2M 003394, 3409 (Exhibit 19)

24. The analysis of the soil samples in the Construction Area disclosed the presence of other CERCLA hazardous substances, including but not limited to, arsenic, barium, beryllium, cadmium, copper, iron, magnesium, mercury, nickel, selenium, and zinc at depths exceeding 40

feet below surface. Town of Oyster Bay, Interim Remedial Measure Investigation Report and Remedial Action Plan (November 2005), Bates No. H2M 003394, 3409, 3480-3574 (Exhibit 19).

25. On February 10, 2006, the DEC recommended that the Town amend its Remedial Action Plan to include an analysis which screened various remedial alternatives with the following evaluation criteria to select a cost-effective remedy for the soils within the Construction Area: (1) overall protectiveness of human health; (2) compliance with applicable or relevant and appropriate regulations and guidance criteria; (3) long term effectiveness and permanence; (4) reductions in toxicity, mobility and volume through treatment; (5) short term effectiveness; (6) implementability; and (7) cost. Letter from Steven M. Scharf, Project Engineer, Remedial Bureau A, Division of Environmental Remediation, Department of Environmental Conservation, to Philip Schade, H2M Group, P.C. (February 10, 2006), Bates No. NGSC-TOB0044404 (Exhibit 22).

26. In March 2006, the Town submitted its "Addendum to the Remedial Action Plan", which, among other things, presented five remedial alternatives to address the soil contamination within the Construction Area. Town of Oyster Bay, Bethpage Community Park, Interim Remedial Measure – Construction Area: Addendum to the Remedial Action Plan (March 2006), Bates No. H2M 004295, 4320 (identifying the five remedial alternatives developed for the Bethpage IRM) (Exhibit 21).

27. The March 2006 "Addendum to the Remedial Action Plan" presented by the Town to the DEC screened five remedial alternatives and provided an evaluation of each alternative against the criteria recommended by the DEC. Town of Oyster Bay, Bethpage Community Park, Interim Remedial Measure – Construction Area: Addendum to the Remedial

Action Plan (March 2006), Bates No. H2M 004295, 4320 (identifying the five remedial alternatives developed for the Bethpage IRM) (Exhibit 21).

28. On May 4, 2006, the DEC approved the remedial alternative selected by the Town. Letter from Chittibabu Vasudevan, Director, Remedial Bureau A, Division of Environmental Remediation, New York State Department of Environmental Conservation, to Philip Schade, H2M Group, P.C. (May 4, 2006), Bates No. NGSC-TOB0044402 (Exhibit 23).

29. The DEC-approved remedial alternative is Remedial Alternative IV – Remediation to 10 Feet plus Targeted Removal of Fill Areas. Town of Oyster Bay, Bethpage Community Park Interim Remedial Measure – Construction Area: Addendum to the Remedial Action Plan (March 2006), Bates No. H2M 004295 (describing Remedial Alternative IV) (Exhibit 21).

30. The Town executed the DEC-approved Remedial Alternative IV with the oversight and approval of DEC. Deposition of Philip Schade (April 25, 2007), pp. 50-51 (Exhibit 24).

31. The Town executed the DEC-approved Remedial Action Plan for Remedial Alternative IV as outlined in the affidavit of Phillip Schade, the Project Manager for the Town's Engineering Consultant, H2M and the supporting documentation annexed thereto. Affidavit of Phillip J. Schade, P.E. in Support of Plaintiff's Motion for Summary Judgment with supporting documentation (December 11, 2007).

32. The Town expended in excess of $22 million in investigating the extent of contamination in the Construction Area and implementing the DEC-approved IRM plan. Affidavit of Matthew Russo, P.E. in Support of Plaintiff's Motion for Summary Judgment (December 12, 2007).

Grumman's Ownership And Operation Of The Park Property Before Transfer To The Town

33. Grumman conducted aircraft manufacturing and testing operations at two sites that were adjacent to the Park Property. "Northrop Grumman Corporation", http://www.epa.gov/region02/waste/fsgrumm.pdf (March 2005), ("[a]ctivities conducted at the facility included engineering, administrative, research and development, and testing operations, as well as manufacturing operations for the Navy and NASA") (Exhibit 25); Deposition of Joseph A. Kaminski (January 30, 2007), p. 25 (stating that Plant 5 on the Bethpage facility was used for "aircraft manufacturing") (Exhibit 26).

34. Grumman conducted these operations during the 1940s through and including, at least, October 1962, when Grumman transferred the Park Property to the Town. Department of Environmental Conservation, Record of Decision, Grumman Aerospace, Bethpage Facility, Operable Unit 1 (Inactive Hazardous Waste Site No. 130003A) (March 1995), § 2.1, Bates No. BETPARK00001, 6 ("Grumman Aerospace Corporation was established in the early 1930s at the present site in Bethpage.") (Exhibit 27).

35. One of these adjacent sites consisted of approximately 550 acres and was owned and operated by Grumman (the "Grumman site"). Deposition of Larry L. Leskovjan (January 11, 2007), pp. 35-36 (describing the Grumman-owned and Navy-owned properties at Bethpage as adjacent to each other) (Exhibit 28); Deposition of Jean-Pierre Cofman (February 1, 2007), p. 133-134 (describing the entire Bethpage facility as comprising approximately 650 acres, of which 105 acres were Navy-owned and 520-530 acres were Grumman-owned) (Exhibit 29).

36. The other adjacent site was known as the Naval Weapons Industrial Reserve Plant ("the NWIRP"). Deposition of Larry L. Leskovjan (January 11, 2007), pp. 35-36 (identifying the "naval weapons industrial reserve plant" as adjacent to the Grumman-owned property)

(Exhibit 28); "Northrop Grumman Corporation", http://www.epa.gov/region02/waste/fsgrumm.pdf (March 2005) ("[a]pproximately 105 of the 635 acres are occupied by the Naval Weapons Industrial Reserve Plant (NWIRP), a Government Owned Contractor Operated (GOCO) facility") (Exhibit 25).

37. The NWIRP consisted of approximately 105 acres, and was owned by defendant, the United States Navy ("the Navy"). Deposition of Larry L. Leskovjan (January 11, 2007), p. 52 (describing the 105-Navy owned site) (Exhibit 28); "Northrop Grumman Corporation", http://www.epa.gov/region02/waste/fsgrumm.pdf (March 2005) ("[a]pproximately 105 of the 635 acres are occupied by the Naval Weapons Industrial Reserve Plant (NWIRP), a Government Owned Contractor Operated (GOCO) facility") (Exhibit 25); Deposition of Jean-Pierre Cofman (February 1, 2007), p. 133-134 (describing the entire Bethpage facility as comprising approximately 650 acres, of which 105 acres were Navy-owned and 520-530 acres were Grumman-owned) (Exhibit 29).

38. Grumman operated the NWIRP as a "Government Owned-Contractor Operated" ("GOCO") facility pursuant to one or more "Facility Use Contracts" between the Navy and Grumman. Facility Use Contract No. NOw 6116-u, Bates No. NGSC-TOB0000088-127 (Exhibit 30); Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (July 25, 2002) (stating that NGSC could not locate the appropriate "facility use" contract pertaining to 1958 through 1963, and further stating that Contract No. NOw 6116-u is "typical of the various Bethpage facility use contracts over the last six decades at NWIRP") (Exhibit 6); Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems

Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (May 24, 2002), Bates No. NGSC-TOB0001773, 1774 (observing that the government-owned NWIRP, and Northrop Grumman "operated the Bethpage facility under standard Government facility use and procurement contracts") (Exhibit 31); "Northrop Grumman Corporation", http://www.epa.gov/region02/waste/fsgrumm.pdf (March 2005) ("[a]pproximately 105 of the 635 acres are occupied by the Naval Weapons Industrial Reserve Plant (NWIRP), a Government Owned Contractor Operated (GOCO) facility") (Exhibit 25).

39. The NWIRP was owned by defendant, the United States Navy (the "Navy") and operated by Grumman. Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (May 24, 2002), Bates No. NGSC-TOB0001773, 1774 ("Northrop Grumman (and its predecessor, Grumman Corporation) operated the NWIRP as agents of the United States to manufacture critical military hardware and aircraft for the Department of Defense (DoD) for the last six decades") (Exhibit 31).

40. A number of buildings (referred to as "plants") and facilities located on the Grumman Site and the NWIRP were utilized to support Grumman's aircraft manufacturing and testing operations. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 13-14 (stating that there were "dozens" of buildings or "plants" on Grumman-owned land) (Exhibit 29); Deposition of Joseph A. Kaminski (January 30, 2007), pp. 68 (describing Building 20 on the NWIRP), 25 (stating that Plant 5 on the Bethpage facility was used for "aircraft manufacturing") (Exhibit 26); Deposition of Larry L. Leskovjan (January 1, 2007), p. 68 (referencing buildings on the 105 acre

property), p. 77 (stating that manufacturing activities were conducted on Grumman-owned property) (Exhibit 28).

41. A Contract for Plant Facilities, entered into between the Navy and Grumman in 1943 provided that, with respect to plants located Grumman-owned land:

> each and every item of the Plant Facilities, including any and all repairs and replacements thereto which may hereafter be made in accordance with the provisions of this Contract, shall become the sole property of the [Navy]...

Contract for Plant Facilities, Nov. 30, 1943, NGSC-TOB0000715, 0000720 (Exhibit 32).

42. Plant 2 was one such facility that was located on the Grumman site but was owned by the Navy. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 86-87 (in connection with discussion of drying metal sludges from the NWIRP operation, testifying that "Plant 2 was on the Grumman-owned property") (Exhibit 29).

43. The Contract for Plant Facilities provided that Grumman had to obtain the approval of the Navy for any additions or alterations to be made to the structure of Plant 2. Contract for Plant Facilities, Nov. 30, 1943, Art. IV, NGSC-TOB0000715, 0000717 ("Contractor may at any time make changes in Appendix A [indicating the location of the Plant Facilities] with the written consent of the Contracting Officer") (Exhibit 32).

44. The Navy provided financing for additions and alterations made to the structure of Plant 2. Contract for Plant Facilities, Nov. 30, 1943, Art. VI, NGSC-TOB0000715, 0000718 ("The Department [of the Navy] shall pay to the Contractor the Allowable Cost . . . incurred by the Contractor (i) in acquiring, constructing and installing the Plant Facilities in accordance with the Contract, (including all costs incurred . . . by reason of compliance with, changes in Appendix A ordered by the [Navy] Contracting Officer) . . . .) (Exhibit 32).

45. In or about 1948, the New York State Department of Health determined that hexavalent chromium was present in Well No. 1 at the NWIRP. Letter from H. R. Lacy, District Public Works Officer, to Commandant, Third Naval District, United States Navy (October 25, 1948), ¶¶ 1-2, Bates No. NGSC-TOB0025220, 25220 (observing that hexavalent chromium contaminated Well No. 1 in the U.S. Naval Storehouse at Bethpage, Long Island) (Exhibit 33); Letter from H. R. Lacy, District Public Works Officer, to Chief, Bureau of Yards and Docks (date unreadable), ¶ 1, Bates No. NGSC-TOB0025224, 25224 (referring to "the contamination of Well No. 1 [at the Bethpage facility] by the presence of hexavalent chromium in excess of the available maximum permitted by U.S. Public Health Service standards") (Exhibit 34). The Navy thereafter took steps to shut down Well No. 1. Letter from H. R. Lacy, District Public Works Officer, to Chief, Bureau of Yards and Docks (date unreadable), ¶ 1, Bates No. NGSC-TOB0025224, 25224 (recommending that the discharge pipe from Well No. 1 be disconnected from the distribution system) (Exhibit 34); Letter from R.G. Oakes, to Commandant, Third Naval District, Navy Department (October 27, 1948), Bates No. NGSC-TOB0025223 (reporting that automatic control equipment will be transferred from Well No. 1 to Well No. 5) (Exhibit 35).

46. Hexavalent chromium is a hazardous substance as defined by CERCLA. 42 U.S.C. § 9601(14) (cross referencing statutes that define "chromium" and "chromium compounds" as CERCLA hazardous substances); 40 C.F.R. § 302.4 (identifying chromium" and "chromium compounds" as CERCLA hazardous substances).

47. After the Navy and the New York State Department of Health determined that Well No. 1 at the NWIRP was contaminated with hexavalent chromium, the Navy approved plans to construct an industrial wastewater treatment facility (the "wastewater treatment

facility"), which was constructed in or about 1950. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 98 ("treatment started at Plant 2 with the construction of the industrial waste treatment facility, otherwise referred to as the acid house, around 1950") (Exhibit 29).

48. The wastewater treatment facility was constructed in or about the area of Plant 2. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 98-99 (Exhibit 29).

50. The wastewater treatment plant treated wastewater generated from various industrial processes conducted at plants located on the Grumman site. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 98 (observing that wastewater treated at the wastewater treatment plant "came from wherever there was wastewater produced on site, not just from Plant 2, but that would have included Plant 1, Plant 3, wherever it was produced[]") (Exhibit 29).

51. The wastewater treatment plant treated wastewater generated from various industrial processes conducted at plants located on the NWIRP. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 98 (observing that wastewater treated at the wastewater treatment plant "came from wherever there was wastewater produced on site, not just from Plant 2, but that would have included Plant 1, Plant 3, wherever it was produced[]") (Exhibit 29).

52. From approximately 1950 through, at least, October 1962, hexavalent chromium-laden wastewater was transported from Grumman's aircraft manufacturing and testing operations to the wastewater treatment facility through influent pipes or a 1,500 gallon tank truck. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 98-99 (observing that the wastewater before treatment contained hexavalent chromium) (Exhibit 29); Deposition of Robert Jasinkonis (October 5, 1999), pp. 31-34 (Exhibit 36)

53. The 1,500 gallon capacity tank truck was owned and operated by Grumman. Deposition of Robert Jasinkonis (October 5, 1999), pp. 31, 56 (Exhibit 36).

54. The hexavalent chromium-laden wastewater was transferred to several 11,000 gallon vats in the wastewater treatment plant for treatment. Deposition of Robert Jasinkonis (October 5, 1999), pp. 39-42 (Exhibit 36).

55. Following treatment of the hexavalent chromium at the wastewater treatment plant, the hexavalent chromium contained in the wastewater was reduced from a hexavalent state to a trivalent state. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 99 (Exhibit 29).

56. Wastewater and sludge containing trivalent chromium was the end product of the wastewater treatment process of the hexavalent chromium contained in the wastewater transported to the wastewater treatment plant. Deposition of Robert Jasinkonis (October 5, 1999), pp. 46-47 (Exhibit 36); Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (May 24, 2002), ¶ 6, Bates No. NGSC-TOB0001773, 1775 (referring to "[t]he drying of metal-bearing sludges from NWIRP operation on what is now the Park property . . . ." and stating that "[t]hese sludges resulted from the treatment of metal finishing wastewaters . . . to reduce the hexavalent chromium to trivalent chromium") (Exhibit 31).

57. Following treatment of the hexavalent chromium contained in the wastewater, the resultant trivalent chromium-laden sludge was then transferred by a piping system and one or more pumps to two 3,000 gallon holding tanks located on the north side of the wastewater treatment plant. Deposition of Robert Jasinkonis (October 5, 1999), pp. 53-55 (Exhibit 36).

58. The trivalent chromium-laden sludge was then pumped from the holding tanks to Grumman's 1,500 gallon tank truck. Deposition of Robert Jasinkonis (October 5, 1999), p. 55 (Exhibit 36).

59. The trivalent chromium-laden sludge in the Grumman 1,500 gallon tank trucks was later deposited onto sludge drying beds located at the Park Property. Deposition of Robert Jasinkonis (October 5, 1999), pp. 56-57 (Exhibit 36); Letter from Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (May 24, 2002), ¶ 1, Bates No. NGSC-TOB0001773-1777 ("[w]hile it was owned by Grumman, the future park property was used to dry sludges produced from industrial wastewater treatment activities in support of Navy and DoD programs."), ¶ 6 ("the drying of metal-bearing sludges from NWIRP operation on what is now the Park property presumably continued until this property was transferred to the Town in 1962 . . . .") (Exhibit 31); Letter from Edwin Dassatti, Director, Bureau of Solid Waste and Corrective Action, New York State Department of Environmental Conservation, to Larry J. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp. (March 12, 2003), ¶ 5, Bates No. NGSC-TOB0020284, 20286 ("waste at [the Park] was deposited in individual truck loads rather than by natural processes") (Exhibit 37).

60. The sludge drying beds located at the Park Property were approximately 20 feet wide, 20 feet long and five feet deep. Deposition of Robert Jasinkonis (October 5, 1999), p. 57 (Exhibit 36).

61. The bottoms of the sludge drying beds consisted of bare soil. Deposition of Robert Jasinkonis (October 5, 1999), p. 57 (Exhibit 36).

62. After the sludge was dried in the sludge drying beds located on the Park Property, Grumman employees used backhoes to scrape the dried sludge from the beds and place it onto dump trucks. Deposition of Robert Jasinkonis (October 5, 1999), pp. 59-60 (Exhibit 36).

63. The dump trucks onto which the dried sludge had been placed then brought the sludge to another part of the Park Property and dumped it. Deposition of Robert Jasinkonis (October 5, 1999), pp. 59-62 (Exhibit 36).

64. In or about 1961, Grumman and the Navy began to conduct "autoclave" operations at Plant 3. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 23-25 (Exhibit 29).

65. The autoclave operations involved three or four machines known as autoclaves. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 23 (Exhibit 29).

66. The autoclave operations were used to heat and cool composite structures for curing used in the aircraft manufactured by Grumman for the Navy. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 31 (Exhibit 29).

67. The heating and cooling process in the autoclave operations was achieved by circulating fluid known as "Therminol." Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 31-34 (Exhibit 29).

68. Therminol had a PCB concentration of approximately 97 to 98%. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 125 (Exhibit 29).

69. The autoclave operations included a separate heating and cooling system and an intricate network of tubing that lined the autoclave machines through a large table-like structure known as a "platen." Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 32-35 (Exhibit 29).

70. The autoclave operations, including the system used to heat and cool the autoclave machinery, the piping that lined the autoclave machinery, and the storage facilities had

the capacity to hold several thousand gallons of the PCB-laden Therminol. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 37-38 (Exhibit 29).

71. The autoclave machinery and related systems experienced leaks of the PCB-laden Therminol. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 39-40 (Exhibit 29).

72. Grumman was aware of the existence of such leaks as a result of maintenance that was performed on the autoclave machinery. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 39-40 (Exhibit 29).

73. Specifically, "packing glands" on "positive placement pumps" and the control valves, were items that often required maintenance due to leakage of Therminol. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 110-11 (Exhibit 29); Larry L. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (July 25, 2002), Bates No. NGSC 0001786, 1789 (Exhibit 6).

74. During maintenance, Grumman employees drained the system of the PCB-laden Therminol, which resulted in some of the fluid being spilled onto the floor of the areas of the autoclave operations. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 39-41 (Exhibit 29).

75. There were one or more floor drains located in the area of the autoclave operations. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 43 ("[t]o my knowledge, there was at least one drain, perhaps more, in the area of the autoclaves") (Exhibit 29).

86. These floor drains led to a drywell below Plant 3. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 43-44 (Exhibit 29). Plant 3 was located on Navy property. *Id.* at 19.

87. The drywell below Plant 3 discharged to the storm water collection system. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 70 (Exhibit 29).

88. The storm water collection system was directed to three recharge basins that were located east of Plant 3. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 71-73 (Exhibit 29).

89. These recharged basins were approximately the length and width of a football field and were 20 to 30 feet deep. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 71-73 (Exhibit 29).

90. Before October 1962, the soils at the bottom of these recharge basins were periodically scraped by Grumman with a bulldozer to restore their percolation capability. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 73-74 (Exhibit 29).

91. The soils that were scraped from the bottom of these recharged basins were dried by depositing them on land in the vicinity of the recharge basins, as well as areas on the Park Property. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 75, 78 (Exhibit 29).

92. In 2002, the New York State Department of Environmental Conservation requested that NGSC test soil samples from the Park Property for PCBs. Letter from Roger Murphy, Supervisor, Corrective Action Section, New York State Department of Environmental Conservation, to Larry L. Leskovjan, Manager, Environmental, Safety, Health & Medical Services, Northrop Grumman Corporation (May 7, 2002), Bates No. 0001868 (Exhibit 38).

93. NGSC represented to the DEC that, as a result of its investigation, NGSC believed that some of the PCB contamination at the Park resulted from leaks of Therminol originating from Plant 3 autoclave operations, which traveled through the storm water system into the recharge basins on the NWIRP, and were deposited on the Park Property when

Grumman disposed of the soils scraped from bottoms of the recharge basins. Letter from Larry L. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (July 25, 2002), Bates No. NGSC0001786, 1789 (Exhibit 6).

94. In the late 1980's through the mid-1990's, NGSC and the Navy conducted numerous environmental investigations and implemented remedial activities to address soil and groundwater contamination that existed in various portions of the Grumman site and the NWIRP. Letter from Larry L. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Steve Kaminski, Division of Solid and Hazardous Materials, New York State Department of Environmental Conservation, and Richard Fedigan, Center for Environmental Health, New York State Department of Health (June 27, 2001), Bates No. 0018961, 18961 (stating that "over the past several years, Northrop Grumman Corporation (NGC) has been conducting assessment and remedial activities to support closure and sale of various properties as its Bethpage, NY facility") (Exhibit 39); Northern Division Naval Facilities Engineering Command / New York Department of Environmental Conservation, Record of Decision, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Sites 1, 2, 3, NYS Registry 1-30-003B (May 1995) (Exhibit 40).

95. PCBs were among the contaminants found at the Grumman site. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 137 (stating that PCB contamination was found on Plant 12 on Grumman-owned property) (Exhibit 29); Deposition of Larry L. Leskovjan (January 11, 2007), pp. 81-84 (stating that investigation in 1999 revealed the presence of PCBs on the Northrop Grumman property) (Exhibit 28).

96. Trivalent chromium was among the contaminants found at the Grumman site. Deposition of Larry L. Leskovjan (January 11, 2007), pp. 93-94 (Exhibit 28).

97. Other metals within the definition of hazardous substances under CERCLA were also found at the Grumman site. Deposition of Jean-Pierre Cofman (February 1, 2007), p. 174-77 (stating that metals contamination was found in receiving basins on Northrop Grumman property at Bethpage) (Exhibit 29); Deposition of Larry L. Leskovjan (January 11, 2007), pp. 81-82 (stating that investigation in 1999 revealed the presence of heavy metals on the 550 acre parcel of Northrop Grumman property) (Exhibit 28).

98. PCBs were also found at the NWIRP. Northern Division Naval Facilities Engineering Command / New York Department of Environmental Conservation, Record of Decision, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Sites 1, 2, 3, NYS Registry 1-30-003B (May 1995), pp. 5-10 (Exhibit 40); Foster Wheeler Corporation, NORDIV Remedial Action Contract, Contract N62472-94-D-0398, Delivery Order 0004, Naval Weapons Industrial Reserve Plant, Bethpage, NY, pp. 3-1-3-3 (Exhibit 41); Halliburton NUS Environmental Corporation, Final Remedial Investigation Report, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Volume 1 (May 1992), p. 4-38, 4-44, 4-46, 4-66, 4-91, 4-93 (Exhibit 42).

99. PCBs were found in the drywell below Plant 3. Deposition of Jean-Pierre Cofman (February 1, 2007), pp. 66-67 (Exhibit 29).

100. Chromium was also among the contaminants found at the NWIRP. Northern Division Naval Facilities Engineering Command / New York Department of Environmental Conservation, Record of Decision, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Sites 1, 2, 3, NYS Registry 1-30-003B (May 1995), p. 6 ("[o]n at least one occasion

hexavalent chromium was detected in the recharge basins water at concentrations in excess of allowable limits [at Site 2 on NWIRP]") (Exhibit 40); Halliburton NUS Environmental Corporation, Final Remedial Investigation Report, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Volume 1 (May 1992), p. 4-32 (noting the presence of chromium in groundwater samples) (Exhibit 42).

101. Other metals within the definition of hazardous substances under CERCLA were also found at the NWIRP. Halliburton NUS Environmental Corporation, Final Remedial Investigation Report, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Volume 1 (May 1992), p. 4-34 (noting the presence of beryllium, cadmium, iron, lead, vanadium and thallium in groundwater samples), 4-44 (noting the presence of mercury and silver in subsurface soil samples) (Exhibit 42); Foster Wheeler Corporation, NORDIV Remedial Action Contract, Contract N62472-94-D-0398, Delivery Order 0004, Naval Weapons Industrial Reserve Plant, Bethpage, NY, pp. 3-4, 4-2 (reporting that soils at the NWIRP were contaminated with arsenic) (Exhibit 41).

102. The remedial measures that NGSC undertook at the NWIRP included excavation, up to depths of 30 feet below surface, of PCBs and offsite disposal of PCBs. Deposition of Larry L. Leskovjan (January 11, 2007), pp. 43-44 (Exhibit 28); Northern Division Naval Facilities Engineering Command / New York Department of Environmental Conservation, Record of Decision, Naval Weapons Industrial Reserve Plant, Bethpage, New York, Sites 1, 2, 3, NYS Registry 1-30-003B (May 1995), §§ 6-7, pp. 26-37 (Exhibit 40).

103. The remedial measures that NGSC undertook at the Grumman site included soil vapor extraction at the Plant 2 source area. Department of Environmental Conservation, Record

of Decision, Grumman Aerospace, Bethpage Facility, Operable Unit 1 (Inactive Hazardous Waste Site No. 130003A) (March 1995), § 9, Bates No. BETPARK00001, 12 (Exhibit 27).

104. The Facilities Use Contracts between Grumman and the Navy provided that the Navy owned the waste products resulting from Grumman's aircraft manufacturing operations that Grumman performed on behalf of the Navy. Facility Use Contract No. NOw 6116-u, Schedule 400, Section D(a), Bates No. NGSC-TOB0000088, 0000111 (defining "Material" and "Facilities") (Exhibit 30).

105. The Facilities Use Contracts between Grumman and the Navy provided that Grumman was responsible for the disposal of waste from the manufacturing operations that Grumman performed on behalf of the Navy. Facility Use Contract No. NOw 6116-u, Schedule 400, Section D(a), Bates No. NGSC-TOB0000088 (Exhibit 30).

106. The Navy owned some or all the materials used by Grumman in the aircraft operations that Grumman performed for the Navy. Letter from Larry L. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (July 25, 2002), Bates No. NGSC0001786, 1788 ("[a]ny materials placed in these [sludge drying] beds [by NGSC] would have been produced from Government-owned materials, used in Government-owned equipment, following Government specifications for Government contracts") (Exhibit 6).

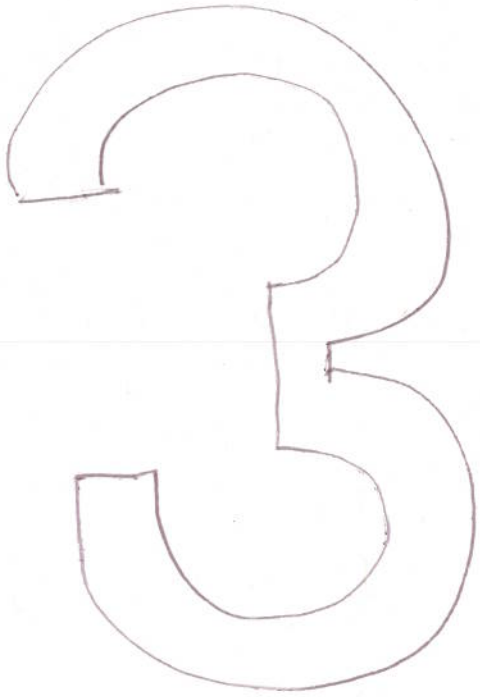
107. Grumman represented in a communication with the DEC that the Navy supplied material used by Grumman in the aircraft operations that Grumman performed for the Navy. Letter from Larry L. Leskovjan, Manager, Environmental, Safety, Health, and Medical, Northrop Grumman Systems Corp., to Roger Murphy, New York State Department of Environmental

Conservation, Division of Solid and Hazardous Materials (July 25, 2002), Bates No. NGSC0001786, 0001788 ("[a]ny materials placed in these [sludge drying] beds [by NGSC] would have been produced from Government-owned materials, used in Government-owned equipment, following Government specifications for Government contracts") (Exhibit 6).

108. Other wastes containing hazardous substances that were generated as a result of Grumman's manufacturing and testing operations for the Navy which were disposed of at the Park included sludge from metal finishing operations, sludge scraped from recharge basins located on the NWIRP, spent rags from paint booth operations, as well as waste oil and jet fuel from fire training exercises. Arcadis G&M, Operable Unit 3 – Remedial Investigation/Feasibility Work Plan, Former Grumman Settling Ponds, Bethpage, New York Site # 1-30-003A (August 18, 2005), Bates No. NGSC-TOB0001568, 1584 (Exhibit 43).

109. Another plant used by Grumman was Plant 3, was located on the NWIRP, and, beginning in the early 1940's, was utilized by Grumman in connection with a number of aircraft production lines, including alodining and anodizing, cadmium plating, honeycomb pretreatment, tank weld cleaning, "chem" milling and painting. Department of the Navy, Facilities Engineering Command, Initial Assessment Study of NWIRP Bethpage, NY and NWIRP Calverton, NY (December 1986) (Exhibit 44).

110. NGSC, from at least 1940 to 1980, had produced in excess of ninety-eight percent of its output at the Grumman site and the NWIRP for government use. Chart entitled "Grumman Aircraft Production, 1940-1980, Military vs. Non-Military", Bates No. NGSC-TOB0000143, 144 (Exhibit 45).



TOWN OF OYSTER BAY -V- NORTHROP

JEAN-PIERRE COFMAN – 2/1/2007

CONDENSED TRANSCRIPT AND CONCORDANCE
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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK
----------X
TOWN OF OYSTER BAY,
Plaintiff,

-against-

NORTHROP GRUMMAN SYSTEMS CORPORATION (f/k/a Northrop Grumman Corporation), THE UNITED STATES NAVY and THE UNITED STATES OF AMERICA,
Defendants.

Civil Action No. CV-05-1945
----------X

926 Reckson Plaza
Uniondale, New York

February 1, 2007
9:35 a.m.

Deposition of the Defendant, NORTHROP GRUMMAN SYSTEMS CORPORATION by JEAN-PIERRE COFMAN, pursuant to Notice, before Jennifer Fuchs, a Notary Public of the State of New York.

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IT IS HEREBY STIPULATED AND AGREED by and between the attorneys for the respective parties herein, that the filing, sealing and certification of the within deposition be waived.

IT IS FURTHER STIPULATED AND AGREED that all objections, except as to the form of the question, shall be reserved to the time of the trial.

IT IS FURTHER STIPULATED AND AGREED that the within deposition may be sworn to and signed before any officer authorized to administer an oath with the same force and effect as if signed and sworn to before the Court.

- oOo -

JEAN-PIERRE COFMAN, called as a witness, having been duly sworn by a Notary Public, was examined and testified as follows:

EXAMINATION BY
MR. SMIRTI:

Q. Please state your full name for the record.

A. Jean-Pierre Cofman.

Q. What is your address?

A. Business, Northrop Grumman Corporation, Plant 25, Mail Stop Z-18-025, Bethpage, New York 11714. Home, 2 Koster Court, Huntington Station, New York 11746.

Q. Mr. Cofman, good morning. My name is Steve Smirti. I'm with my colleague Janice Greenberg. We represent the Town of Oyster Bay in this matter.

I am going to be asking you a couple of questions today, more than a couple, and please tell me if you don't understand any of the questions, and I will try to clarify. Also, if you would, for the sake of the court reporter, wait until I am finished asking my

question before you respond, okay?
A. Okay.
Q. Thank you, sir.
Did you attend college?
A. Yes.
Q. Where did you attend?
A. Bethlehem, Pennsylvania.
Q. What was the college?
A. Lehigh University.
Q. Did you obtain a degree?
A. Yes.
Q. In what?
A. I obtained a bachelor's of science in chemical engineering.
Q. When was that?
A. In 1969.
Q. After college did you go to graduate school?
A. Yes, I did.
Q. Where did you go?
A. University of Michigan in Ann Arbor, Michigan.
Q. Did you obtain a degree?
A. Yes, I did.

Q. What was that?
A. That was a master's of science in civil engineering/water resources.
Q. When did you get your master's degree?
A. In 1972.
Q. After the master's degree did you attend school?
A. Yes.
Q. Where did you go then?
A. I went to the university of -- I think it was called University of Michigan in Ypsilanti for one course. I took courses at New York Institute of Technology in Westbury. I think it was Westbury. I took some courses there. I took some courses at Brooklyn Polytechnic Institute in -- I think they were in Melville. They had an office in Melville. I took some courses there, and I think that's about it.
Q. Did you obtain a degree after your master's degree from the University of Michigan?
A. No.

Q. In the course of your studies either at Lehigh or the University of Michigan or the other schools that you've mentioned, did you take courses on environmental pollution?
A. Yes.
Q. What types of courses?
A. Well, the course work I took at the University of Michigan was in the civil engineering department, and it primarily involved the water resources and water pollution control, so it was a general sanitary engineering kind of curriculum, which pertains to pollution control and environmental issues. At Lehigh I did not take any courses in naval areas.
I did work for a summer for one of the professors who was working on a study of activated carbon absorption using a phenolic substrate, and that was related to pollution control. It was to be applied to physical chemical treatment of sanitary wastewaters.
At Brooklyn Poly I took a course

on environmental auditing, and also at New York Institute of Technology I took a course on water resources, mathematical modeling of groundwater flow. I think that about covers what I've taken there.
Q. Have you written any papers on pollution or water resource control?
A. No.
Q. You got your master's degree from the University of Michigan in 1971 was it?
A. '72.
Q. What did you do after that?
A. I worked for a consulting firm in Ann Arbor.
Q. What was the name of the firm?
A. Ayres, Lewis, Norris & May, Incorporated.
Q. What were your responsibilities there?
A. I was doing initially preliminary designs on sanitary and industrial wastewater treatment facilities, and then I concentrated more on writing proposals for public works associated with sewage treatment, waterworks,

water supply. That's basically it. I'm sorry, I also did operation and maintenance manuals for sanitary sewage treatment plants.

Q. What was the business of the Ayres firm?

A. They were consultants to municipalities primarily working in standard civil engineering work, roadwork, parking lots, but primarily in water and wastewater engineering.

Q. How long did you work at the Ayres firm?

A. Five years.

Q. While you were there were you involved in any cleanup of waste sites?

A. No. When you say "waste sites," just to clarify that, you mean contaminated properties?

Q. Yes.

A. No.

Q. Were you involved in cleanup of contaminated water?

A. Yes.

Q. Tell me what your involvement

was.

A. Well, as I mentioned, the preliminary design of works to treat sanitary wastes.

Q. What did you do?

A. Just that.

Q. Well, can you explain it to me; what kind of work did you do?

A. Well, I would be -- a typical case might be municipality XYZ needs to expand their treatment facilities because the projections are the population growth is going to be such that the flow to the existing treatment facility is going to be exceeded in X number of years. I would come up with typically three alternative ways of expanding their facilities to handle the additional flows. So I would do preliminary designs on those, come up with estimates, and that would be submitted to the Town for further deliberation.

Q. At the Ayres firm did you get involved in remediation of contaminated water?

A. Well, it was treatment of

contaminated water, and this was strictly sanitary waste. It wasn't groundwater that was being remediated. Typically you refer the term remediation to a natural resource, like groundwater or soils. With water that's coming down the pipe, whether it's storm water or sanitary wastewater, it's typical treatment, not remediation.

Q. Did you deal with any remediation of groundwater?

A. No.

Q. Did you deal with remediation of PCBs?

A. No.

Q. Remediation involving heavy metals?

A. No.

Q. So you worked at the Ayres firm until approximately 1977?

A. Yes.

Q. What did you do then?

A. Then I started working for a firm in Bethpage, New York.

Q. What firm was that?

A. Grumman Corporation.

Q. What was your title when you first started to work for Grumman?

A. I think it was chemical engineer.

Q. And you worked in Bethpage?

A. Yes.

Q. Where in Bethpage?

A. On Stewart Avenue, the building was called Plant 30.

Q. Do you know whether that was on property owned by Grumman?

A. Yes, it was.

Q. What were your duties as chemical engineer?

A. I did design work for various chemical processes that the company used for manufacturing, so I would do -- for example, I would design a pump for a certain application or do the process design work for a metal finishing operation, including material selection, tank sizing, pumps, piping, valves, that kind of thing. I would do the design. That would be turned over to a -- I would do the engineering design. That would be turned

over to a draftsman who would put a package together. I would be involved in purchasing equipment, supervising the draftsman, reviewing his designs. That was eventually all packaged up, and I would be involved then in overseeing construction of the facility that was under design.

Q. Your office was in Plant 30?

A. In Plant 30.

Q. How long was your office in Plant 30?

A. I don't know exactly. I can give you --

Q. Approximately, yes.

A. I would say about 15 years.

Q. So from about 1977 to 1992 or so?

A. Yeah, 1990, 1993. I'm not sure exactly.

Q. What types of operations went on in Plant 30?

A. It was strictly an office building, so the only operations that occurred there were office-type operations, including my department, which was the facilities

engineering department. So they basically did all the engineering for any of the activities that were going on in Bethpage or in Calverton, which is another facility we ran, or other parts of the country for that matter. It was all centralized in that office. The building also contained procurement department, I think it was materials department. That's about all I can remember that was located at that office.

Q. How many plants were there on the Grumman-owned property?

A. "Plants" meaning buildings?

Q. Yes.

A. Dozens.

Q. Do you know their designations?

A. They were normally designated by a plant number, so there would be 1 through whatever. 77 I think is the highest number I can remember, but that included facilities off the Bethpage site and off Long Island also.

Q. In that 77 number?

A. Yes.

Q. Approximately how many buildings

were on the Grumman-owned site at Bethpage?

A. I don't have that number. I could estimate it.

Q. Just your best estimate.

A. Thirty.

Q. Now, near or adjacent to the Grumman-owned property was there Navy-owned property to your knowledge?

A. Yes.

Q. Did you work on the Navy-owned property at all?

A. Yes. Some of the duties that I worked on involved production facilities in the Navy property.

Q. What did you do with respect to the Navy property?

A. The same thing as I just described.

Q. Did that cause you to go onto the Navy property to work?

A. Yes. There was very little distinction made between the Navy property -- from my point of view, between the Navy property and non-Navy property. All the work

we did was under government contract primarily for the Navy. And the first few years I worked there it just so happened that yeah, that area was known as owned by the Navy, and that area was not owned by the Navy, but in terms of my duties, there was very little difference. The difference primarily came in I guess the way the budgets were set up and the way upper management dealt with submitting proposals and some of the oversight that was done by Navy personnel.

Q. Grumman did work for the Navy at the Bethpage site?

A. Yes.

Q. Did Grumman also do work for individuals or corporations outside of the Navy?

A. I don't think so.

Q. So no private work so to speak?

A. No private work.

Q. It was all operations with respect to Navy contracts, to your understanding?

A. No. I think there were contracts

that were supporting sales of military equipment to other nations, and I think there was a -- it was channeled through the Navy somehow or approved by the Navy, but there was definitely work done that the end product did not go to the Navy.

Q. I see, but it was subject either to approval or somehow through the Navy?

A. That's my understanding. I never really got very involved in that, but I do know, for example --

MR. TOPOL: Objection. I don't want the witness to disclose, and I don't think you want him to disclose, any specific contracts. We may be dealing with national security issues here, and you've obviously gotten what's a relevant answer.

MR. SMIRTI: I'm not interested in any national security issues.

Q. Now, you said that your job responsibilities would cause you on occasion to go onto the Navy property, correct?

A. Yes.

Q. Do you recall the buildings that you worked in on the Navy property?

A. Yes.

Q. What were their designations?

A. Plant 3 was the major building, there was Plant 20, I think there was a plant by the designation of Plant 10, I could be wrong about that, but it was the laboratory facility that was a Navy building. There were warehouses north and south of Plant 3 with various numbers, I don't recall those numbers, maybe 17 and a few others. There was a roads and grounds building just to the south of Plant 3. That was a Navy building. That's about it, as far as Navy buildings. There were sometimes small buildings, little sheds that were associated with larger buildings. No specific designation that I can recall for those.

Q. Can you give me an estimate as to how often you were at Plant 3 either in terms of number of days --

A. In terms of what kind of answer are you looking for?

Q. Any way you could, Mr. Cofman. I understand that you were at or your office was at Plant 30 from 1977 until approximately 1990, correct?

A. Yes.

Q. Let's take that.

From 1977 to 1990, while your I guess permanent office was at Plant 30, correct?

A. Yes.

Q. You had occasion to be at Plant 3 on the Navy property?

A. Yes.

Q. How often would you visit Plant 3 on the Navy property during that time period?

A. Once a day sometimes, three times a week sometimes. It all depended on what I was doing. Sometimes it could be four times a day.

If we were, for example, starting up a facility that I had been involved in the design of or if there was some problem with a facility that I was involved in, when I say facility, I am talking about a production

line, I might be there several times a day or all day.

Q. So it would be rare if you were not at Plant 3 at least once or twice or three times a week?

A. Yes.

Q. How long would you typically be at Plant 3 during the course of any week, five hours, ten hours, fifteen hours?

A. I wouldn't be able to say there was a typical amount of time. Sometimes it would be all day. Sometimes it would just be to pick up something.

Q. What types of operations went on in Plant 3?

A. Well, there was some office areas. The Navy had some offices there, we had some offices there, but primarily Plant 3 was a manufacturing operation, so there were typically metal finishing operations that would be conducted there.

Q. Anything else?

A. Riveting, metal bending. There were ovens, but all this falls under the

category of metal finishing, anodizing, Alodine works, etching. It was all related to the production of metal parts for the airplanes.

Q. Now, how big was Plant 3?

A. About a million square feet.

Q. How many people worked in Plant 3?

A. I don't know.

Q. Did you have occasion to work at other plants on Navy-owned property, again just focusing for now the period 1977 until approximately 1990?

A. Now, when you say work at the plants, what do you mean by that?

Q. Did you visit the plants?

A. I did visit other plants.

Q. What was the purpose of the visit of plants other than Plant 3 on the Navy property?

A. At times it might be to look over a design of something or to prepare for designing something. It might be to meet with personnel. It might be to inspect some

equipment.

Q. Do you recall the designation of the plants, the other plants that you visited?

A. Yes.

Q. What was their designations?

A. There was the Plant 20 garage, which is a Navy facility. There was the laboratory, which I think was Plant 10. I occasionally met with people from the roads and grounds department at their building on Navy property. In the mid-'80s there was an industrial waste treatment facility built on the Navy property, and I was closely involved in that design and construction and then the operation of that, so I was often at that location.

Very rarely did I have occasion to go into the warehouses, but sometimes I would if there was some piece of equipment that I might become involved in, with rather. I think that's all I can recall.

THE WITNESS: Excuse me. May I get one of those bottles of water?

MR. SMIRTI: Of course, of

course.

THE WITNESS: Thank you.

Q. At Plant 3 was there an autoclave operation?

A. Yes.

Q. What's an autoclave operation?

A. Well, in Plant 3 there was an area that was designated the autoclave area, and in that area there were -- I'm not sure of the exact number, but I think at least three autoclaves. That was in the time period I'd say -- well, it was certainly there when I started working for the company, and I think it might have gone on there until mid-'80s.

Q. You said there were three autoclave machines is it?

A. I'm not sure of the number, but I think it was at least three.

Q. The three autoclave machines were in Plant 3 at or about the time that you started in Grumman in 1977?

A. Yes, they were.

Q. And they were there until did you say the late 1980s?

A. I'm not sure, but I think around the mid-'80s. There was an effort to move some production facilities to another location in the country, and the autoclaves were there to support composite structures, composite structures as opposed to just strict metal structures. The company would make some parts out of fiberglass or carbon fibers, just composite plastic structures, and the autoclaves would support manufacture of composite structures. In the '80s the composite structure manufacturing operation was moved to Milledgeville, Georgia, so during that operation some of the autoclaves were moved to Georgia, and the autoclave operation was phased out in Plant 3.

Q. Do you have an understanding as to how long the autoclave operation was in operation before 1977?

A. Yes, I do.

Q. What's that understanding?

A. That the autoclave operation started somewhere in the area of 1961. I'm not sure if that's when the autoclaves went

into full operation or when the construction was completed, I don't know exactly what phase, but somewhere around 1961 is my understanding when the operation started.

Q. How did you arrive at that understanding?

A. Certainly by talking to people. I don't recall exactly. But subsequent to that I've discussed the autoclave operation with my immediate supervisor, and he had discussions with some of our contracts people regarding their understanding of when the autoclave operation might have been implemented, and that information was relayed to my supervisor, and then he spoke to me about it.

Q. Let's see if we can get some names.

Who is your supervisor?

A. Larry L. Leskovjan.

Q. When did you speak to Mr. Leskovjan about the autoclave operation?

A. Several years ago.

Q. Did Mr. Leskovjan identify for

you people from whom he received information about the autoclave operation?

A. Yes.

Q. What were their names, if you recall?

A. The only one that I can recall is a man by the name of John DeBois.

Q. What did Mr. Leskovjan tell you about the information he received from John DeBois?

A. I don't recall very much detail involved. John DeBois was involved in contracts. My understanding was that he researched contracts with the Navy associated with the autoclave operation and that their conclusion was that -- his conclusion was the date that I gave you.

Q. Was Mr. DeBois a Grumman employee?

A. I don't really know his history. When I first ran into him, he was a Northrop Grumman employee.

Q. Now, aside from the discussions with Mr. Leskovjan, you spoke with other

people with respect to the autoclave operation?

A. Yes. That was much longer ago. When I first started working at Grumman, the person who sat at the desk in front of me was one of the primary engineers involved in design of the autoclave and equipment associated with the autoclave. I learned quite a bit from that man. His name is Jim -- well, you didn't ask me.

Q. Please. You anticipated my question.

A. Sorry. His name was Jim Ohrtman, O-H-R-T-M-A-N. I'm not sure if there's a second N on there or not.

Q. And you first became acquainted with Mr. Ohrtman when?

A. 1977.

Q. He was a Grumman employee?

A. Yes.

Q. Was he your supervisor at that time?

A. No, no. He was in the same group that I was working in, but he was not my

supervisor.

Q. And you had conversations with Mr. Ohrtman about the autoclave equipment?

A. Yes.

Q. Over the course of what time period did you have discussions with Mr. Ohrtman about the autoclave equipment?

A. Several years at least. I don't know the exact number, but I would say four or five years.

Q. As best as you recall, as best as you can recall, what were those discussions that you had with Mr. Ohrtman about the autoclave equipment?

A. Well, I didn't know much about autoclaves at the time, so since he was the expert, he would explain to me how they worked and the kind of equipment that was involved in it, just basically the technology of it.

Q. Did you talk to Mr. Ohrtman about how long the autoclave equipment had been in operation?

A. Yes.

Q. What did he tell you about that?

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A. That it had been around since early '60s.
Q. Did he show you any documents that indicated that?
A. No.
Q. Did you speak with anyone else, and now I am talking about the time period from 1977 through 19 -- well, I guess the early 1980s is when you had these conversations with Mr. Ohrtman?
A. Um-hum.
Q. Did you speak to anyone else at that time about the historic operation of the autoclave equipment?
A. Not that I can recall.
Q. Do you know if Mr. Ohrtman is still employed by Northrop Grumman?
A. Yes, I do know that he's not.
Q. He's retired?
A. He's dead.
Q. Did you have occasion when you were at Plant 3 to view the autoclave operation?
A. Yes, yes.

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Q. Let me make sure I have the right designation. It's called an autoclave machine?
A. Well, it's typically referred to as an autoclave.
Q. How big was one autoclave?
A. I don't have an exact number, but I would say these things would be -- if you could imagine something that's in the shape of a cacoon with dished ends and a tube, maybe 20, 30 -- 20, 25 feet long and with an interior diameter of 10, 12 feet, something like that.
Q. And there were, to your best recollection, at least three autoclaves?
A. I think so, three or four.
Q. How often did the autoclave run; did it run 24 hours a day?
A. I don't think so, but I don't know how often they ran.
Q. Did it use oil?
A. It used an oil for its heat transfer fluid.
Q. Do you know the process in which

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it used the oil?
A. Yes. The autoclave was used to heat composite structures for curing, so the temperature would go up to -- we brought it up to -- I don't know exact numbers, but several hundred degrees, maybe 3, 400 degrees, we kept -- for a certain period of time, and then it would be cooled at a certain rate, and the atmosphere inside the autoclave was controlled to prevent various chemical oxidations or whatever. I'm not sure exactly, but it was a controlled environment.
In order to heat and cool the autoclave, the autoclave was pretty much lined with tubing, which was used for heating and cooling, and so these tubes would be brought up to temperature and down to temperature, depending on whether heating or cooling was required. And the way those tubes were heated and cooled was by pushing a fluid through them at the desired temperature, and the fluid was heated and cooled externally to the autoclave. So if the autoclave was to be heated, this oil was heated in a heater and then run through

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the autoclave, and of course it would all be controlled by various sensors to keep the temperature at the right level and have the flow of the fluid occur at the right flow rate.
Q. And the idea was that this fluid that ran through the tube in the autoclave would heat up the autoclave?
A. It would heat up the autoclave, yes, or cool it.
Q. Or cool it, as the case may be.
A. Yes. Externally there were heaters and there were cooling systems to heat and cool the oil. There were pumps and valves. There was a lot of piping associated with this heating fluid. This heat transfer fluid, I'm sorry.
Q. And the heat transfer fluid ran through the tubes that ran through the autoclave?
A. Yes. In addition, it would run through something called a platen, and the platen was something that the composite structure would be placed on. The platen

would be like a large table, but thick and with -- the platen would have similar to those tubes, some of them were just drilled holes through this platen, I'm not sure exactly the design of this thing, but it was something that would supplement the heating and cooling of the autoclave, and the platen would be rolled in and out of the autoclave with the part in it.

Q. Do you know the diameter of the tube that ran through the autoclave?

A. No.

Q. Approximately.

A. An inch.

Q. And about how much fluid would be in the autoclave as it was running through the tube, any idea?

A. I don't know that.

Q. Do you know the name of the fluid?

A. I think it was called Therminol.

Q. To your understanding, did Therminol contain PCBs?

A. Yes.

Q. Was the Therminol recycled; was it reused through the autoclaves?

A. Yes, yes. It's very much like a refrigeration system. If you think of a refrigerator, yeah, a refrigerator, it's got -- the refrigerator will have Freon typically, and it's circulated through coils to keep the freezer cold and the refrigerator cold, and then part of the loop goes outside, and then there's a compressor and a heat exchanger on the outside to get rid of the heat. So it's a similar kind of operation where this fluid would be circulated through, and it wouldn't stay in the autoclave.

Q. Was there a place in or around Plant 3 where the Therminol was stored?

A. I don't know the storage location specifically for Therminol. I think there were drums of it that were used to top off the system, but the system was a relatively complicated piping, assemblage of piping, valving, pumps, and the heating and cooling units would have capacity probably for, you know, several hundred gallons of Therminol,

and it would be from these locations it would be pumped to the -- and circulated through the autoclave.

So as far as storing of the Therminol, I think there were surge tanks associated with the process in line, but not that -- I don't recall a storage tank for Therminol was a standalone storage tank, if that's what you're asking.

Q. Yes, that was.

Now, I want to go back to what you mentioned, I think you said several hundred gallons of Therminol.

A. That would be my guess.

Q. Was the several hundred gallons, was that the amount of Therminol that would be used for one autoclave operation?

A. No. When I referred to several hundred gallons, I was referring to the capacity of the -- the volumetric capacity of the heaters, the heating system and the cooling system.

Q. And Therminol would run through the heating system and the cooling system?

A. To be heated and cooled, yes.

Q. To be heated and cooled, and then transmitted to the autoclave?

A. Yes, right.

Q. I see.

A. I also don't want to mislead you. I don't think all the autoclaves used this heat transfer fluid. If I recall, I think there was at least one autoclave that was operated strictly electrically, but I think the majority of the autoclaves, two or three of them, were using the PCB fluid.

Q. Used the Therminol that contained PCBs?

A. Yes.

Q. Was the heating and cooling system, was that used for all three autoclaves?

A. I'm not sure, but I think so.

Q. So at any one time in the operation of the three autoclave systems there would be a few hundred gallons of Therminol that was either going from the heating system to the cooling system through one or more of

the autoclaves?
A. I really don't know the capacity of the tube in the autoclave, so I can't -- and I don't know the flow rate that was used to push it through. But if you have a thousand gallon capacity in the heating tank and you're pumping from that heating tank to the autoclave, you know, if you're pumping at 5 gallons a minute, all you can talk about is the rate, not so much the volume that is involved.
Q. But again, it was a closed system?
A. Yes.
Q. So at any one time in that system from the heating system, the cooling system to the piping in the autoclaves there would be several hundred gallons?
MR. TOPOL: Objection to the form. Is that a statement or a question?
MR. SMIRTI: It's a question. Everything I say to the witness is a question.

A. I think there were quite a bit more than that. That was the capacity I think of the -- when I'm talking about several hundred gallons, it could be 500. I'm talking to the heating loop. There might be another certain volume for the cooling side of the operation, some surge tanks. So I don't really know the volume, total volume, that was involved in the system, but I would guess it was at least several thousand gallons.
Q. Several thousand gallons of Therminol in the system, correct?
A. In the whole system.
Q. And again, the whole system comprising the heating system, the cooling system and the tubing that ran through the --
A. The piping, yes.
Q. -- the piping that ran through the autoclaves?
A. And the external piping.
Q. And the external piping.
A. And surge tanks or whatever other piping was associated with these things. And again, that's an estimate. I never worked

directly on the autoclave, as far as its production or operation. This is just what I've learned from being in the area and speaking to my compatriots.
Q. And speaking to people who ran the autoclave system?
A. Mostly speaking to the engineers that were involved. I had very little contact with the operators, other than just if I was in the area, you know, being friendly, but not a business relationship.
Q. Were the operators employed by Grumman?
A. Yes.
Q. Were there any Navy employees in Plant 3, who worked in Plant 3?
A. I think so, yes.
Q. Do you know what their responsibilities were?
A. Not really.
Q. Do you have an understanding as to whether there were ever any leaks of the Therminol?
A. Yes.

Q. What's that understanding?
A. That there were leaks.
Q. What's your understanding as to how they occurred?
A. I don't really know exactly. I've never witnessed it specifically, but in a system as complicated as the piping that I just described for the autoclave system, especially because we were operating at -- the equipment was operating at elevated temperatures and then lower temperatures, it's pretty hard on the mechanical components, so things such as valves and pumps would require maintenance on a periodic basis. And of course all this was filled with fluid, so when you -- when you do maintenance on these things, you might have a leaking valve or a leaking pump seal, that would cause fluid to leave the piping, land on the floor.
During maintenance, if some piece of equipment was taken out, they would try to -- the maintenance would try to drain the system first, but there's always residual leftover, so when you take the piping apart

there would be some fluid that might hit the floor, and I think that's pretty much the nature. I'm not aware of any specific accident that occurred or major rupture that would have released large quantities in one fell swoop.

Q. You just mentioned about draining the system.

A. Yes.

Q. How many gallons would have to be released in order to drain the system?

A. Well, when you say "released," you mean removed from the system?

Q. Yes.

A. This would go into like a surge tank or a storage -- temporary storage area, storage tank. I couldn't say.

Q. You personally did not witness any leaks of the Therminol?

A. No.

Q. But your knowledge about leaks of the Therminol comes from discussing it with colleagues?

MR. TOPOL: Objection, asked and

answered.

You can answer if you want to.

A. From that, from observation of the way piping and equipment was maintained at the facility. That's basically -- and we've also seen contamination outside the Plant 3 facility in areas that would indicate that it came from the autoclave.

Q. Do you know whether there was any record that was regularly kept by Grumman with respect to leaks in the autoclave system?

A. No.

Q. There was no record?

A. I'm not aware of a record.

Q. Where was the temporary storage tank located?

A. I think it was located in the same general area of the autoclave operations.

Q. Were there leaks from the temporary storage tank?

A. I don't know.

Q. Were there floor drains in Plant 3?

A. It's my understanding that there

were floor drains in Plant 3.

Q. Were they in the area of the autoclave, autoclaves?

A. To my knowledge, there was at least one drain, perhaps more, in the area of the autoclaves.

Q. What were the drains for?

A. They were to convey any fluid that landed on the floor outside the building to a -- again, from my understanding, it was originally a dry well, which was subsequently turned into part of a storm water collection system.

Q. So the fluid flowed into the drains, the fluid from the floor on Plant 3 flowed into the drains on the floor?

A. Say that again, please.

Q. I'm sorry. I'm trying to trace if there was fluid on the floor of Plant 3, it flowed into the drain?

A. It could.

Q. It could flow into the drain?

A. It could flow into the drain. Normally there would be precautions taken,

such as rags or whatever, but -- for example, if maintenance is breaking apart some piping, they would certainly put a bucket underneath the broken connection. But yes, if something landed on the floor, if sufficient quantities that would flow and it found its way to the drain, it would go to that drain, yes.

Q. From the drain it went to where?

A. Outside the building.

Q. Outside the building to where?

A. Initially it went to a dry well.

Q. Below the surface?

A. Yes.

Q. How big was the dry well?

A. I don't know exactly, but they were all pretty much the same, invert elevation of perhaps 15, 20 feet below ground surface, maybe 8 foot diameter ring.

Q. Did you have occasions to view these dry wells?

A. Not directly, no.

Q. How many dry wells were there?

A. That the drain from the autoclave went to?

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Q. Yes, sir.

A. Well, before the storm water collection system came in I think there was just one. But once the storm water piping was connected, it connected a number of dry wells. There were dry wells -- if you can imagine Plant 3, there were dry wells outside the building, and at some point in time, I don't know when, a storm water sewer was run along the outside of the building which connected these dry wells. It would also take roof -- drainage from roof leaders, and that storm water was then conveyed to on-site recharge basins.

Q. How big was the floor drain by the autoclaves?

A. I don't know.

Q. Were there transformers at Plant 3?

A. To the best of my knowledge there were, although I'm not intimately familiar with their location or number.

Q. Do you have any estimate as to how many?

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A. No.

Q. How did you come to an understanding there were transformers at Plant 3?

A. Well, in the middle of the '80s or a little bit later than the mid-'80s my responsibilities migrated more into a -- at the environmental department of the corporation, and so I was associated with individuals that were responsible for retrofitting transformers, if they were suspected to contain PCB transfer fluid. And discussions with those people, seeing what they were doing or in staff meetings where we would discuss what they were doing, the transformers at Plant 3 were touched on by the individuals who were responsible for retrofitting them.

Q. What do you mean by retrofitting the transformers?

A. Well, back in time transformers typically had -- many transformers typically had heat transfer fluid to allow them to be cooled through heat exchangers, and that heat

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transfer fluid would often be PCB containing.

Q. What does it mean to retrofit transformers?

A. Oh. I think in the early '80s there was -- late '70s, people became aware that PCBs were a dangerous material, and legislation was passed to prevent the manufacture of PCBs, sale of PCBs, and then through a phased-in approach to eliminate the usage of PCBs in transformers and PCB containing equipment, such as autoclaves. And you could just get rid of the stuff, that was one alternative, but if you wanted to keep the equipment, you would have to retrofit it so that it would use a different heat transfer fluid that did not contain PCBs. So that involved draining the system, flushing it, testing it, draining it again, flushing it again, doing that until you got below a certain regulatory level for the concentration remaining, and that's what was called retrofitting.

Q. Did you personally participate in retrofitting transformers?

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A. No.

Q. Grumman did, though?

A. Yes.

Q. Do you know where the retrofitting operation took place?

A. No. Let me back that. I think some took place where the transformers were. Some transformers -- other than that I don't know. I suspect some of them may have been removed and then retrofitted and put back in place, but I don't really know.

Q. Do you know whether there was any retrofitting of transformers at Plant 3?

A. I don't know.

Q. Who would you go to to find out about the retrofitting operation that Grumman performed?

A. I don't really know. The people that were involved are no longer with the company. I suppose a search could be done to see if their files were available. I'm not sure.

Q. To your understanding there was retrofitting that Grumman performed on the

Navy property?

MR. TOPOL: Objection.

Mr. Smirti, you asked a specific question on that twice. The witness answered your specific question. Now you're asking the same question a third time.

MR. SMIRTI: I think I asked Plant 3. Now I'm asking about the Navy property.

Q. Do you have an understanding as to whether Grumman performed any retrofitting operations on the Navy property?

A. I don't know.

Q. Do you know whether Grumman performed any retrofitting operations on the Grumman property?

A. I'm not sure.

Q. But your best understanding is that there was some retrofitting operations that were performed on site?

A. Yes.

Q. Do you have an understanding as to what would be done with the PCB-containing

fluid that was drained from the transformer during the retrofitting process?

A. Yes.

Q. What's that understanding?

A. It would be disposed of through a licensed contractor, disposed of in accordance with regulations, typically incineration.

Q. Do you have an understanding as to whether there were leaks that were discovered during the retrofitting process?

A. No.

Q. Were there operations at Plant 3 other than autoclave operations?

A. Yes, there were.

Q. What were the other operations at Plant 3?

A. I wouldn't be able to tell you all of them. Do you want me to tell you the ones I remember?

Q. Please, whatever you know, sir, whatever you can recall.

A. Okay. In the front of the plant, which would be the -- I guess that would be the northern side, there were heat treating

operations where parts would be heat treated, metal parts would be heat treated in ovens. Also in the front of the plant there was a conversion coat operation known by the trade name of Alodine or Alodine. It was a process line to provide Alodine coating, and that would involve half a dozen or more tanks in one line which would be used to deoxidize and basically prepare the surface for this coating operation and then dry it afterwards.

Towards the middle of the plant there was a process line for I think testing leaks on fuel tanks. Moving towards the back of the facility, the Plant 3 facility, there was a sulfuric acid anodize line, a chromic acid anodize line, a honeycomb pretreatment line. The honeycomb pretreatment line was more in the middle, but each of these are tank lines, each of which was comprised of half a dozen or more tanks.

There was a flow coat operation, as it was known, which was basically a process whereby metal parts were dipped into a rubber maskant, and then some of the maskant would be

removed from the metal part, and then the parts would be brought over to a chemical milling line, also in Plant 3, where the parts would be dipped into these tanks, and by chemical action some of the metal would be dissolved where the maskant had been removed.

So there's the flow coat operation, chemical milling operation, there was a sulfuric anodize line. I don't know if I mentioned that already. There were degreasing operations associated within these tank lines, there were paint booths and paint tunnels and all the mechanical equipment associated with the painting operations. One of the painting operations was a mechanized automated process line that would -- like a conveyor belt.

There was a lot of machining that was done in Plant 3, so there would be large machines that would be used for cutting, milling, drilling, riveting, that kind of thing. I think that covers the general areas. Of course each of these areas had -- each of these process lines or operations, you know,

had many parts to them. I am just giving you the overall.

MR. SMIRTI: Sure, the overview.

MR. TOPOL: Counsel, could we take a short rest room break?

MR. SMIRTI: Absolutely.

(Recess taken at 10:32 a.m.)

(Examination resumed at 10:42 a.m.)

Q. Mr. Cofman, was there an area on the Navy property known as the drum marshalling area?

A. Yes.

Q. Can you describe that?

A. It was a -- essentially a slab -- a concrete slab with a roof over it, but it was open on the sides.

Q. What was the area of the slab, approximately?

A. 100 by 300 feet.

Q. Was there always a slab?

A. When you say "Was there always a slab"?

Q. Well, to your understanding, did

the drum marshalling area always have a slab?

A. Oh, yes. Yes, yes, it did.

Q. Was there anything stored on the drum marshalling area?

A. Yes.

Q. What was on it?

A. Drums of waste or typically -- yeah, drums of waste were stored there.

Q. How big were the drums?

A. 55 gallon drums. There may have been 30 gallon and smaller containers, but 90 percent of what was stored there I would say was -- at least 90 percent were 55 gallon drums.

Q. What was in the drums?

A. Waste.

Q. What kind of waste?

A. Any waste we have would go to the drum marshalling area.

Q. From which plants?

A. From plants -- from any of the plants in the Bethpage facility and even some of the other Long Island facilities.

Q. Would there be any Therminol in

any of the drums?

A. I don't know.

Q. On how many occasions did you view the drum marshalling area?

A. I don't know.

Q. Did you ever see leaks from the drums at the drum marshalling area?

A. No.

Q. You never did?

A. No.

Q. Are there any documents to your understanding that are maintained with respect to the drum marshalling area?

A. I know that there were documents that were maintained when the drum marshalling area was in operation, if that's what you're asking me.

Q. Yes. What kind of documents?

A. There were inventories and documents on laboratory results of tests taken on the contents of the drums.

Q. Who maintained those documents?

A. It was maintained by the -- I'm trying to think of the right term of that

group, environmental operations group and also the environmental -- let's see, a group known as environmental technology and compliance I think. That was the environmental engineering group.

Q. Did you ever have any discussions with anyone where it was indicated to you that there was leakage that took place at the drum marshalling area?

A. Not to my recollection.

Q. When was the drum marshalling area first put in place?

A. I don't really know exactly.

Q. Approximately.

A. 1981.

Q. Until when?

A. I think it was in the early '90s that that facility was decommissioned.

Q. And all the drums removed?

A. Oh, yes.

Q. But from 1981 until 1990 it was in use?

A. Those dates are approximate, yes.

Q. About how many drums were on the

drum marshalling area?
A. On average you're saying?
Q. On average, sure.
A. I would guess 600, 700, something like that.
Q. Was there waste from the Grumman property that was in the drums or some of the drums on the drum marshalling area?
A. Yes.
Q. And the Navy property?
A. Yes.
Q. Before 1981 was there another place on the Navy property where the drums were stored?
A. I think there was, but I'm not sure.
Q. Was there a place on the Grumman property where the drums were stored?
A. I think there was there too, but I'm not sure of that.
Q. Was there an automotive maintenance facility on the Navy property?
A. Yes.
Q. What was that?

A. That was Plant 20.
Q. What operations took place there?
A. Maintenance of Grumman vehicles. It was a garage facility, and also fueling of those vehicles and washing of those vehicles.
Q. Now, aside from the operation of the three autoclaves on the Navy property, was there any other operation on the Navy property to your understanding that used any fluid containing PCBs?
A. Not to my knowledge.
Q. Aside from what you've described in the autoclave operation and the storage of Therminol containing PCBs in Plant 3, was there any other place on the Navy property where Therminol was stored?
A. I don't know.
Q. Was there any other place on the Navy property where any fluid containing PCBs was stored?
A. Other than the autoclave, I really don't know if there were. Shipments of drums make up Therminol would be required, you know, to fill the system or to make up the

system. I don't know where those drums were kept before the Therminol was used. It could have been on the Navy property.
Q. Now, with respect to the Grumman property, again from 1977 until approximately 1990, you worked at Plant 20, correct?
A. No.
Q. I'm sorry. What plant?
A. 30.
Q. 30, sorry. Was there a Plant 12 on the Grumman property?
A. There was a Plant 12. It was not contiguous with the main Bethpage facility, but it was kind of across the street, so there was a Plant 12 which was Grumman property.
Q. Did you have occasion to view Plant 12?
A. Yes.
Q. How often would you go to Plant 12?
A. I couldn't put a number on it, because it varied so much between the years. I was not there on a regular basis.
Q. Between 1977 and 1990 --

A. Oh, between 19 --
Q. Yes.
-- approximately how often would you be at Plant 12?
A. Probably not more than once a month.
Q. Did you have occasion to view the operations of Plant 12?
A. Yes.
Q. What were the operations in Plant 12?
A. Well, there were several buildings that comprised Plant 12 complex. One of the buildings was engineering development, materials development in nature, and the remaining buildings included a boiler plant for heating the facility, and there were also -- that's where the -- it was at the Plant 12 facility that the main maintenance operation, maintenance personnel, had their shops, so there would be a carpenter shop, metal shop, metal fabrication shop, I think there was a paint shop there, but these are all maintenance kind of related operations,

not production operations.
Q. Was any fluid or substance containing PCBs used at Plant 12?
A. Not that I know of.
Q. Did you come to any understanding that PCBs were used at Plant 12?
A. Not that I know of.
Q. Did you have any understanding that PCBs or any fluid or substance containing PCBs were used on any portion of the Grumman property?
A. Other than the likelihood of transformers, I can't say that I know of any.
Q. What do you know about transformers?
A. There were transformers at the Bethpage site, as I've discussed before.
Q. On the Grumman property?
A. Yes.
Q. You don't know where those transformers were?
A. I know where some were.
Q. Okay. Where were those?
A. There were some transformers that

were located just south of Plant 30, across the street from the access road that runs along Plant 30 known as Cherry Avenue Extension. I know they were there because I worked at Plant 30 and I saw them.
Q. That was on Grumman property?
A. Yes.
Q. How many transformers?
A. Two. They were like two boxes.
Q. When did you see them?
A. In the '70s and '80s.
(Cofman Exhibit 1, Document Bates stamped BETPARK 200 through BETPARK 203, marked for identification.)
Q. Mr. Cofman, let me just put this question on the record, and I will just state for the record I've handed you Cofman Exhibit 1. Please take a moment to take a look through Cofman Exhibit 1, sir.
(Witness perusing document.)
Q. Mr. Cofman, have you seen Cofman Exhibit 1 before?
A. Yes, I have.
Q. When did you first see it?

A. I think I saw it before it was submitted to the State.
Q. Did you participate in the preparation of this letter?
A. What do you mean by the preparation of the letter?
Q. Well, did you draft the letter?
A. No.
Q. Did you help draft the letter?
A. No.
Q. Did you comment on the letter?
A. Yes.
Q. When did you comment on the letter?
A. Before it was sent. I don't know exactly when.
Q. Who did you give comments to?
A. Certainly my boss. I don't know if there's anybody else involved.
Q. Who was your boss at the time?
A. Larry Leskovjan.
Q. What did you talk to Mr. Leskovjan about concerning the letter?
A. I don't recall.

Q. Let me direct your attention, please, to page 3 of the letter, paragraph numbered 5 starting with the words "From the currently available information." Do you see that, sir?
A. Yes.
Q. Did you discuss with Mr. Leskovjan any of the information contained in paragraph 5 --
A. I think I did.
Q. -- before preparation of the letter?
A. Yes.
Q. Did you tell Mr. Leskovjan that some of the PCBs and metals detected within the Bethpage Park property may have originated from Navy and Grumman property and production lines as a result of operations supporting military production contracts?
A. I don't remember specifically, but I very well could have.
Q. Let's go to the next sentence. Did you talk to Mr. Leskovjan about the autoclave operations?

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A. Yes.
Q. Did you tell Mr. Leskovjan that you believed that the PCBs came from the autoclave operations in Plant 3?
A. I don't think I would have said that exactly.
Q. What do you recall saying?
A. Well, I would -- I don't recall exactly, but I think I would have said that they may have come from the Plant 3 operation.
Q. Continuing on in that sentence, Mr. Cofman, did you talk to Mr. Leskovjan about occasional leaks and discharges of PCBs?
A. I think I did.
Q. What did you tell him about that?
A. That it was not unlikely that maintenance operations at the autoclaves would have resulted in leakage of fluid.
Q. What else did you tell him about leakage?
A. I don't recall anything other than that.
Q. Did you tell him the extent of the leaks?

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A. No.
Q. Did you tell Mr. Leskovjan as to whether any other person observed leaks or discharges?
A. No.
Q. Look at the next phrase after operations in Plant 3. It says, "which previously testing suggests." Did you talk to Mr. Leskovjan about any previous testing that suggested that there were leaks in the autoclave system?
A. Yes.
Q. What did you say about that?
A. We had done testing of a dry well outside of the building in the area of the autoclave, which I've discussed with you earlier, and that dry well was investigated and found to have PCB contamination in it, and that to me indicated that there was a good likelihood that the PCB contamination in that dry well was associated with the operation of the autoclave.
Q. That's the dry well that the drain in the floor at Plant 3 led to?

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A. Yes.
Q. When was the testing done?
A. I don't recall.
Q. Approximately.
A. In the late '80s or early '90s. No, let me correct that. I would think it was in the '90s.
Q. Who did the testing?
A. It was a consulting firm, and my recollection that it was Roux Associates, R-O-U-X.
Q. What prompted the testing?
A. There came a time when we decided to cease operations on the Navy property, and in conjunction with turning the property back over to the Navy we did a environmental investigation of all the buildings and the property to determine whether there was any contamination, and it was in doing that that -- the environmental investigation, there are a number of steps that are done in the environmental investigation, and the initial steps indicated that there was a potential for contamination to have reached this dry well,

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and subsequently the next step of the environmental investigation was involving conducting testing, and that's how it came about.
Q. Did you have any role in the testing?
A. Yes, I did.
Q. What was that role?
A. Well, not the -- not in the initial testing, but once contamination had been found in that storm drain, some remediation was done, and the State in evaluating the level of decontamination that was done to that dry well requested that additional decontamination be done, and it was at that point I became involved in the project of investigating the remaining contamination in the dry well.
Q. Again, what time period are we talking about; is that early '90s I think you said, sir?
A. I would have to guess the mid-'90s.
Q. What was your job title at that

point?
A. I don't recall.
Q. So what did you do once the contamination was found?
A. Well, it was -- what we had to do was fully delineate the contamination, so there were several rounds of testing that were done of the soil at depth and also groundwater that was coming to and from the area to determine whether PCBs were impacting not only the soil but also groundwater, and my responsibility was strictly to do this investigation.
Q. What did you do?
A. So a report resulted, and that was the end of that.
Q. What did you do in the course of the investigation?
A. Just media sampling and analysis.
Q. Were you involved in any effort to trace the source of the PCB contamination in the dry well?
A. No.
Q. When you were doing the

investigation, you knew that the floor drain in Plant 3 led directly to the dry well?
A. I knew that the floor drain had led to the dry well. The floor drain had been removed by the time I was involved in the investigation.
Q. Did you investigate whether PCBs got into the dry well from any source other than Plant 3?
A. No.
Q. Was there any other conduit to the dry well other than the drain from the floor at Plant 3?
A. I don't think so. I need to explain that a little bit.
Q. Please.
A. The dry well was connected to the drain, and then that dry well discharged to the storm water system, so it was connected to a conduit, but the flow would have been from the dry well to the storm water collection system.
Q. From the dry well to the storm water collection system?

A. Yes.
Q. But any fluid or any matter that flowed into the dry well would have only been from Plant 3?
A. I think so, although I guess under abnormal storm conditions there might have been a general flooding of the area, and who knows what would have gotten there from that condition, but I don't know of that happening. That's just conceptual.
Q. As part of your investigation did you determine whether there were leaks and discharges of PCBs on the floor of Plant 3?
A. I was not involved in that investigation.
Q. Who was?
A. I'm not sure.
Q. Now, continuing on on that sentence, sir, let's take it from the top. It says that "The PCBs are believed to have come from the autoclave operations in Plant 3, which previously testing suggests experienced occasional leaks or discharges that were captured by floor drain systems routing them

to the storm water system." Do you see that, sir?
A. Um-hum.
Q. Was there any direct route from the floor drain system in Plant 3 to the storm water system?
A. Well, via this dry well. That was a direct connection.
Q. Was there ever a time where the drain on the floor in Plant 3 went directly into the storm water system and bypassed the dry well?
A. I don't think so.
Q. The next sentence says, "The storm water was directed to the NWIRP recharge basins." Do you see that, sir?
A. Yes.
Q. NWIRP refers to Navy property?
A. Naval Weapons Industrial Reserve Plant.
Q. Were there recharge basins on the Navy property?
A. Yes.
Q. How many?

A. Three.
Q. Where were they located?
A. They were located to the east of the Plant 3 building and north of the roads and grounds building.
Q. How far from Plant 3 were they?
A. 700 feet, 800 feet.
Q. How big were the recharge basins?
A. I don't have a measurement of them. They were big.
Q. Approximately.
A. Maybe something a football field each.
Q. A football field in length?
A. Yes.
Q. And width?
A. Yes.
Q. And how deep?
A. 20, 30 feet.
Q. The next sentence says that "The recharge basins were periodically scraped to restore percolation capability." Did you report that to Mr. Leskovjan in preparation of this letter?

A. I very well could have.
Q. To your best recollection, did you do so, sir?
A. I know that I discussed the operation of recharge basins with Mr. Leskovjan, and this would have fallen under that category.
Q. How were the recharge basins periodically scraped?
A. With a -- I think it was a bulldozer.
Q. How often was it done?
A. I don't have an exact number on that, but a few times a year perhaps. It really was a function of when it needed to be done, and I don't know that that was constant, but it was not unusual.
Q. How many bulldozers were used to scrape the recharge basins?
A. That I don't know.
Q. Who determined when the recharge basins had to be scraped?
A. Roads and grounds, the roads and grounds department of Grumman.

Q. Do you have any estimate as to how much material was removed at any given time when the recharge basins were scraped?
A. No.
Q. Continuing on it says, "and the soils that were removed were allowed to dry on land in the vicinity of the recharge basins." Do you see that, sir?
A. Yes.
Q. So the scrapings, if you will, from the recharge basins were placed in the vicinity of the recharge basins?
A. Yes.
Q. And did you have occasion to view those, the placement of those scrapings?
A. I don't think I ever saw those.
Q. Can you give me any estimate as to the quantity of the scrapings that were allowed to dry on land in the vicinity of the recharge basins?
A. No.
Q. How did you come to an understanding that there were these scrapings that were allowed to dry in the vicinity of

the recharge basins?
A. Well, it was with discussions I had with some of the operations people, but I couldn't -- I wouldn't be able to relate specifics on that.
Q. What period of time did this scraping take place?
A. By that you mean --
Q. Over what period of time, sir? I just want to fix a time period here, what we're talking about.
A. I don't really know when it started.
Q. Do you know when it ended?
A. When we turned the property over to the Navy.
Q. When was that?
A. Somewhere in the mid to late '90s.
Q. But to your understanding the scraping took place until the mid to late '90s?
A. Yes.
Q. The next sentence says, "These

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soils were considered to be clean fill at the time." Did you report that to Mr. Leskovjan?
A. Yes.
Q. How did you come to an understanding that the soils were considered to be clean fill at the time?
A. By participating in discussions with environmental operations department personnel and my former boss.
Q. Who was your former boss?
A. John Ohlmann.
Q. What operations personnel did you discuss this with?
A. Well, Barry Andres was the lead person that I can recall having discussions on this with.
Q. When were PCBs considered to be dangerous?
A. I don't know. The first I heard about it was in the late '80s. Late '70s, I'm sorry.
Q. This scraping took place through the mid to late '90s?
A. Yes.

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Q. Now, continuing on in that sentence, sir, it says, "These soils were considered to be clean fill at that time and may have been placed at various locations on the NWIRP Grumman property, including shallow areas of the property upon which the Park is presently located and the adjacent Northrop Grumman property." Did you discuss that with Mr. Leskovjan?
A. Yes.
Q. How did you come to the understanding that this material was placed upon Park property?
A. Well, I never really came to that understanding, other than it's a possibility.
Q. Did you have any discussions with anyone else concerning the placement of this material onto Park property?
A. Yes.
Q. Who was that?
A. A gentleman by the name of Robert Jasinkonis.
Q. When did you have that discussion with Mr. Jasinkonis?

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A. I don't know the exact date, perhaps late -- I don't know the exact date.
Q. Approximately.
A. 2002, 2001.
Q. Who else participated in that discussion with Mr. Jasinkonis?
A. There was counsel, Frank Amoroso and John Ohlmann, my former boss.
Q. At the time that you participated in the discussion with Mr. Jasinkonis, was he employed by Grumman?
A. No.
Q. Did Mr. Jasinkonis discuss the placement of material on Park property?
DI MR. TOPOL: Objection. Counsel, that's obviously part of a privileged discussion with counsel. The question is improper, and I instruct the witness not to answer.
MR. SMIRTI: Well, I'm not interested in any privileged part, if any, of that discussion. I'm not interested in Mr. Amoroso's comments, I'm not interested in his advice to

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Grumman, if any. I'm interested in the observations that a non-Grumman employee related.
MR. TOPOL: If the discussions were had in the context of the meeting with Mr. Amoroso, then it's not appropriate for questioning, which is the same rule that your counsel has employed with Mr. Russo and other witnesses.
If on the other hand the witness has had conversations with Mr. Jasinkonis at which counsel was not present, you can ask him about that. And if he had such discussions, he can answer, but he can't answer as to what Mr. Jasinkonis said at a meeting at which Mr. Amoroso was present.
MR. SMIRTI: I'm only interested in facts that Mr. Jasinkonis related. Those facts don't take on a privilege simply because they're in the presence of counsel. I'm not asking for strategy. I'm not asking for opinion.

I am not asking for any type of reflections or observations made by Northrop Grumman with respect to the import of those facts. What I'm asking --

MR. TOPOL: Counsel.

MR. SMIRTI: I haven't finished.

What I'm asking is the observations that Mr. Jasinkonis articulated at that meeting. And if you're going to direct and if you are going to object and direct the witness not to answer, then I would like a specification of the privilege and the rule under New York law upon which you're relying.

MR. TOPOL: Counsel, I'm implying exactly the same approach, which is an objection which your counsel has employed consistently, most recently in the Russo deposition when I asked for facts that were disclosed in discussions at which counsel was present, I believe the counsel was Mr. Firetog, and I was

told that counsel was present at the meeting, it was not appropriate for examining at the deposition, and I'm applying precisely the same objection here.

MR. SMIRTI: You're directing the witness not to answer?

DI MR. TOPOL: I am, that is correct.

MS. GREENBERG: If I can add something on to the record. I would add on that the discussions that we asserted the privilege on were Matt Russo was a current employee at the time. We're talking about retired employees, and Mr. Russo was also involved as an employee of the Town and was involved in the strategy.

Regarding the discussions that occurred here, we would take the position that Mr. Jasinkonis was there simply to provide facts, which however Mr. Amoroso used them or took them we're not interested. We're just interested

in the facts that were related.

MR. TOPOL: And I would also add that when I asked in connection with Mr. Russo, there were other individuals there who were not employees at the Town. I was interested in what they said at the meeting, and I was told it was improper questioning because counsel was present at the meeting, and I'm asserting precisely the same objection here.

MR. SMIRTI: Okay, I understand.

Q. Aside from your discussions with Mr. Jasinkonis do you have any other basis for an understanding that these materials were deposited on Park property?

A. Well, my understanding is not that they were deposited on Park property, but that they may have been deposited on Park property, and that's based on the fact that scrapings were routinely produced in the maintenance of the recharge basins, and the material that was produced had to be deposited somewhere, and it would be deposited in

areas -- if there was a low area or area that needed filling, that material was clean fill, or that's what we believed it to be, and that's what it was used for. So regarding the Park, it's just a possibility.

Q. Let's go to the next sentence. It says, "Indeed the PCB aroclors found in both the Park and the adjacent Northrop Grumman property are consistent with the isomers found in the dry wells adjacent to Plant 3 that conveyed storm water to the recharge basins."

First let me ask you, what's an aroclor?

A. PCBs are a class of compounds, and that class is made up of a variety of specific chemical compounds, and they're known as aroclors.

Q. What's an isomer?

A. An isomer is a chemical compound that has the same atomic composition as another chemical compound, but the location of the atoms on the compound are not identical.

Q. Did you report this to

Mr. Leskovjan, that the PCB aroclors found in the Park are consistent with the isomers found in the dry well adjacent to Plant 3?

A. I don't think I did.

Q. Do you know how he got this information?

A. I know how I got the information, which was from our consultant, and I assume he did the same.

Q. Which consultant?

A. Dvirka & Bartilucci.

Q. When did you get this information from Dvirka & Bartilucci?

A. I don't recall.

Q. Can we call them D&B?

A. D&B.

Q. Who at D&B gave you this information?

A. Well, they've had a fair number of personnel changes. I don't recall who was specifically working on this project at that time. Could be Mike Hofgren, who is currently working on the project, but I don't know if somebody preceded him on that.

Q. Now let's go to paragraph 6 if we could, Mr. Cofman. The first sentence says that "The drying of metal-bearing sludges from the NWIRP operation on what is now the Park property presumably continued until this property was transferred to the Town of Oyster Bay in 1962, after which sludge-drying beds were constructed in the vicinity of the recharge basins on the NWIRP." Did you discuss this with Mr. Leskovjan?

A. Yes.

Q. What did you tell him about that?

A. That it was my understanding that metal-bearing sludges may have been deposited at the property in question.

Q. On the Park property?

A. Yes.

Q. Where did the metal-bearing sludges come from?

A. Again, my understanding was that metal-bearing sludges were generated at the Bethpage facility from a industrial waste treatment operation which took industrial waste from the facility and treated it to make

it less hazardous, if you will.

Q. What plant in the facility?

A. Plants 2 and plants -- Plants 2 and 3 had industrial waste treatment facilities that generated sludges that would have had metals in them.

Q. Plant 2 was on the Grumman-owned property?

A. Yes.

Q. Plant 3 was the Navy-owned property?

A. Yes.

Q. What types of metals were contained in these sludges?

A. Primary concern was with cadmium and chromium.

Q. Before treatment what type of chromium was in the sludge?

A. There was none before treatment. The sludge was the result of treatment.

Q. I apologize. Before treatment it was wastewater that was treated?

A. Yes.

Q. To your understanding, was there

chromium in the wastewater?

A. Yes.

Q. What type of chromium?

A. It would have been a mix of different valences, but the one we were concerned with was chromium 6.

Q. Is that hexavalent chromium?

A. Yes.

Q. How about cadmium?

A. What about cadmium?

Q. Was that in the wastewater?

A. That could have been in the wastewater, yes. It was in some of the wastewaters. The wastewater was not unique -- I mean not one wastewater. A large facility, there was a lot of operations going on.

Q. Was there hexavalent chromium or chromium 6 in the wastewater from Plant 3?

A. Yes.

Q. And from Plant 2?

A. Yes. Now, I am talking about my knowledge of what was going on when I was there.

Q. Yes, I understand, sir.

Over what period of time did you have an understanding from your knowledge being there?

A. From my direct experience was since I worked there, since 1977.

Q. From 1977.

The wastewater that contained hexavalent chromium, do you know how it was treated?

A. I know how it was treated when I was involved, yes.

Q. When you were there, sure. How was it treated?

A. It would basically be reduced to the chromium 3 state by -- I think there were a couple of operations that were used at different times, but in one case it was hydrogen peroxide was added to the mix to reduce the valence state, I think ferrous sulfate was sometimes used, various chemicals were used, but the end product was always to take the chromium 6 to chromium 3, and that's how it was changed in state. And then the solution would be -- the PH would be

manipulated, would be increased by the addition of caustic or lyme to cause the metal, which is in the solution, to come out of the solution, to precipitate, and it was this precipitate which is called the sludge.

Q. Was there testing done following the wastewater treatment process to determine whether or not there remained any hexavalent chromium?

A. Yes.

Q. What type of testing was done?

A. The operations at least in Plant 2 were done in a batch operation. I think Plant 3 had a continuous flow system, but the discharge waters were tested periodically to verify in the continuous batch operation -- I mean continuous mode operation it would be periodic. In the batch mode operation before discharging the contents of the -- the supernatant contents of the tank they would be tested to determine whether there was chromium in the hexavalent form.

Q. To your knowledge, was there ever hexavalent chromium found after the treatment

process?

A. In the supernatant?

Q. Yes.

A. To my understanding, there was never any chromium found above levels that were allowed for discharge.

Q. There was never any hexavalent chromium found; is that correct?

A. Yes.

Q. But there was hexavalent chromium detected following the treatment process?

A. I don't have recollection of the analytical results. Whenever a test is done there's always a certain level to which the test is sensitive. I don't know what that level was. It was certainly sufficient to determine that we were below the discharge criteria, so it could have been nondetect, that the result for chromium 6 could have been nondetect to that specific -- to the specific level that that test would discriminate to. That's not to say that if a more sensitive test were done that some level of chromium wouldn't be found. I'm sure if your body is

tested to a right degree you'll find all sorts of chemicals there that are not of concern at, at a level of concern.

So to answer your question, which was was there ever any chromium detected, I don't really know the answer to that.

Q. The treatment process took place at both Plant 2 and Plant 3?

A. Yes.

Q. What happened to the sludge that was produced after the treatment process at Plant 3?

A. At Plant 3?

Q. Yes, sir.

A. The sludge was pumped to a -- something known as a -- well, a vacuum filter operation, which would take the water out of the sludge, and the sludge was then -- it was dropped into typically a 20-yard, roll-off Dumpster, and that sludge would be taken off site for disposal as a hazardous waste.

Q. Where off site was it taken?

A. I don't know.

Q. Do you have an understanding as

to whether or not that was the process with the metal-bearing sludge at Plant 3 before you became employed at Grumman?

A. Yes.

Q. What's that understanding?

A. There was no industrial waste treatment facility at Plant 3 before I became employed at Grumman.

Q. So there were no metal-bearing sludges to your understanding before 1977 that were produced at Plant 3?

A. Yes, that's correct.

Q. With respect to Plant 2, what happened to the metal-bearing sludges at Plant 2?

A. When?

Q. Well, from the time of your employment.

A. Well, I don't know exactly what happened. I don't know what happened to them during the first year or two that I was employed by Grumman. I was not involved in any sense in that operation. But 1978, 1979 a system was placed -- I engineered a system to

take the sludge and dewater it. And once that was in place, the sludge was handled pretty much the way it was handled later on at Plant 3. The sludge was dewatered, it fell into containers, and the containers were removed from the site by a licensed hazardous waste hauler.

Q. Do you have any understanding as to the drying of metal-bearing sludges on Park property before the property was turned over to the Town of Oyster Bay?

A. Yes, I do.

Q. What's that understanding?

A. Well, my understanding in that comes from two sources. One is from review of real estate documents or correspondence between the Town and the company prior to the turnover of the property or the dedication, and also from the discussions with John Ohlmann, Frank Amoroso and Robert Jasinkonis.

MR. TOPOL: Counsel, you may ask him about his understanding from the real estate documents but not about his understanding derived from the meeting.

MR. SMIRTI: I understand your objection and your direction.

Q. What documents did you review from the -- was it the real estate department, the Grumman real estate department, sir?

A. Yes.

Q. What documents did you review?

A. There was correspondence between I think our attorneys and the Town's attorney's regarding conditions, preparations for the transfer, and so there were I think several documents. I couldn't tell you which specific documents.

Q. When did you have occasion to review them?

A. I think around 2001, 2002.

Q. Did you speak to Mr. Leskovjan about that?

A. Yes. He's the one that gave them to me, as a matter of fact.

Q. Is it your understanding that there was treatment of wastewater before your employment in 1977?

A. Yes.

Q. And again, what is your source of that understanding; is it the real estate documents?

A. No.

Q. What's the source of that understanding?

A. Discussions with any number of plant personnel regarding the history of the operations.

Q. What's your understanding as to where the treatment of wastewater took place?

A. Before I was employed?

Q. Yes.

A. At Plant 2.

Q. Was there any treatment of wastewater at Plant 3?

A. No, not to my understanding.

Q. So now at Plant 2, who did you speak to to get the understanding first that there was wastewater produced from Plant 2?

A. I've discussed this with John Ohlmann, John Wichmann, Barry Andres, George Kerrigan. I really couldn't put a finite list together, but at least those people, probably

several others that were operators.
Q. When did you have these discussions?
A. Probably starting in '77 on through.
Q. Over what period of time did you have an understanding that there was wastewater produced at Plant 2?
A. If you're asking when I think it started?
Q. Yes, sir.
A. The treatment facility was built, to my understanding, in 1950, plus or minus a year.
Q. Is it your understanding that wastewater was produced consistently from 1950 thereafter at Plant 2?
A. No, no, I never said that wastewater was produced at Plant 2. I didn't mean to say that if that's what I said.
Q. I may have misunderstood. I apologize.
What's your understanding as to either the treatment of wastewater at Plant 2

or the production of wastewater at Plant 2?
A. My understanding is that treatment started at Plant 2 with the construction of the industrial waste treatment facility, otherwise referred to as the acid house, around 1950, and the wastewater that was treated there came from wherever there was wastewater produced on site, not just from Plant 2, but that would have included Plant 1, Plant 3, wherever it was produced.
Q. Either on the Grumman site or the Navy-owned property?
A. Yes, yes.
Q. Let me just confirm what I'm talking about now is the period from 1950 to the time that you became employed in 1977.
A. Yes.
Q. So from that period of time, for that 27-year period of time, did you have an understanding as to the contents of the wastewater before treatment?
A. Not a complete understanding, but an understanding of certain constituents that I'm sure were in the water.

Q. What's that understanding?
A. Well, chromium is the primary one.
Q. That's the hexavalent chromium that we spoke about?
A. Yes.
Q. And cadmium?
A. I don't know about cadmium, but I would guess that yes.
Q. What happened to that wastewater?
A. The wastewater was generated, and it would be brought to the industrial waste treatment facility at Plant 2 for treatment.
Q. And then can you walk me through the treatment process? Again, as it existed from 1950 to 1977.
A. No. I don't have that complete a detail. I do know that the chromium was reduced to trivalent state and precipitated out. The supernatant was discharged with state regulatory approval. I think that's how it was treated.
Q. I would like to focus on the period from 1950 to 1962.

Do you have an understanding as to whether the treatment process at Plant 2 produced sludge?
A. Yes.
Q. What's that understanding?
A. That it did.
Q. Do you have an understanding as to what happened to that sludge?
A. Yes.
Q. What's that understanding?
A. My understanding is based on both my review of the real estate documents and my discussions with Frank Amoroso and John Ohlmann and Robert Jasinkonis.
Q. I am not asking about those discussions given the direction of your counsel. Just from your understanding of the real estate documents, what happened to that sludge that was produced at Plant 2 for the years 1950 to 1962?
A. Well, I only know or I only -- my understanding is for a time prior to the turnover of the Park, but that's not open-ended. I don't know that -- how long a

period that occurred for, but at least based upon the review of the real estate documents I concluded that sludge was deposited on the Park property.

Q. Was the sludge from Plant 2, to your understanding, dried at all on Grumman property and then deposited on Park property?

A. No.

Q. It was --

A. It was a fluid.

Q. The sludge was a fluid?

A. Yes.

Q. And your understanding is that it was placed on Park property?

A. Yes.

Q. How often would the sludge have been dumped on Park property?

A. I don't know that.

Q. Do you know how much was dumped on Park property?

A. No.

Q. Aside from your discussions with Mr. Jasinkonis and the conversation with Mr. Amoroso and aside from the real estate

documents, did you come to that understanding about the disposition of those sludges from conversations with anyone else --

A. No.

Q. -- or from your own observations?

A. No.

Q. Do you have an understanding as to whether the depositing of those sludges on Park property continued after 1962?

A. The real estate documents requested permission to continue the operations after the transfer of the property to the Town and until such time as it impeded the development of the Park.

Q. Aside from the real estate documents do you have any independent knowledge as to whether or not the depositing of those sludges continued on Park property after 1962?

A. No.

Q. Do you have an understanding as to whether sludge-drying beds were constructed in the vicinity of the recharge basins on the Navy property in or after 1962?

A. Yes.

Q. What's that understanding?

A. That there were.

Q. When were they constructed?

A. I don't know the dates, but my understanding is it was after 1962.

Q. How many were constructed?

A. I think there were a total of three, although I don't know if they were all constructed at the same time.

Q. How big were they?

A. I don't really know.

Q. Do you have an understanding as to whether or not the sludge then was placed in these sludge-drying beds on Navy property?

A. I would surmise that.

Q. What's the basis for that?

A. I've seen -- I think I've seen a picture of them in an aerial.

Q. The sludge-drying beds on Navy property?

A. Yes.

Q. When did you see the picture?

A. I don't recall exactly.

Q. What's the date of the picture?

A. I don't know exactly, but it was certainly after '62. My guess is it was in the late '60s, but I don't know.

Q. What did the picture show?

A. Well, it primarily showed the recharge basin, but off to the side I could see an area that looked like sludge-drying beds, and there was a crane that looked like it was removing dried sludge.

Q. Who else viewed this photo to your understanding?

A. I think my boss would have seen it.

Q. Mr. Leskovjan?

A. I think so. I'm not sure.

MR. SMIRTI: Let's take five while I find this document.

(Recess taken at 11:48 a.m.)

(Examination resumed at 11:54 a.m.)

(Cofman Exhibit 2, Document Bates stamped NGSC-TOB 1786 through NGSC-TOB 1791, marked for identification.)

Q. Mr. Cofman, we've placed Cofman Exhibit 2 in front of you. Would you take a moment to look through it, sir.

A. Yes.

(Witness perusing document.)

Q. Have you had an opportunity to review Exhibit 2, Mr. Cofman?

A. Yes, I have.

Q. You are shown as a blind copy on Exhibit 2.

A. Okay.

Q. When did you first see this letter?

A. I'm not sure. It would have been about the time it was issued.

Q. Did you participate in the drafting of the letter?

A. I think I did.

Q. What was your participation in the drafting of the letter?

A. I think I discussed some of the statements that are in here with John Ohlmann. I didn't draft it myself. Wait, with Larry Leskovjan, excuse me. And I may have reviewed

the final product before it was released for accuracy, editorial comments, whatever.

Q. Now, Exhibit 2 discusses some of the topics that are also discussed in Exhibit 1; is that correct, sir?

A. Yes.

Q. What's your understanding as to the reason why Cofman Exhibit 2 was prepared?

A. Well, I think it was in response to questions raised by the State. That's my understanding.

Q. How did you get that understanding?

A. I don't recall.

Q. Did you talk to Mr. Leskovjan about that?

A. Oh, yes.

Q. Do you recall those discussions?

A. Not specifically.

Q. Between the time that Exhibit 1 was sent on or about May 24, 2002 and Exhibit 2 was sent on or about July 25, 2002, did you personally participate in any discussions with New York State representatives?

A. No.

Q. With DEC representatives?

A. Not to my recollection.

Q. How many discussions with Mr. Leskovjan did you have about the preparation of Exhibit 2?

A. I don't know.

Q. Do you know whether anybody else assisted Mr. Leskovjan in the preparation of Exhibit 2?

A. I think John DeBois did.

Q. Anybody else?

A. I don't know.

Q. Did you participate in discussions with Mr. DeBois and Mr. Leskovjan?

A. No.

Q. Did you speak to Mr. DeBois before the preparation of Exhibit 2?

A. Not about Exhibit 2.

Q. About what?

A. He works on the same floor I do, and we run into each other in the bathroom occasionally.

Q. Is Mr. DeBois still employed by

Northrop Grumman?

A. Yes.

Q. Mr. Jasinkonis is not employed by Northrop Grumman; is that correct?

A. That's my understanding.

Q. Do you know whether he's alive?

A. I don't know.

Q. Let's look at page 3 of Exhibit 2 if we can, please. The first full paragraph I'd like to focus on if we could. The first full paragraph states, "It should be noted that in the year following the donation of the Park property to the Town construction of sludge-drying beds on the NWIRP property adjacent to the recharge basin began."

Did you supply Mr. Leskovjan with that information?

A. No.

Q. The next sentence says, "Enclosed are copies of aerial photographs taken in April of 1962 and November, 1963 showing the Park property and the Navy's recharge basins. The 1963 photograph shows the beginning of construction of what is known to be the

sludge-drying beds adjacent to the recharge basins. This construction would have been necessary if Grumman could no longer use the Park property for sludge drying." Do you see that, sir?

A. Yes.

Q. Did you discuss that with Mr. Leskovjan?

A. Yes.

Q. What were those discussions that you had with Mr. Leskovjan about that?

A. Nothing other than what is said here.

Q. Did you have an understanding that the sludge-drying beds adjacent to the recharge basins on the Navy property was necessitated because Grumman could no longer use the Park property for sludge drying?

A. Yes.

Q. How did you come to that understanding?

A. By deduction.

Q. Did you talk to Mr. DeBois about that?

A. I don't think I did.

Q. You talked to Mr. Leskovjan about that?

A. Yes.

Q. Did Mr. Leskovjan concur with that?

A. Yes.

Q. Now, if you go to page 4, please, Mr. Cofman, of Exhibit 2, the heading at the top, it says "Autoclave Use and Operation." Do you see that, sir?

A. Yes.

Q. Between the time of preparation of Exhibit 1 in May of 2002 and the time of preparation of Exhibit 2 in July of 2002 do you recall any discussions that you had with Mr. Leskovjan that added to the description of the "Autoclave Use and Operation" that was set forth in Exhibit 1?

A. Not specifically, no.

Q. Look at the second full paragraph of page 4, please. It says, "The packing glands on the positive displacement pumps, and to a lesser extent those on the control

valves, were items that often required maintenance due to leakage of the pumped fluid." Do you see that, sir?

A. Yes.

Q. Did you talk to Mr. Leskovjan about the statement here that these "were items that often required maintenance due to leakage"?

A. I think that subject came under discussion, yes.

Q. What was that discussion that you had with him about that?

A. Just that, that the equipment that's discussed here was operating under very severe conditions and that this kind of occurrence was likely to happen. That's that.

Q. And it was routine?

A. It was -- yes, it was routine.

Q. The leakage was routine?

A. Well, I'm not sure what you mean by "routine." I would be hard-pressed to say it was routine. All I could say is you could expect things like this happening and that maintenance would have to be done to control

it.

Q. Go to page 5 if you would, please, Mr. Cofman. The second sentence on page 5 starting with the words "Anecdotal evidence," do you see that, sir?

A. Um-hum.

Q. It says, "Anecdotal evidence suggests that an effort was made by either Grumman or the Town to remove and dispose of any sludges off site." Do you see that, sir?

A. Yes.

Q. Did you discuss any such anecdotal evidence with Mr. Leskovjan?

A. Yes.

Q. What were those discussions that you had with him about it?

A. Well, this relates back to the discussions I had with Frank Amoroso, John Ohlmann and Robert Jasinkonis.

Q. So when this letter uses the term "anecdotal evidence," it is referring to the discussion that you participated in with Mr. Jasinkonis and Mr. Amoroso?

A. I believe that's true.

Q. What was the anecdotal evidence?

MR. TOPOL: Objection. The witness has answered the question. He said it came from the discussion. You've established that. What's the anecdotal evidence, he said it comes from the discussion, and you can't ask about the discussion.

MR. SMIRTI: The letter is referring to anecdotal evidence that takes place in a conversation. It's anecdotal evidence that Grumman is representing to the DEC, and I can't ask about the anecdotal evidence on the basis of privilege?

MR. TOPOL: Correct.

MR. SMIRTI: You're directing him not to answer?

DI MR. TOPOL: I am, Counsel.

MR. SMIRTI: Okay, fine.

Q. Do you have an understanding, Mr. Cofman, as to whether Grumman continued to discharge sludge onto the Park property after the Park was transferred to the Town of Oyster

Bay?

A. I don't know if they did or not.

(Cofman Exhibit 3, Document Bates stamped NGSC-TOB 1738, marked for identification.)

(Cofman Exhibit 4, Document Bates stamped NGSC-TOB 1749, marked for identification.)

Q. Mr. Cofman, have you had an opportunity to look at both Exhibits 3 and 4?

A. Yes.

Q. Is either Exhibit 3 or 4 some of the real estate documents that you referred to earlier?

A. I don't recall seeing them.

Q. Have you ever seen Exhibit 3 or 4 before?

A. I don't recall seeing them.

Q. Are you familiar with the term O'Brien Canal?

A. Yes.

Q. What's the O'Brien Canal?

A. It's a ditch that ran in an east/west direction north of -- an east/west

line, that the boundary would be the northern edge of the Navy recharge basins. There was a drainage ditch that ran along that property heading toward the east and I think terminated at the Park, in the Park.

Q. Just north of the Navy recharge basins?

A. That's my recollection, yes.

Q. Was the O'Brien Canal on any part of the Grumman property?

A. Yes.

Q. What part of the Grumman property was it?

A. Well, the part that as it leaves the Navy property and heads east, from that point on it would have been on Grumman property.

Q. And as it continued east, would it be then on Park property?

A. I think so, yes. I'm calling that Grumman property at the time.

Q. Understood, understood.

How big was the O'Brien Canal?

A. 2 to 3 feet in diameter perhaps.

It was like a drainage ditch.

Q. And it was 2 to 3 feet deep?

A. Yes, I think so.

Q. How wide?

A. Oh, that's what I'm saying, 2 to 3 feet wide.

Q. How deep was it?

A. About the same.

Q. About 2 to 3 feet deep also?

A. That's my guess.

Q. How long was it?

A. I don't really know.

Q. Have you viewed it?

A. I've seen aerials that show it.

Q. What was it used for?

A. Storm water, it would just convey storm water.

Q. From where?

A. I'm not sure. I mean, from the area that it's in, but I'm not sure what specific areas drained to that.

Q. During what period of time was it used for storm water?

A. I don't know when it was first

Cofman

put into place. I know that it was in place at this time.

Q. In 1962?

A. Yes.

Q. How do you know that?

A. From aerials.

Q. The aerials that you just referred to, is that the same aerial photographs that are referred to in Cofman Exhibit 2?

A. Let me see. Do you recall where they mention it in Exhibit 2?

Q. Sure. If you look at page 3, the first full paragraph.

A. I don't know.

(Cofman Exhibit 5, Document Bates stamped NGSC-TOB 2840, marked for identification.)

Q. Mr. Cofman, we've handed you Exhibit 5, which I'd just like to use for illustrative purposes if we can. Can you point out the area on Exhibit 5 where the O'Brien Canal would have been?

A. Not exactly.

Cofman

Q. Just approximately.

A. I can show it to you. I would say it came along somewhere like this (indicating).

Q. Can you mark it with the red pen that I've just given you, Mr. Cofman?

A. Yes.

(Witness complying.)

Q. So at its westernmost boundary the O'Brien Canal would have been on Navy property?

A. I think so, but the reason I'm hedging is the Navy property is very close to the borderline of the Grumman property at that location. My understanding is it was on Navy property, but it was very close to the borderline between the two properties.

Q. The borderline was north of the Navy property?

A. Yes.

Q. And as the canal ran east, did it go from Navy property to Park property?

A. Water would have flowed to the east, yes.

Cofman

Q. What I'm trying to drive at is as it went east, did the canal go through Grumman-owned property, not Park property, but Grumman-owned property?

A. Yes.

Q. So it went from Navy property going east to Grumman property, again going east to Park property?

A. Yes.

Q. Do you know whether the materials or the contents of the O'Brien Canal were ever tested?

A. Yes. I think the -- not the material conveyed in the canal, but I think the material that comprises the bottom of the canal or maybe even the side walls were tested.

Q. When was it tested?

A. I don't recall.

Q. Were you involved in the testing?

A. Not directly, no.

Q. Approximately when was it tested?

A. 1999, 2000. I'm not sure.

Q. What's your best recollection as

Cofman

to your role in the testing?

A. I think I saw the results of the testing.

Q. What were the results?

A. Nothing significant.

Q. What were the results, significant or not?

A. Well, I don't recall. If there was nothing significant, I would not recall any particular constituents, if that's what you're asking.

Q. Why was it tested?

A. Just as a routine, because of contamination that was located at various areas on Navy property and the possibility that there was storm water runoff that would have contained some materials, contamination materials, and that some of those materials may have been deposited on the bottom of the canal.

Q. Are you aware of any investigation as to whether a substance other than storm water runoff was placed in the O'Brien Canal?

A. No.
Q. Who else participated in the investigation?
A. I think it was conducted by Dvirka & Bartilucci.
Q. Are you aware as to whether the contents of the canal were ever tested, not the sides, not the floor of the canal, but the contents?
A. No, I don't think so.
Q. Do you know how it got its name?
A. Well, O'Brien was a president of the company. I don't know why it was named after him. It was probably somebody's joke. It caught on.
Q. What was the purpose?
A. The purpose of what?
Q. The O'Brien Canal. Was it to move storm water off the property?
A. Just to convey storm water, yes.
Q. Where did it discharge to?
A. I think the discharge was to a low but flat area in the Park.
Q. How was the storm water directed

to the O'Brien Canal at its western end?
A. I don't know.
Q. Did you ever have a discussion with anyone as to whether any substance other than storm water was deposited in the O'Brien Canal?
A. None other than speculation, that the possibility existed that there was carryover, as I mentioned before.
Q. Speculation that there was what?
A. Carryover.
Q. What do you mean by "carryover"?
A. Well, we knew that portions of the Navy facility had contamination. We knew that there was sludge-drying beds in the general vicinity, so the possibility exists I guess that rainwater would have picked up some contaminated material and routed it to the canal. Testing was done to determine whether or not there was anything like that.
Q. Testing was done on the bottom of the canal and the sides?
A. Yes. The canal does not normally contain water.

Q. It doesn't?
A. No.
Q. When you say it does not normally contain water, what period of time are you talking about?
A. What period of time? My understanding, as long as it existed. It's not a water body. It's a drainage ditch.
Q. So even before you were employed by Grumman your understanding is that the O'Brien Canal normally did not contain water?
A. Yes.
Q. How did you come to that understanding?
A. Because in discussions it was always referred to as a drainage swell, a drainage ditch. It's not something like the Eerie Canal where the purpose is to maintain a water body for whatever reason. This is a drainage item.
Q. Did you ever have a discussion with anyone or did you ever hear that sludge was deposited in the canal?
A. No.

MR. SMIRTI: Do you want to break?
MR. TOPOL: Sure.
(Luncheon recess taken at 12:25 p.m.)

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AFTERNOON SESSION

(Time noted: 1:24 p.m.)

JEAN-PIERRE COFMAN, resumed as a witness and testified further as follows:

CONTINUED EXAMINATION

BY MR. SMIRTI:

Q. Mr. Cofman, do you know in what concentration PCBs were contained in the fluid known as Therminol?

A. Yes. Approximately 97, 98 percent.

Q. 97, 98 percent of the fluid was PCBs?

A. PCBs, yes.

Q. Are there fluids other than Therminol that contain PCBs?

A. Yes.

Q. When I say are there fluids, I also mean were there fluids other than Therminol that contain PCBs?

A. Where specifically are you referring to?

Q. I guess what I'm asking you is

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Therminol was in use, to your understanding, in Plant 3 during what years?

A. Well, I know it was in use while I worked at the company. I'm not sure of the history of it.

Q. So from 1977 somewhere until the mid-'90s or so?

A. Yes. No, not the mid '90s. I think we got rid of the autoclave operation in the mid-'80s from the Bethpage facility. And even before we got rid of that the Therminol was removed, the PCBs were removed from the autoclaves because of the regulation that I think we spoke about this morning.

Q. Therminol was no longer used in the autoclave operation at some point?

A. Yes. That's when we had to retrofit all the equipment that was contacting -- had been in contact with Therminol or PCBs.

Q. And that was approximately what year again?

A. Early to mid-'80s.

Q. Now, from your experience until

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the mid-1980s, from any point up until the mid-1980s, were there fluids other than Therminol that contained PCBs?

A. In the autoclave area?

Q. No, just generally first I am asking you.

A. Universally in the world?

Q. Exactly.

A. Yes.

Q. What types of fluids?

A. Well, I know that they were used in fluorescent light ballasts. They often may have been used in other pieces of equipment that needed a heat transfer fluid that was stable and would not degrade with temperature. Therminol I think was a brand name, but PCBs were used in a lot of heat transfer fluids other than Therminol.

Q. And Therminol was the brand name for heat transfer fluids, for a particular brand of a heat transfer fluid?

A. Yes.

Q. Were there PCBs contained in oil products?

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A. In what?

Q. Certain oil products.

A. Oil products, I think so.

Q. What types of oil?

A. I think heat transfer oils. That's what light ballasts -- that's why there were PCBs in light ballasts. I don't know other than that.

Q. Were there oil products other than Therminol that were used at the Navy site?

A. For heat transfer?

Q. Yes.

A. I don't -- not that I know of, but I wouldn't know about that.

Q. For any other purpose?

A. Not that I know of.

Q. How about on the Grumman site?

A. Not that I know of, although I have to hedge that with what we mentioned earlier today about transformers, which is that transformers typically contain heat transfer fluid with PCBs in them, not always, but typically.

Q. Do you have an understanding as to the amount of PCBs that are contained in a transformer?
A. No.
Q. Now, when you first became employed at Grumman, I think you said that your title was chemical engineer?
A. I think so, yes.
Q. Just generally again what were your responsibilities?
A. To support design and operation of -- and construction of process lines, metal finishing processing lines or any other processing lines or equipment that the company may have needed, hydraulic piping. It was a mixed bag, design tanks.
Q. Did your responsibilities later change?
A. Yes.
Q. When?
A. Approximately in the early '80s or so. My responsibilities stayed with design, but more and more I was involved in industrial waste treatment operations, in

water pollution control, groundwater treatment, and gradually I had less and less involvement in the industrial process engineering kind of functions I had previously been doing.
Q. And that started around the early 1980s?
A. Yes.
Q. What was the nature of your responsibilities then?
A. I spent more time doing design work for the industrial waste treatment operations and being responsible for permitting air -- some air permits, groundwater permits, regulatory -- environmental regulatory compliance I guess was the overall title.
Q. That was your title?
A. No, the overall title of the work product that I was doing.
Q. What was your job title at that point?
A. Well, at one point it was section chief. It changed a number of times. I

wouldn't be able to tell you exactly what it was each time, but section chief at one point. Eventually -- it was changed to senior environmental engineer, which is what I am currently.
Q. When did you become senior environmental engineer?
A. I would guess about five years ago, four or five years ago.
Q. Up until the time right before you became senior environmental engineer did you get involved with the investigation of contamination?
A. Oh, yes.
Q. What was your involvement?
A. Primarily to support real estate operations. The company downsized very significantly starting in the late '80s and early '90s, and so a lot of property that we had was targeted for disposition, and I was involved in doing evaluations -- doing environmental assessments of those properties and remediation if required.
Q. Was one of those properties on

the Grumman site, the Grumman-owned site?
A. Yes.
Q. What did you do with respect to that?
A. Well, you mentioned "was one of those properties." There was many properties, so do you want me to tell you about one of them?
Q. You said there were many properties you're involved in. I'm interested as to whether or not you had any responsibility with respect to the Grumman-owned site, the Bethpage site?
A. Yes. What I was trying to explain was that the Grumman Bethpage site, that was originally one contiguous piece. Well, Plant 12 was not contiguous, but basically it was one parcel, and that was broken up into sections and sold off as parcels, and each of those parcels was investigated independently.
Q. I should have been a little more clear. I am interested in just the Bethpage facility, recognizing that you may or may not

have been involved with respect to properties outside of Bethpage. Were you involved with respect to properties outside of Bethpage?

A. Yes.

Q. Again, sticking, though, just with respect to Bethpage, what was the nature of your responsibilities with respect to investigation concerning that parcel or parcels on the Grumman-owned properties at Bethpage?

A. Basically you could describe my function as acting as the project engineer for the company, overseeing consultant work, consultants doing phase -- environmental assessment work and subsequent remediation if required.

Q. Grumman decided to sell a part of the Grumman-owned property at Bethpage at one point?

A. Yes, many parts.

Q. How big was the Grumman-owned property at Bethpage?

A. Well, the whole complex was 650 acres approximately, of which a little over a

hundred or 110, 105 were Navy-owned property.

Q. How much was owned by Grumman, 550 acres?

A. Right, the difference between those two would be about, yeah, about 520, 530 perhaps.

Q. Of the 520 or 530 acres, how many acres did Grumman sell?

A. Approximately 400.

Q. Were you involved in the sale?

A. In the role of supporting the real estate department. I wasn't directly involved in the marketing.

Q. And you supported the real estate department in connection with the sale of those some 400 odd acres, and in that connection did you --

A. I wasn't the only person, so the 400 acres were not what I necessarily worked on. I worked on some portions of them.

Q. I understand. Approximately how many acres were you involved in?

A. Was I involved in? That's hard to say. I wouldn't be able to give you a very

good number.

Q. How many different parcels were you involved in?

MR. TOPOL: Objection. This is all very interesting, Counsel, but it seems to be so far afield from relevancy. I mean, I'll let the witness answer. I assume you're getting into something relevant here.

MR. SMIRTI: I assume.

MR. TOPOL: Do you need the question read back now that your lawyer interrupted?

THE WITNESS: No.

A. I am just trying to picture in my mind how many of the parcels I was involved in. A dozen perhaps.

Q. And with respect to these dozen or so properties did you oversee consultants in the investigation of whether there was contamination on one or more of these parcels?

A. Yes.

Q. Again, these were Grumman owned parcels?

A. Yes.

Q. Which consultants did you oversee?

A. Dvirka & Bartilucci, Arcadis, Roux, and there may have been one or two others that I can't recall the names of right now.

Q. Did you direct the type of investigation that was going to be conducted by those consultants?

A. In a sense. I'm not sure what you mean by that question, but maybe you could explain.

Q. Well, tell me what your role was with respect to the consultants and the investigation of contamination.

A. Typical scenario of a parcel would be that the company would decide it wanted to sell a property. And so once that happened, the real estate department would authorize us to do an environmental investigation of the property. We would then hire a consultant to do what's known as a phase 1 environmental assessment. I would

review the proposal, write up the purchase documents to get a PO for that, and then the consultant would do the investigation.

I would support them in terms of giving them access, giving them people to interview, documents, et cetera. Reports would be produced, I would review them, and they would be finalized.

Q. Would you discuss the results of the reports with the consultants?

A. Oh, yes.

Q. Would you make recommendations to others at Grumman with respect to remediation?

A. I'm sorry. Say that again, please.

Q. In the course of your working with consultants on the Grumman-owned property, was any PCB contamination found?

A. Yes.

Q. Where was it found?

A. On Grumman property I can recall -- my recollection is it was found in Plant 12. I don't recall it being found on other properties that we were looking at for

disposition, so Plant 12 would be the only one I could recall.

Q. Found in Plant 12?

A. No. It was located outside of Plant 12. When I say Plant 12, I am talking about the property that included the buildings and the property.

Q. Where outside of Plant 12?

A. It would be west of the metal shop.

Q. Where was the metal shop with respect to Plant 12?

A. It was north -- no, southwest of the main Plant 12 building.

Q. The metal shop was?

A. Yes.

Q. How far southwest?

A. 200 feet.

Q. The PCBs were found did you say north of the metal shop?

A. I think I said south, yeah.

Q. About how far south of the metal shop?

A. A hundred feet, 150 feet.

Q. Was it near receiving basins?

A. It was near receiving basins, yes.

Q. How many receiving basins were there?

A. One.

Q. How big was it?

A. About a football field in size, maybe a little bit bigger.

Q. Were PCBs found in the receiving basins?

A. No.

Q. But near the receiving basins?

A. Yes.

Q. Was it found in soil?

A. Yes.

Q. Was it found in groundwater?

A. No.

Q. Did you have a discussion with the consultants as to the source of the PCB contamination in the soil near the receiving basins?

A. Yes. There were several discussions regarding where this might have

come from, because it was a surprise to everybody. It wasn't picked up in the phase 1 assessment.

Q. Which consultant found it?

A. Dvirka & Bartilucci.

Q. And you had discussions with D&B about that?

A. Sure.

Q. Who from D&B?

A. I don't recall.

Q. How many discussions did you have?

A. I don't recall the specific number. It was several.

Q. What were those discussions about the source of the PCB contamination?

A. Well, the PCBs were found in a field, in soil underneath -- essentially an open field under which -- at which no activities had ever occurred, and there were no PCB-related processes that we knew of in Plant 12, so it was quite a question of how the PCBs got there. But an investigation of historical aerials, historical documents,

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construction drawings showed that the area in question where the PCBs were found had previously been a recharge basin.

That recharge basin was, let's say, 10, 15 feet deep, and the contamination that we found in that area was all above that level, so it was pretty clear from that information that the PCBs got there in our estimation by contaminated fill that was used to fill in the recharge basin.

Q. When was the recharge basin filled in?

A. I think before 1980, but I'm not sure of the date.

Q. Just one recharge basin?

A. Yes, one recharge basin was filled in, yes.

Q. And it was in that area of that one recharge basin that you concluded that PCB-containing fill had been placed in the recharge basin?

A. Yes.

Q. And it was 15 feet the recharge basin?

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A. Yes. That's a good estimate.

Q. How long was it?

A. I don't have a good grasp on the dimensions of the fill-in basin, but it was at least 40 by 50, 40 by 80, at least that dimension.

Q. How many cubic yards of fill was placed in the recharge basin?

A. I don't know.

Q. But you came to an understanding that the 30 by 40 and 15 foot deep recharge basin was filled with fill that contained PCBs?

A. Yes.

Q. Do you know where the fill came from?

A. No.

Q. How did you come to that understanding?

A. Which?

Q. That the recharge basin was filled with fill containing PCBs.

A. By knowledge of the fact that the basin existed originally, at one point, that

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subsequent to that it was filled in because we had excess capacity -- excess recharge basin capacity. It was filled with fill material, and the fill material contained PCBs, and there were no operations that we could see that would have led to a contamination of fill material if it had been clean. So based on those pieces of information we concluded that the fill material was contaminated as it was brought in to fill the recharge basin.

Q. Do you have any information as to whether the fill material was brought in from off the Grumman site?

A. I have no information regarding where it came from.

Q. Was PCB contamination found from the surface of that recharge basin down to approximately 15 feet?

A. The contamination was found strictly within the volume that would have comprised the fill material. It was pretty scattered as far as concentrations.

Q. But the volume of the fill material would have gone down 15 feet?

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A. Yes, and no contamination was found below the invert elevation of the basin.

Q. Below the what elevation?

A. Invert elevation, the bottom.

Q. No contamination found below 15 feet?

A. Yes.

Q. Because 15 feet was the bottom?

A. Yes.

Q. Did D&B concur with that conclusion?

A. Yes.

Q. Did you have any discussions with anyone from D&B that supported that conclusion?

A. I can't recall.

Q. To your knowledge, did D&B do any type of comparison to ascertain whether the PCBs found in the recharge basin were similar to the PCBs that were on the Navy property?

A. Not to my knowledge.

Q. Were PCBs found at any other place on the Grumman site?

A. On the Grumman site? There were

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PCBs found -- yes, there were PCBs found at other locations on the Grumman site.

Q. Where were they?

A. I couldn't give you a complete listing, but I know some were listed on an area called the Plant 24 access road property.

Q. Do you know whether the PCBs that were found in the area of Plant 12 were similar to the PCBs found at the Bethpage Park?

A. I don't know.

Q. Who found the PCBs in the access road you said, sir?

A. In the access road, yes. I think the first time PCBs were found was the result of a Navy investigation. PCBs were found on Navy property, and this area is adjacent to residential property and the Navy property. And there was a question about -- I think it was a question raised by either the State officials or local officials regarding the possibility that gee, there's contamination of PCBs at the Navy property, what about in the areas around the Navy property, so the Navy

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did a sampling program to determine whether or not there were.

Q. You were involved in the investigation of PCBs near the site access road?

A. Not that investigation. I was involved subsequently.

Q. When?

A. I think starting in 1999 or 2000, about that time frame.

Q. Who performed that investigation?

A. Dvirka & Bartilucci.

Q. Were you involved in overseeing D&B with respect to that?

A. Yes. I was the project engineer for that operation.

Q. D&B reported to you with respect to their findings?

A. Yes.

Q. Now, going back to Plant 12 for a second and the PCBs that were found in the vicinity of Plant 12, were you involved in recommending to Grumman the remediation that should be employed for the PCBs?

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A. Yes.

Q. Who did you make those recommendations to?

A. I think it was Larry Leskovjan.

Q. What was your responsibility with respect to remediation?

A. Well, when a decision was made to remediate the site, I was the project engineer overseeing the consultant and remediation contractor. I was overseeing the remediation contractor. We also had our consultant doing field observation of the remediation.

Q. Did you make a recommendation as to the type of remediation that should be undertaken at Plant 12?

A. Yes.

Q. What was that recommendation?

A. That we obtain approval from the State of a course of action so that we could get a no further action letter from the State, and that course of action was to remove from the site, from this area, any PCBs that the State considered to be above a threshold level that would cause it to be designated as

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hazardous waste and to leave the remainder of the PCBs on site and under a cap to prevent any possibility of precipitation washing contamination into the groundwater and to provide monitoring wells to determine whether or not the cap was being effective in preventing any subsequent contamination of groundwater.

Q. And in connection with that remediation did you recommend that there be deed restrictions on the property?

A. I don't know if I can say I recommended it, but that was my understanding as to what would be required to satisfy the New York State DEC. So I don't know if I recommended it or we all understood it, but that was part of the solution.

Q. Did you recommend the monitoring wells be put in place?

A. Again, that was kind of standard practice when you come up with a solution like this. It wouldn't be so much my recommendation as implementing standard practice.

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Q. And, in fact, was that recommendation put in place?
A. Yes.
Q. That remediation plan?
A. Yes.
Q. There was a cap placed on the site where the PCBs were found?
A. Yes.
Q. Was there any excavation?
A. Yes.
Q. How far down?
A. I don't think we went any deeper than 10, 12 feet, maybe a little deeper, but I think the design was in that area.
Q. Was the whole extent of the basin excavated to 10 or 12 feet?
A. Only those areas that required it, because they contained concentrations in excess of 50 parts per million.
MR. TOPOL: I didn't hear the last answer. In excess of what?
THE WITNESS: 50 parts per million.
Q. Where was the cap placed?

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A. Over the contaminated area.
Q. So there were caps at different locations placed?
A. No. The area was backfilled with clean fill, so that we'd have a level surface again, and then the area was capped.
Q. So if there was PCB contamination found at 10 feet, the excavation would be to 10 feet; is that correct?
A. If there was --
Q. Please go ahead.
MR. TOPOL: Object to the form.
MR. SMIRTI: Withdrawn.
Q. If there were PCB contamination found above 50 parts per million at a level of 10 feet, at a depth of 10 feet, then there would be excavation to 10 feet?
A. Yes, or slightly below that.
Q. And if there were only PCB contamination found at levels below 50 parts per million, then there would be no excavation of those areas, correct?
A. Yes.
Q. How many monitoring wells were

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installed?
A. I don't recall.
Q. Do you know the cost of operating the monitoring wells on a yearly basis or a monthly basis, as the case may be?
A. No.
Q. Did you get involved in the actual monitoring of the monitoring wells?
A. Yes.
Q. What was your role with respect to the monitoring wells?
A. I would direct the consultant to take samples, and then I would review the results with the consultant.
Q. How often were samples taken?
A. We took samples shortly after the remediation, and I think a year after that, and I think the last sample we took was last year.
Q. This is samples of the groundwater?
A. Yes, downgradient of remediation.
Q. What were the findings?
A. Negative.

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Q. Was there any PCB concentration in the groundwater?
A. No, not within the limits of the analytical procedures that we used.
Q. Again with respect to the PCB contamination in Plant 12, do you have an understanding as to whether a different remediation alternative would have been employed if there were no deed restrictions that were placed on the property?
A. Would you explain that question again?
MR. SMIRTI: Read it back.
(Record read.)
A. In order to get a no further action letter from the State and to do the remediation that we proposed, we had to couple that with a deed restriction. If we were interested in not having a deed restriction on the property, then we would have had to remediate the PCB contaminated area to different end points.
Q. What type of remediation would Grumman have had to do if there were no deed

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restrictions?
A. The same remediation, the same type of remediation, would have been digging a hole.
Q. Excavation?
A. Yes, but we would have remediated instead of to 50 -- instead of removing anything above 50 parts per million, we would have removed everything that was above 10 parts per million, as long as that contamination was at least 2 feet below surface, and it would have been, because we would have had to at least put in that much clean fill.
Q. So if there were contamination at 15 feet, 30 parts per million, that would have had to be removed if there was no deed restriction?
A. Yes.
Q. If there were contamination at 30 parts per million at 20 feet, would that have had to be removed?
A. Yes.
Q. How far down would PCB

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contamination above 10 parts per million have had to be removed?
A. There's no limit that I know of.
Q. To your understanding, are there different types of deed restrictions that are employed in the course of certain remediation projects?
A. I don't know. I'm not sure what types there are, that's what I mean by I don't know.
Q. Aside from the Plant 12 location and the site access road that we've talked about, did you find any other PCB contamination on the Grumman-owned property?
A. Not that I recall.
Q. Did you find any Freon contamination on the Grumman-owned property?
A. I can't recall of any Freon contamination that I found in the investigation I did for property transfer, if that's what you're referring to.
Q. Yes, sir.
A. No.
Q. Do you have any other

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understanding that there was Freon contamination found at the Grumman site?
A. There is some Freon contamination that is in groundwater on the southern portion of the Grumman site.
Q. How did you come to find that out?
A. Testing of groundwater from groundwater monitoring wells.
Q. How did you come to test those groundwater monitoring wells?
A. Well, the site is a super fund site. We have a very extensive network of monitoring wells throughout the site and off site that are tested on a routine basis for a number of parameters, including the category that would be picked up by Freon, if there were Freon in the groundwater.
Q. What are your responsibilities in connection with that type of testing that's done?
A. It's reported to the State on a quarterly basis.
Q. Are you responsible to do that?

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A. Yes.
Q. Where were the groundwater monitoring wells located that detected the Freon?
A. I would have to review some documents to be specific about that.
Q. Do you know the approximate area?
A. Yes.
Q. Where, approximately?
A. In the area of Plant 2, which is on the southwestern end of the facility, southwestern, yes.
Q. Of the Grumman-owned facility?
A. Of the Grumman-owned facility.
Q. At how many monitoring wells did you detect Freon?
A. I don't know.
Q. Do you know the type of Freon that was detected?
A. I'm fairly certain that it's a type of Freon called Freon 113.
Q. Any other types of Freon?
A. Not that I can recall.
Q. What's Freon 113 used for?

A. Cleaning.
Q. Was Freon 113 used on the Grumman site?
A. Yes.
Q. Was Freon 113 used on the Navy site?
A. Not to my knowledge.
Q. Where was Freon 113 used on the Grumman site?
A. Well, I don't know everywhere it was used, but I personally know that it was used in Plants 2 and 5.
Q. And it was used for cleaning in Plants 2 and 5?
A. Yes.
Q. Did you cause an investigation to determine where Freon 113 was used?
A. No.
Q. Did you cause an investigation to determine the source of Freon 113?
A. No.
Q. What type of cleaning was Freon 113 used for?
A. It was used for degreasing metal

parts. Certain metal parts could not be degreased with other degreasing solvents because of the -- it has something to do with metallurgy of the parts, if some parts had oxygen exposed to them -- I'm not sure of the details, but from a metallurgic standpoint, Freon was the material choice.
Q. How much Freon was used in those plants?
A. I wouldn't know that.
Q. To your understanding, is Freon used in the production of aircraft?
A. What I just mentioned was in the production of aircraft, aircraft parts.
Q. Any other types of Freon used in the production of aircraft to your understanding?
A. There was another Freon that's designated as Freon TF, and that also was used for degreasing components of aircraft.
Q. Is Freon TF also known as Freon 12?
A. No.
Q. Was any Freon TF found in the

groundwater?
A. I don't think so, but I'm not sure.
Q. Was Freon TF found in the soil?
A. Not that I know of.
Q. How about Freon 113, was that found in the soil at the Grumman site?
A. I'm not aware of any.
Q. Was Freon 12 used at the Grumman site?
A. I don't know specifically whether it was, but my understanding is it's a common refrigerant, and certainly there was air conditioners in the facility.
Q. So it wouldn't surprise you if Freon 12 was used at the Grumman site?
A. No, it wouldn't surprise me.
Q. And you don't recall whether Freon 12 was detected in these monitoring wells?
A. I never said that, I don't think, and my understanding is that it was not detected in any of those monitoring wells.
Q. How much Freon 12 was used in

refrigerants on the Grumman site?
A. I don't know that.
Q. Are you aware whether Freon 12 was used on the Navy site?
A. I don't know if it was or wasn't.
Q. Were you responsible for any remediation efforts on the Navy site?
A. No.
Q. Or investigation of contamination on the Navy site?
A. Yes.
Q. What was your responsibility with respect to investigation of contamination on the Navy site?
A. I was responsible for investigating two dry wells that had PCB contamination in them.
Q. Is one of those dry wells what we talked about earlier, by Plant 3?
A. Yes.
Q. Was there another dry well that you were responsible for?
A. Yes.
Q. Where was that?

A. That was also at Plant 3 located downstream of the connection point between the dry well -- of the dry well that we were talking about earlier, so it was located -- it was in the line, in the path, of the storm water collection system but further downgradient from the one that was by the autoclave and about halfway between the autoclave dry well and the recharge basins.

Q. So working downgradient it would have been the autoclave drains or the drains in Plant 3 of the autoclave operation, the dry well, the first dry well that we talked about earlier today, correct?

A. Yes.

Q. And then this second dry well that we're talking about now, correct?

A. Yes.

Q. And that second dry well was in the path of the storm water system?

A. Yes. It was a dry well that was part of the storm water collection.

Q. Then working downgradient, the recharge basins?

A. Yes.

Q. When did you work on the investigation of this second dry well that we're talking about now?

A. At the same time as the first.

Q. Did you find contamination in the second dry well?

A. Yes.

Q. What kind of contamination?

A. You mean the concentration?

Q. Well, first of all, let me ask you this. Did you find PCB contamination in the second dry well?

A. Yes.

Q. What other types of contamination?

A. That's the only kind of contamination.

Q. Where did you find the PCB contamination?

A. The two dry wells in question had been determined to have PCB contamination before I got involved in the project. They were remediated down to a depth of 30 feet to

remove contaminated soil. We asked the State if that was sufficient, and they came back and said no, that was not sufficient. So at that point we need to investigate further what was in the dry wells below 30 feet, and that's where I got involved.

Q. I understand. Did you come to a determination as to the source of the PCB contamination in the second dry well?

A. No, not specifically.

Q. Do you have an understanding that it was from Plant 3?

A. Yes.

Q. From the same source as the PCB contamination in the first dry well?

A. Yes, yes.

Q. Now, both dry wells were excavated to 30 feet?

A. Yes.

Q. What were the outside dimensions of the dry well again?

A. 10 feet perhaps.

Q. 10 feet by how much?

A. The depth?

MR. SMIRTI: Withdrawn. Let me start over.

Q. I'd like to know the length and width of the dry wells.

A. The width, 8 to 10 feet. I'm not sure of the exact dimension, but 10 feet is a good estimate of the width or the diameter of these rings that are the dry wells, and perhaps 15 feet in depth.

Q. PCB contamination was found in the dry wells at what depths?

A. Well, I have to correct the way I've been speaking. They were found below the dry wells, but they're always referred to as the dry wells.

Q. So they were found below 15 foot from surface?

A. Yes.

Q. How far down were they found?

A. About 55 to 60 feet.

Q. In both dry wells?

A. Yes.

Q. Do you recall the concentrations?

A. Of course it varied with depth,

but I think the highest concentrations were on the order of 5 percent.

Q. 5 parts per million?

A. 5 percent.

Q. 5 percent, so that would be --

A. 50,000 parts per million.

Q. Both dry wells were excavated to 30 feet did you say?

A. Yes.

Q. Was clean fill placed in?

A. Yes.

Q. What, if any, PCB contamination was below 30 feet?

A. That's the contamination that I've been discussing.

Q. 5 percent?

A. That's when I got involved in the project.

Q. And that's 50,000 parts per million that you found below 30 feet?

A. Yes.

Q. Did you have discussions with the DEC about that?

A. Yes.

Q. Who at the DEC did you discuss this with?

A. Maybe discussions is the wrong term. It was correspondence, and I don't recall who that was.

Q. Communications with the DEC?

A. Yes, communications.

Q. That you participated in?

A. I participated in submitting reports to them of the findings.

Q. What did the DEC say about the PCB contamination below 30 feet?

A. That they were satisfied with our delineation, and they wanted something done about that.

Q. What did they want done?

A. Remediation.

Q. Specifically what did they want done with --

A. The DEC doesn't usually get very specific about things like that. They ask you to propose something.

Q. Did Grumman propose something?

A. No.

Q. Are you in the process of doing that?

A. No.

Q. What was your response to the DEC?

A. That this was an area that the Navy was going to be responsible for and that they were taking over the project.

Q. And is it your understanding that the Navy took over the project?

A. Yes.

Q. And is it your understanding that the Navy is performing further remediation below 30 feet in the dry wells?

A. I'm not aware of any remediation they're doing, but I know they've been studying what to do about it.

Q. Do you know whether Grumman came to a resolution with the Navy concerning excavation below 30 feet?

MR. TOPOL: Object to the form of the question.

You can answer, if you understand.

A. I don't think that a resolution was reached with the Navy regarding remediation, excavation below 30 feet. I think the understanding was that this is an area that the Navy said that they would assume responsibility for, and that was the extent of the discussion.

Q. To your understanding, there's no dispute between the Navy and Grumman as to who has the responsibility to excavate below 30 feet?

A. Correct.

Q. How far below the 30 foot level is the PCB contamination in the dry wells?

A. About 20 to 30 feet below that point.

Q. So approximately 60 feet below surface?

A. That's the extent of it, 55, 60 feet.

Q. Did the DEC ever suggest that it wanted excavation down to 60 feet?

A. No.

Q. Did the DEC ever suggest that it

would be satisfied with a cap?
A. No.
Q. Or that it would be satisfied with deed restrictions?
A. No.
Q. Do you have an understanding as to why the Navy assumed responsibility for remediation below 30 feet?
A. Not really.
Q. Who would you go to to find out the answer to that question?
A. Jim Coulter was the person I interfaced with. That was the Navy representative or the Nav Fac representative.
Q. You had discussions with Mr. Coulter?
A. I've had many discussions with Mr. Coulter, yes.
Q. Were some of those discussions about excavation below 30 feet?
A. No.
Q. About remediation below 30 feet?
A. No.
Q. What discussions did you have

with Mr. Coulter about remediation at the two dry wells?
A. None.
Q. What were the nature of your discussions with Mr. Coulter?
A. Well, Mr. Coulter was responsible for overseeing any remediations we did do on the Navy facility, and also he was the cognizant person for the Navy regarding the groundwater contamination super fund site, so we would discuss those items.
Q. Do you have an understanding as to what concentrations of PCB contamination the DEC wants remediated in the groundwater, in the two dry wells?
A. In general, yes.
Q. What's that understanding?
A. That anything above 10 parts per million should be removed unless there are some institutional controls, such as a cap and monitoring installed, that's number one. Number two, that anything that is over 50 parts per million should be removed.
Q. Anything over 10 parts per

million?
A. Anything over 10 parts per million should be removed if you don't have a deed restriction or an institutional control, and an institutional control.
Q. No matter what depth?
A. That's my understanding.
Q. And anything over 50 parts per million if you don't have a deed restriction has to be removed no matter what depth?
A. Anything over 50 parts per million, whether or not you have a deed restriction, has to be removed.
Q. Understood.
Mr. Cofman, do you have an understanding as to whether there was a fire training area on the Park property?
A. That's my understanding.
Q. Tell me what that understanding is.
MR. TOPOL: Counsel, I suggest you ask him what the basis of his understanding is.
Q. What's the basis of your

understanding?
A. It's a discussion that I've had with Frank Amoroso, John Ohlmann and Robert Jasinkonis.
Q. Do you have information with respect to the fire training area from any other source other than that discussion with Mr. Amoroso and Mr. Jasinkonis?
A. No.
Q. Were you provided any documents with respect to the fire training area?
A. No.
Q. Was a topic of discussion - I'm not asking for the content - was a topic of discussion in the meeting that you had with Mr. Amoroso and Mr. Jasinkonis the fire training area?
A. Yes.
MR. SMIRTI: Take five.
(Recess taken at 2:17 p.m.)
(Examination resumed at 2:26 p.m.)
Q. Mr. Cofman, we talked about your understanding that fill was brought in to the

receiving basin on the Grumman property. Do you recall that, sir?

A. That was a possibility that we suspected.

Q. Did you come to an understanding that fill was brought in to any other portion of the Grumman property?

MR. TOPOL: Objection to the form of the question. Are we talking about ever, I mean in the history of the world? I mean --

MR. SMIRTI: I want to know his understanding as to whether fill was brought in to the Grumman property.

A. Fill was brought in to the Grumman property?

Q. Yes.

A. I don't have direct experience with fill being brought in to the Grumman property.

Q. Being brought onto the Grumman property?

A. Being brought onto the Grumman property from off site, no.

Q. Did you have any understanding that fill was brought from the Navy property to the Grumman property?

A. That was a recharge basin on the southern end of the Grumman property, and that recharge basin was filled at one point because it was no longer needed, so fill was brought to that recharge basin and it was leveled, and that fill came from on site.

Q. Was that the fill that we were talking about earlier, or am I getting the receiving basin and the recharge basin mixed up?

A. I use the terms in this case interchangeably because the -- on the south end of plant, of the Bethpage facility, there were a string of recharge basins, and two of those recharge basins were connected to the influent storm water connection, and those were called receiving basins, because all the flow would go to those two basins before being directed to one or several of the other basins through piping.

Q. So it would go from the receiving

basin to one or more of the recharge basins?

A. Right. In those days we had two receiving basins and five regular recharge basins. They were all recharge basins, but because of their functions these were called the receiving basins. One of those receiving basins it was decided that we no longer needed, and that was filled in.

Q. That's where you found the PCB contamination, in one of the receiving basins?

A. No. This is south -- on the south side of the Bethpage facility, not Plant 12.

Q. Okay. I apologize. Please continue.

A. So that's the other location that I'm familiar with, or that's the location that I'm familiar with fill being used on site.

Q. Now, was any PCB contamination found in either of these two receiving basins that you just mentioned?

A. No.

Q. Was any contamination, PCB contamination, found in any of the five or so

recharge basins that you've just mentioned?

A. No.

Q. Was any contamination found in these basins at all?

A. We found some metals contamination in the receiving basin.

Q. Was that the receiving basin that contained fill?

A. Yes.

Q. Did you come to an understanding as to where that fill came from?

A. Yes.

Q. Where did it come from?

A. It came from scrapings of other basins.

Q. On Grumman property or the Navy property?

A. Both.

Q. On both properties?

A. Yes.

Q. In how many of the basins did you find contamination?

A. We found metals contamination in both receiving basins, one which had been

filled in and the other which had not.
Q. And none in the recharge basins?
A. No.
Q. Was there just soil contamination or both soil and groundwater contamination?
A. We noticed some low levels of metals contamination just downgradient of the recharge basins, of the receiving basins.
Q. Were you involved in the remediation of the receiving basins?
A. No.
Q. Who was?
A. Fred Weber.
Q. Did remediation of the receiving basins take place?
A. There was some removal, but it was basically to prepare for capping those areas, paving them over. This was done in conjunction with approval from the State.
Q. So there was some excavation that was done?
A. Yes.
Q. And a capping?
A. Yes.

Q. Were there deed restrictions placed on that area?
A. Well, deed restrictions are normally placed on an area when there's a sale of the property. So the only thing that was done was that it was made clear to the State that if that property were to be sold, it would be sold under the conditions of a deed restriction, the wording of which was submitted to the State.
Q. Do you know what that deed restriction is?
A. Not specifically, no.
Q. Generally do you know what it is?
A. I think it calls out what the contamination is, where it is and that if that area is disturbed, if the cap is disturbed, it can only be done in conjunction with approval from the State, and I think there may be some limitation on the uses of the property. In other words, it can't be used for residential purposes or a school, that kind of thing. I'm not sure of the details of that, but that's generally the idea.

Q. Or a place where children inhabit?
A. Certainly. It's primarily reserved for commercial and industrial properties.
Q. To your understanding, are you aware of any other fill being brought in to the Grumman site in any other area of the Grumman site?
A. No. This wasn't being brought in to the Grumman site. This was from the Grumman site.
Q. I believe you indicated you believe also it was from the Navy site?
A. It was from the scrapings of basins from both the Navy and the Grumman site.
Q. Both the Grumman-owned property and the Navy-owned property?
A. Yes.
Q. Aside from your conversations, discussions that you participated in, with Mr. Amoroso and Mr. Jasinkonis, did you speak with anyone about the fire training area on

the Park property?
MR. TOPOL: Objection.
A. Yes.
MR. TOPOL: Objection to form. You can answer.
Q. Yes?
A. Yes.
Q. Who did you speak with?
A. Larry Leskovjan, personnel from Dvirka & Bartilucci and personnel from Arcadis.
Q. When did you speak to Mr. Leskovjan about the fire training area?
A. 2001 I guess.
Q. Why did you speak to him about that?
A. We were trying to determine the nature of contamination of the Park, and this was important information to help in determining whether there was or where there might be contamination.
Q. Who was present when you spoke to him about that?
A. Larry Leskovjan?

Q. Yes.
A. I don't know that anyone was besides the two of us.
Q. What prompted you to speak to Mr. Leskovjan about the fire training area?
A. When I came by that information, I felt that it was important to let Larry know about it because it was going to be important in our investigation of the Park property.
Q. At the time that you spoke to Mr. Leskovjan about the fire training area was Grumman performing any investigation of contamination at the Park site?
A. Yes.
Q. Did you have this discussion with Mr. Leskovjan for the purpose of determining what type of investigation should be done at the site?
A. I wouldn't put it quite that way, but I would put it that it was important for Larry Leskovjan to know about this in order to understand why the consultants were recommending what they were recommending, which was investigation.

Q. Of certain areas of the Park property?
A. And groundwater.
Q. And this was under an agreement of sorts with the DEC to do investigation at the site?
A. I don't think that was the case at that point in time, no.
Q. At the time that you had the discussion with Mr. Leskovjan was Grumman performing investigation on the Park property?
A. Yes.
Q. Why were they doing that?
A. Because we had found contamination adjacent to the Park property, and subsequently determined that some of the testing we'd done was on the Park property because the fence separating the two properties was located several feet into the Park property. So once we found that there was contamination on the Park, we notified the Town, we notified the State and requested their cooperation in doing investigations.
Q. So the State knew that Grumman

was performing investigations in the Park?
A. The State knew, but there was no agreement between us and the State at the time.
Q. Did Grumman propose to the State the areas on the Park property where it conduct the investigation?
A. At some point in time we did, yes, but I don't think we did at that point in time.
Q. And did you have that discussion with Mr. Leskovjan for purposes of Grumman's suggesting to the State the locations on the Park property where Grumman conduct the investigation?
A. I don't think so.
Q. As a result of your discussions with Mr. Leskovjan, was a recommendation made to the consultant as to the location of the investigation on the site?
A. I don't think it would be -- I would classify it as a result of that.
Q. Is that one of the factors?
A. That information led to -- would

have led to Larry understanding what the recommendations were to the consultant.
Q. It was important in the formulation of the recommendation to the consultant?
A. Yes.
Q. As to the areas the consultants should investigate on the site?
A. Further investigation.
Q. Did you have any direct discussions with the consultants about the fire training area?
A. Yes.
Q. Who from the consultants?
A. Mike Hofgren and Dave Stern, Mike Hofgren from Dvirka & Bartilucci, Dave Stern from Arcadis, although it might have been called Gerrighty & Miller at that time.
Q. Did the consultants perform an investigation of the fire training area?
A. They performed an investigation which attempted to determine where the fire training area was and where contamination from a fire training operation may have ended up.

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It was never clear exactly where the fire training area was.
Q. How do you know that?
A. Well, let me rephrase that. It was never clear to me or anybody I spoke to exactly where the fire training area was.
Q. Did you relate that to the consultants?
A. Yes.
Q. Did the consultants, to your understanding, perform an investigation at or around the area of the fire training area?
A. In the area where we thought it might be, yes.
Q. Did they report results to you?
A. Yes.
Q. What were your responsibilities with respect to the consultants' investigation of the fire training area?
A. I would review the documents and reports that they would prepare and discuss their findings periodically.
Q. What was your responsibility with respect to reviewing those reports?

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A. I and a team of others would determine whether or not they were satisfactory or not.
Q. Was part of that responsibility to make a recommendation as to remediation if necessary?
A. We never got to the point of recommendations and remediations. We were still in a mode of investigation. I mean, there was some conceptual ideas, like maybe if it's like this or like that, these are possible avenues of exploring in terms of remediation, but that was not the thrust of the effort.
Q. Did you have any discussions with the DEC about the fire training area?
A. I don't recall.
Q. Do you know whether Mr. Leskovjan did?
A. I don't know.
Q. Do you know whether the information that Mr. Jasinkonis disclosed at the meeting with Mr. Amoroso was transmitted to the DEC?

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A. No, I don't know.
Q. Was the Navy involved in any waste disposal practices on the Navy site?
A. Yes.
Q. What was the extent of the Navy's involvement?
A. Well, they had inspections carried on on a periodic basis, that would include an inspection of all their facilities, and I think even facilities that were not theirs but were used for contracts to support them. Their involvement was in funding the construction and operation of waste disposal facilities or anything that was in support of waste disposal facilities on their property. I think that's basically it.
Q. Did Grumman obtain approval or authorization of the Navy for any waste disposal practices on the Navy site?
A. Yes, I think so.
Q. Tell me how that process worked.
A. Well, as an example, the drum marshalling area was really central to our waste disposal procedures, and that would have

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been proposed to the Navy as a construction project for that purpose. The Navy would have approved the funding and would have had somebody supervise construction to some degree.
Q. Tell me if I understand this correctly. When we talked about the drum marshalling area earlier, you stated that there were drums that were placed on the drum marshalling area, correct?
A. Yes.
Q. That you saw.
A. Yes.
Q. And is it your understanding that the Navy authorized the placement of those drums in the drum marshalling area?
A. Yes. As a matter of fact, they were co-owners with the permit that was given by the State to operate that facility.
Q. To operate what facility?
A. The drum marshalling area.
Q. Do you have an understanding as to whether the Navy knew of the contents of the barrels in the drum marshalling area?

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A. I don't know the answer to that.
Q. Do you know whether the Navy paid for any part of the waste disposal on the Navy site?
A. I think they paid for all of it, but I think it was through indirect funds, overhead funds.
Q. Through?
A. Overhead funds. It wasn't -- that function, waste disposal, was not directly connected to individual programs. It was part of an overhead function for operation of the total facility, and the Navy would have funded those costs.
Q. Was it built into Grumman's contracts with the Navy?
A. I think so, yes.
Q. Was it a separate line item?
A. I don't know about that.
Q. Is it your understanding that the Navy had responsibilities with respect to waste disposal practices before you were employed by Grumman?
A. As far as I know, the contractual

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relations between Grumman and the Navy were pretty much the same before I was -- in terms of funding and approval of funding and reviewing drawings and signing off on drawings, that kind of thing, was not new to my starting at the company.
Q. How did you come to that understanding?
A. Based on documents I'd seen in the file, the facilities engineering department files. Any construction effort that was Navy related there would be -- or even non-Navy related, but there would be plans and specs on file. I'd have to review those periodically if I was going to make an adjustment or change to something, and those are all signed off by the Navy.
Q. It's your understanding that the Navy would have approved the scraping operations that took place in the recharge basin by Plant 3?
A. That's my understanding, yes.
Q. And that the Navy would have had responsibility in authorizing the disposal of

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the scrapings from that basin?
A. I really have no information regarding that.
Q. We talked earlier about sludge-drying beds being constructed on the Navy site after the Town of Oyster Bay took title to the Park. Do you recall that, sir?
A. Yes.
Q. Is it your understanding that the Navy would have had to approve the construction of those sludge-drying beds?
A. Yes.
(Cofman Exhibit 6, Document Bates stamped NGSC-TOB 18949 through NGSC-TOB 18958, marked for identification.)
Q. Mr. Cofman, do you recall receiving Exhibit 6?
A. Yes.
Q. It is a report to you from D&B regarding certain soil samplings taken at the Park property?
A. Yes.
Q. Were you the point person with D&B with respect to this sampling?

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A. Yes.
Q. Look at the top of page 2, please. The first sentence on page 2 says, "Based on NYS DEC's and NYS DOH's review of the analytical data and subsequent site visits, NGC, Northrop Grumman, received a letter from the NYS DEC dated May 7, 2002 in which the NYS DEC and NYS DOH requested additional soil sampling be performed in the Park." Do you see that, sir?
A. Yes.
Q. Did you have discussions with anyone from the DEC or the DOH regarding these additional soil samplings?
A. Not that I recall.
Q. Do you know who did?
A. No.
Q. The next sentence talks about a request that additional soil samples be collected in the bocce court area. Do you see that?
A. Yes.
Q. Do you know why soil samples were requested to be collected in the bocce court

area?
A. My recollection is that the State was concerned about locations within the Park where people might come into direct contact with soil, and they wanted to make sure that that soil was not part of the contamination.
Q. There was an initial sampling that was done in March of 2002?
A. Um-hum.
Q. And then a follow-up sampling that was done I guess it would have been after May of 2002?
A. I'm not sure if it's after or during, but in that time frame.
Q. Was there a recommendation that soil samples be taken at the bocce court area because there was contamination found in or about that area during the March sampling?
A. I don't recall the specifics of that. My recollection would be that there was contamination found, and the Health Department was concerned about certain possible contact areas. The bocce court was one of them.
Q. Did you participate in those

conversations with the Health Department following the investigation that took place in March, 2002?
A. Not to my recollection.
Q. Who would have done that, Mr. Leskovjan?
A. Yes.
Q. Anybody else from Northrop Grumman?
A. I don't think so.
Q. On the third full paragraph on page 2 there are a listing of bullets that talk about the scope of the additional soil sampling program. Do you see that?
A. Yes.
Q. Do you know the basis for the determination of the locations of that additional soil sampling program?
A. As far as I can tell, all these locations have to do with Health Department concerns that these areas are potential areas of contact by users of the Park with soil at or near the surface that may or may not contain PCBs. They wanted to determine

whether they did or not.
Q. Did you recommend any of these locations listed on page 2?
A. No.
Q. You weren't at this May 9th meeting that's mentioned in the second paragraph of page 2?
A. Not to my recollection.
(Cofman Exhibit 7, Document Bates stamped BETPARK 1033 through BETPARK 1040, marked for identification.)
Q. Mr. Cofman, have you seen Exhibit 7 before?
A. I think so.
Q. When did you first see it?
A. I don't know.
Q. Did you help prepare it?
A. No.
Q. Did you attend a meeting on or about May 15, 2002 where the Bethpage property disposition and Park closure was discussed?
A. Yes.
Q. Who was present at the meeting?
A. I'm not sure. It was management.

This was -- this looks like a presentation to management, but I don't have in my mind a recollection of the individuals that were there.
Q. Did you participate in making the presentation?
A. I was in attendance, but I did not participate in the presentation, other than maybe commenting.
Q. Who made the presentation?
MR. TOPOL: Why don't you ask him first, Counsel, if there were any lawyers present at the meeting, since he told you it was a management presentation.
MR. SMIRTI: I'll get there. I'm not asking about any content until I get there. Don't worry about it.
DI MR. TOPOL: I'm instructing the witness not to disclose content until you're asking whether there were any lawyers present.
Q. Who gave the presentation?
A. Larry Leskovjan.

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Q. Anybody else?
A. Not that I can recall.
Q. Aside from Grumman management, who was there?
A. I don't recall.
Q. Do you recall whether anybody from the Navy was there?
A. No.
Q. Look at page 2 of the exhibit, please. See the last bullet says, "The Town undertook extensive earthwork following donation of the property;" do you see that?
A. Yes.
Q. Did Mr. Leskovjan make that statement at the meeting?
MR. TOPOL: Objection, Counsel. You haven't asked him whether within Grumman management there were any lawyers.
MR. SMIRTI: I said who else was present. Fair enough.
Q. Within Grumman management, were there any lawyers present?
A. I think so.

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Q. Who?
A. I'm not sure.
Q. What was the purpose of the meeting?
A. To brief management.
Q. On what?
A. On what we'd found at the Park.
Q. Do you recall whether anybody from the Navy was present?
A. I don't recall if anybody from the Navy was present.
MR. TOPOL: Asked and answered, Counsel.
Q. Exhibit 7 appears to be a Navy-produced document, and it appears to me that the Navy was present at this meeting. Which people from Grumman were present?
A. I don't recall who was present.
Q. Mr. Leskovjan was the presenter?
A. Yes.
Q. Other than perhaps the Navy, was anyone outside of Grumman present?
A. Not to my recollection.
Q. Was there a discussion with

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respect to the last bullet on page 2?
DI MR. TOPOL: Objection, instruct the witness not to answer. He said I believe there was counsel present.
MR. SMIRTI: It's a yes or no as to whether or not this was a topic of discussion, and I'm entitled to understand, even if you make a privilege objection, as to the topics discussed.
MR. TOPOL: Fair enough.
You may answer that question without disclosing the content of what was discussed.
THE WITNESS: What was the question?
MR. SMIRTI: Read it back.
(Record read.)
A. Yes.
Q. Were there any documents produced at the meeting that addressed the topic on the last bullet?
MR. TOPOL: Counsel, for the record, when you say the second page, do you mean the one with the Bates number

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01034?
MR. SMIRTI: Yes, I do.
A. I don't recall.
(Discussion off the record.)
(Cofman Exhibit 8, Document Bates stamped NGSC-TOB 2798 through NGSC-TOB 2928, marked for identification.)
(Cofman Exhibit 9, Document Bates stamped NGSC-TOB 20828 through NGSC-TOB 20844, marked for identification.)
Q. I won't ask you to look through the whole document on Exhibit 8, Mr. Cofman, but if you would like to take a few moments just to generally glance through it, please be my guest, and then certainly if I ask you questions with respect to the document, feel free to take as much time as you like to review the document to the extent you deem necessary.
(Witness perusing document.)
A. Okay.
Q. First of all, have you seen Exhibit 8 before, Mr. Cofman?
A. Yes.

Q. Is Exhibit 8 a report from D&B of the results of the soil investigation that D&B did in or about March of 2002 at the Park site?

A. Yes.

Q. Exhibit 8 was sent to you by D&B?

A. Yes.

Q. Do you have a recollection having reviewed Exhibit 8 at or about the time it was sent to you?

A. Yes.

Q. Which would have been around June of 2002?

A. Probably in May.

Q. May of 2002.

Let me direct your attention if I could, please, to page 2-3. It's about eight pages in. See the paragraph starting 2.2, Site History?

A. Yes.

Q. The next to the last paragraph on that page says, "Aerial photographs of the Grumman Aircraft Engineering Corporation Bethpage facility dated from before the

transfer of the property show the site as undeveloped and indicates some earthwork operations in areas that appear to contain surface water." Do you see that, sir?

A. Yes.

Q. Do you have an understanding as to the basis for that statement in this report?

A. Yes.

Q. Is it the aerial photographs?

A. Yes.

Q. And only the aerial photographs?

A. That's my understanding.

Q. Do you recall discussing with D&B the content of the aerial photographs?

A. Yes.

Q. Did your discussions involve the conclusion that there were earthwork operations at the Park before the transfer of the property to the Town of Oyster Bay?

A. Yes.

Q. Where were those operations?

A. There were operations in the southwestern portion primarily of the property

that was subsequently transferred to the Town.

Q. Any other place?

A. There were -- if I recall, there were areas -- no. I think that was about it, southwestern area, say the southwestern quadrant or so.

Q. The next paragraph on 2.3 says, "Northrop Grumman Corporation does not have any information regarding the operations conducted by the Town of Oyster Bay subsequent to property transfer." Do you see that, sir?

A. Yes, I do.

Q. Do you know the basis for that statement?

A. An investigation of our files did not disclose anything that would indicate that we knew anything about the Town of Oyster Bay's work. That's all I can surmise that is the basis for that statement.

Q. Did you have that discussion with D&B?

A. Yes.

Q. Prior to preparation of this report?

A. Yes.

Q. Let's take a look at Exhibit 9. We're done with number 8, Mr. Cofman.

Just take a moment to glance through that, Mr. Cofman. And again, when I ask you questions about the letter, you'd like to take some more time, please be my guest.

(Witness perusing document.)

A. Okay.

Q. Have you seen Exhibit 9 before, Mr. Cofman?

A. Yes, I have.

Q. You received a copy of Exhibit 9 when it was sent by Mr. Leskovjan to Mr. Scharf?

A. Yes.

Q. Did you ever speak to Mr. Scharf?

A. Have I ever spoken to Mr. Scharf?

Q. Yes.

A. Yes.

Q. How many times?

A. I don't know, 50 times.

Q. Did you speak to Mr. Scharf about the remediation at the Park property site?

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A. What remediation are you talking about?

MR. SMIRTI: Withdrawn.

Q. Did you speak with Mr. Scharf about the Park property?

A. Yes.

Q. Did you speak with him about the investigation undertaken by Grumman at the Park property?

A. Yes.

Q. Did you speak with Mr. Scharf about any of the investigation or remediation undertaken by the Town at the Park property?

A. Yes.

Q. How many discussions with Mr. Scharf did you have concerning the investigation or remediation conducted by the Town at the Park property?

A. I would estimate half a dozen.

Q. Over the course of what time period did you have those discussions?

A. I'd be hard-pressed to give you dates, but it was at or about the time the Town submitted a proposal to the State to

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undertake an investigation and conduct an IRM.

Q. That would have been sometime in 2005?

A. I think so.

Q. Through what time period?

A. Through last week.

Q. And discussions are ongoing?

A. Yes.

Q. What is your role with respect to the investigation and remediation conducted by the Town at the Park property?

A. I have no direct role regarding that.

Q. You have no responsibility with respect to that?

A. Not to the Town's work, only inasmuch as it may affect the work that we're doing.

Q. So your responsibility involves how, if at all, that investigation or remediation conducted by the Town affects Grumman?

A. Affects the investigation we're doing.

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Q. Affects the investigation that Grumman is doing at the site?

A. Yes.

Q. I understand.

Were these communications that you had with Mr. Scharf oral or in writing or both?

A. My communications were oral.

Q. Over the telephone?

A. Yes.

Q. And in meetings?

A. I don't recall a meeting with him that I spoke regarding the Town's investigation.

Q. And you spoke with Mr. Scharf I think you said about a dozen times concerning that?

A. That's a good number.

Q. What were those conversations?

A. Normally my discussions would be regarding the investigation we were doing or work that we were doing relative to the super fund project, not related to the Park, but it would not be uncommon for me to ask him what

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his understanding was of the status of the work being conducted by the Town or discussions regarding the -- no. That's my answer.

Q. Did you make notes of those conversations with Mr. Scharf?

A. I may have made notes on some occasions, but I can't recall specifically which occasions that would be.

Q. Where are those notes kept?

A. Those normally would be kept as E-mail report to my supervisor.

Q. Did you make any notes other than E-mail notes to your supervisor?

A. There might have been some rough hand notes that would have been thrown away once it was transferred to the PC.

Q. Were any handwritten notes kept?

A. No.

Q. And your supervisor, when you had those discussions with Mr. Scharf, was Mr. Leskovjan?

A. Yes.

Q. Did you speak with Mr. Scharf

about the remediation that was employed, that was being employed by the Town?

A. I may have, but there was nothing really at depth regarding that.

Q. Do you recall what you said to him about that?

A. Not really, no.

Q. Do you recall what he said to you about that?

A. Not specifically. There was a discussion regarding the extent of the remediation, and I can recall him saying that he was surprised that the extent of the work that the Town felt was required.

Q. When did he say that?

A. I think after the IRM work plan was submitted.

Q. What did he say about that?

A. Other than what I just mentioned, I can't recall anything other than that.

Q. Did you comment on that response?

A. Yes.

Q. What did you say?

A. I agreed.

Q. What did he say about the extent of the remediation?

A. That it was excessive.

Q. Did he say what about it was excessive?

A. The degree of earthwork and removal that was planned.

Q. How did that topic come up?

A. I don't recall.

Q. Did you raise it?

A. I don't recall.

Q. Did Mr. Scharf state that the DEC objected to the remediation that was being employed by the Town?

A. No.

Q. Did Mr. Scharf state that the DEC had a better alternative to the remediation that was employed by the Town?

A. Other than to say that it was in excess of what would be required to meet TAGM or the end point concentrations that the Town normally requires, no.

Q. Did Mr. Scharf say that the remediation proposed, that remediation being

conducted by the Town, violated any rule or regulation of the DEC?

A. No, he did not.

Q. During the course of any of your conversations with Mr. Scharf concerning the Town's remediation did you suggest that the Town be prevented from going forward with its remediation?

A. No.

Q. To your knowledge, has anyone at Grumman made that suggestion?

A. To Mr. Scharf?

Q. Yes, sir.

A. I think Larry Leskovjan may have. I know that somewhere along the line there was a discussion regarding our concern regarding the potential for the Town's work interfering with our investigation and potential remediation, and so we were concerned only inasmuch as the potential for interference may occur and that it was important that we coordinate.

Q. Did you participate in those discussions?

A. Yes.

Q. And they were with Mr. Scharf?

A. Yes.

Q. Who else participated in those discussions?

A. I think it was just Larry, myself and Mr. Scharf.

Q. How many occasions did you have those discussions?

A. Once or twice.

Q. When did they take place?

A. I think it was after we reviewed the IRM work plan.

Q. When you say "interference," you mentioned interference a couple of answers ago, what do you mean by interference?

A. Well, it could be a number of sources or a number of areas, but in one case I know we were prevented from gaining access to the Park for an extended period of time when we wanted to go in and do some investigation, because the process of obtaining an access agreement from the Town to enter the Park just dragged and dragged, I

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don't know, for six months, but it was a long time, so that's one case of interference.

Another potential that we saw was that if the Town were to build their facility, the ice rink I am talking about, over an area that we had not had a chance to investigate and may contain potentially a source of contamination to groundwater, it would -- we would not be in a position to investigate that, and it would make remediation of that area that much more difficult.

Q. And you had those discussions with Mr. Scharf?

A. Yes.

Q. Ultimately was a site access agreement signed?

A. Yes.

Q. And put in place?

A. Yes.

Q. And Grumman given access to the site?

A. Yes.

Q. What were the discussions with Mr. Scharf about the ice rink?

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A. I don't recall a specific discussion regarding the ice rink itself.

Q. You mentioned that that was a topic with respect to interference?

A. Yes.

Q. What did Mr. Scharf say about that?

A. I don't recall.

Q. But you voiced this concern about the ice rink?

A. Yes.

Q. Did Mr. Leskovjan?

A. Yes.

Q. And you don't recall whether Mr. Scharf responded to that?

A. I can't recall that he responded in any kind of specific way that would imply that an action be taken by State. He just acknowledged our concern.

Q. When you spoke to Mr. Scharf about the ice rink, did you suggest that the Town be prevented from conducting the remediation at the ice rink?

A. The remediation? No.

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Q. Or any activities at the ice rink?

A. I suggested that if it was possible for the State to request that the Town delay their work until we were -- we had completed our work, that would be useful.

Q. And Mr. Scharf's response was?

A. I think he said something to the effect that it's the Town's property, and they can pretty much do with it what they like.

Q. Now referring to Exhibit 9, did you participate in the drafting to any extent of Exhibit 9?

A. I think I reviewed it before it went out.

Q. And you reviewed it at Mr. Leskovjan's request?

A. Yes.

Q. Do you know who prepared Exhibit 9?

A. Personnel from Arcadis.

Q. Anybody else?

A. I don't think so.

Q. Did anybody else have a hand in

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the drafting of Exhibit 9?

A. I think Larry may have edited the work product that Arcadis presented to us, as I may have.

Q. Primarily it was an Arcadis product?

A. Yes.

Q. Did you give comments to Mr. Leskovjan about Exhibit 9?

A. Yes.

Q. How many drafts of Exhibit 9 were prepared?

A. I don't know.

Q. Did you retain those drafts?

A. No.

Q. Do you know if anyone did?

A. I don't know.

Q. What were the comments you gave to Mr. Leskovjan?

A. I can't recall specific comments. This document was pretty much satisfactory, as far as I was concerned. There may have been a comma here or a misspelled word or some editorial comment.

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Q. Do you recall suggesting any additions or deletions from what turned out to be Exhibit 9?

MR. TOPOL: Objection. You're being repetitious, Counsel. The witness told you what his role was in connection with the document. I'll let him answer this question, but I would hope you wouldn't repeat it a third time.

A. No.

Q. Look at page 2 of Exhibit 9, please.

A. Yes.

Q. The first sentence at the top, do you see that, Mr. Cofman?

A. It starts with "The Town's"?

Q. Yes, sir. "The Town's proposed remedial action, however, departs significantly from the requirements of the NYS DEC and proposes actions that are unnecessary to protect human health and the environment." Do you agree with that?

A. Yes.

Q. Did you agree with it at the

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time?

A. Yes.

Q. How does the Town's proposed remedial action depart significantly from the requirements of the NYS DEC?

MR. TOPOL: Objection to the form of the question. He's not here as a legal expert, Counsel.

MR. SMIRTI: He said he came to an understanding. He said he agreed --

MR. TOPOL: You may answer.

A. Well, I think it's pretty laid out in here. My understanding is a reflection of this.

Q. You don't have any other understanding, other than what's laid out in here --

A. Yes.

Q. -- as to the basis of the statement "The Town's proposed remedial action departs significantly from the requirements of the NYS DEC"?

A. Yes, correct.

Q. Are you familiar with the

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requirements of the NYS DEC?

A. Yes. I'm familiar with some requirements, yes.

Q. What requirements are you familiar with?

A. There are levels of remediation that they require for unrestricted and restricted usage of property under RCRA and under the super fund guideline, regulations.

Q. Are you familiar with a DEC regulation regarding remedy selection?

A. Yes.

Q. And are you familiar with that portion of the regulation that states that the goal of the program for a specific site is to restore that site to predisposal conditions to the extent feasible and authorized by law?

DI MR. TOPOL: I'm instructing the witness not to answer this question and any other questions that have to do with the New York State regulations. We did this at length in Mr. Leskovjan's deposition. He's not here as an expert lawyer, nor is he here to express legal

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opinions. He's here as a fact witness. He's testified at length about facts in connection with his role in drafting or preparing Cofman Exhibit 9, and I instruct him not to answer any more legal questions.

MR. SMIRTI: Are you objecting on the basis of privilege?

MR. TOPOL: No. I'm objecting on the basis that he's here as a fact witness, and it's entirely inappropriate.

MR. SMIRTI: I just want to understand. You're directing him not to answer on the basis other than a privilege objection?

MR. TOPOL: Yes.

MR. SMIRTI: And you do understand, Mr. Topol, that I am not asking the witness for any expert opinion or legal conclusion. I just simply asked him, and we can go back and have the question reread, I simply asked him as to whether he was aware of the

NYS DEC regulation that provided as I stated.

MR. TOPOL: You were asking him for legal conclusions. If you want to ask that question, you can ask whether he's aware, but I'm not going to permit him to sit here and have to answer questions about interpretation of the New York regulations. If you want to ask what he's aware of, you can ask him what he's aware of.

Q. Are you aware of it?

A. Am I aware of that wording?

Q. Yes, sir.

A. Yes.

Q. Were you aware of it at the time that Exhibit 9 was written?

A. Yes.

Q. And did you agree with the conclusions or the objections raised in Exhibit 9 in light of your understanding of the regulation?

A. Yes.

Q. Why; why did you agree?

A. Because the comments made here seemed to be supported by my understanding of the regulations.

Q. Does the proposed remedial action plan that's proposed in Exhibit 9, does it remedy the site to predisposal conditions?

A. Yes, in my opinion.

Q. The plan proposed by Grumman in this Exhibit 9.

A. I'm sorry. I misunderstood the question.

Q. Let me restate it.

In Exhibit 9 does Grumman suggest an alternate remediation?

A. I would have to read this document again to answer that question.

MR. SMIRTI: Okay, please do.

(Witness perusing document.)

THE WITNESS: Can I hear the question again, please.

(Record read.)

A. Well, I guess you could say that on page 7 there is an alternative presented.

Q. Do you agree with that

alternative?

A. Yes.

Q. Does the alternative proposed at page 7 restore the site to predisposal conditions to the extent feasible and authorized by law to your understanding?

A. I think it does.

Q. Does the proposed remediation at page 7 leave intact some contamination at the site?

A. It leaves some contamination at the site.

Q. At what depths?

A. I couldn't tell you offhand.

Q. Below 2 feet?

A. Below 2 feet, yes.

Q. And if contamination at the site is left intact below 2 feet, is it your understanding that that's a predisposal condition?

A. No.

Q. What's a demarcation barrier?

A. Well, when a area of contamination is capped or otherwise left in

place with or without a cap, there will typically be a deed restriction in which it will denote where that is. And in addition, there will be something placed over the area that's contaminated so that subsequently if any excavation is done in the area there will be an indication of where that contamination starts, in conjunction with the documents and the deed.

Q. The proposal here is that there be a demarcation barrier at 2 feet?

A. That's what it says.

Q. And if in the future there were excavation below 2 feet, that DEC approval would be required at that time?

A. Yes.

Q. For what type of projects would there be a requirement that there be excavation below 2 feet?

A. I imagine any kind of redevelopment might have that, putting in utilities, water lines, electrical lines.

Q. Building a building?

A. Building a building.

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Q. How far down do you have to go to build a building?
A. It depends on the nature of the building.
Q. Suppose you wanted to build a two-story senior center.
A. I don't know exactly, but I would imagine you would have to have a significant enough foundation for a two-story building to extend 5, 10 feet below ground. I'm not sure.
Q. Generally with your civil engineering background for buildings with basements you would have to excavate how far?
MR. TOPOL: Objection to the form of the question. You're asking him as an expert. You're giving him expert questions. You know that's improper, Counsel.
MR. SMIRTI: I'm asking his background.
MR. TOPOL: You're asking an expert question. It's precisely the kind of question that your counsel instructed the witness not to answer.

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You know it's highly inappropriate.
Go ahead and answer the question if you'd like.
A. Well, my civil engineering background is limited to water resources and sanitary engineering, not construction.
Q. When you gave comments to Mr. Leskovjan about Exhibit 9, did you discuss with him whether the Town had plans to build any building at the site of the ice skating rink in the future?
A. You mean including the ice rink or not including the ice rink?
Q. In the future, if the Town wished to do something at that site other than having an ice rink.
A. No, I did not.
Q. If there were a demarcation barrier, as you mentioned, and excavation were required below the demarcation barrier, DEC approval would have to be obtained?
A. That's my understanding.
Q. Who would have to obtain that approval?

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A. The owner of the property.
Q. If the DEC required that there be additional remediation below 2 feet in order to perform either building at the site or whatever the case may be, who, to your understanding, would pay for that?
A. I don't know.
Q. Did you have an understanding at the time that Exhibit 9 was written that it would be Grumman's responsibility to pay for any remediation that was required below the demarcation barrier?
A. No.
Q. Did you expect that Grumman would not be paying for that?
A. I really don't know.
Q. Did you discuss that with Mr. Leskovjan?
A. No.
Q. Did you have an expectation that what was being proposed here was that if in the future remediation below the demarcation barrier would have to be undertaken, that that would be the Town's responsibility?

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MR. TOPOL: Objection. You asked the witness that question, and he answered you specifically that the Town would have to pay. You're just harassing him for no reason, Counsel.
Q. Is that your response, that the Town would have to pay?
A. I'm sorry. I'm not sure where we are here.
Q. Is that your response, that the Town would have to pay, if it had to go below the demarcation barrier?
A. No, that's not my response.
Q. I didn't think so. What's your response?
A. I don't know.
Q. Did you have an understanding as to the type of deed restrictions that were being proposed on page 7?
A. Not specifically.
Q. Did you have a general understanding of the deed restrictions?
A. Yes.
Q. What was that understanding?

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A. That there would be a documentation of where contamination was remaining on the site and some stipulation regarding approval required if those areas were to be disturbed.

Q. Did you have an understanding as to restrictions on the use of that area of remediation under Grumman's proposal?

A. My understanding, that there would be no restriction on the use of that area.

Q. No restriction on the use?

A. Right.

Q. Or future use of the area?

A. Well, as long as these provisions were complied with, yes.

Q. As long as there was a deed restriction?

A. Deed restriction and if work were required in areas of contamination, that appropriate measures be taken.

Q. And the deed restriction, to your understanding, would restrict future use in one form or another?

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A. It would either restrict further use -- no, I don't see it as restrict further use. My understanding would be that it would require if something were to be done that would require a use that wasn't being done at the time, such as putting in a building, that appropriate measures be taken to assure that any contamination that was encountered or expected to be encountered would not be -- would be dealt with in such a way that the safety of the workers would be protected and that the site would be left in such a state that that contamination would not be of concern to occupants or the environment.

Q. Did you make a determination as to what the remediation proposed by Grumman would cost?

A. When you say "the remediation proposed by Grumman," you're talking about these alternatives (indicating)?

Q. I am specifically talking about page 7 of Exhibit 9 where at the top the exhibit says "A better remedial approach for the Town would be as follows." This was

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Grumman's proposed remediation plan?

A. I wouldn't call this a proposed remediation plan. I would say this is an alternative that could be followed by the Town in lieu of their proposal.

Q. Grumman was not proposing what's outlined on page 7?

A. Yes. We were proposing what is outlined on page 7.

Q. So that was Grumman's proposed remediation plan?

A. Well, that was a proposed remediation plan for the Town's work, yes.

Q. Grumman was proposing the remediation plan outlined at page 7 in the place instead of the remediation plan being implemented by the Town?

A. Yes.

Q. Did you make an assessment as to the cost of the remediation plan proposed by Grumman at page 7?

A. Not to my recollection.

Q. Did you consider the effect of the proposed remediation plan on page 7, the

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effect that that plan would have on area residents?

A. Yes.

Q. What did you consider about that?

A. That this was fully protective of area residents.

Q. Did you consider whether the residential values would decrease as a result of employment of this proposed plan on 7?

A. No.

Q. Did you have an understanding that the residential areas, that the value of the residential homes adjacent to the Park would be decreased because if this remediation plan were employed contamination would remain in place?

A. No.

Q. At the time that you gave your comments to Exhibit 9, did you believe that if this plan were put in place there would be no effect on the value of the residences?

A. I really had no opinion on that.

Q. Did you consider it?

A. Yes.

Q. What did you consider about it?
A. That it was impossible for me to make a determination regarding it, because the -- if the site were remediated to New York State requirements, it's hard to -- that would be satisfactory in my opinion to some people. Other people might consider that not satisfactory. I couldn't tell what the effect on property values was on that, but it seemed hard to determine.
Q. So you didn't know one way or the other whether it would affect property values?
A. Yes, exactly.
Q. Did you have an understanding as to the type of cap that Grumman was proposing on page 7 here?
A. Not specifically.
Q. Generally?
A. Well, there are many kinds of caps available, and nothing specific was proposed that I can see here. It was just a general recommendation of whatever is suitable.
Q. Take a look at page 8, if you

would, please, Mr. Cofman. At the top, subheading E, "Develop an appropriate set of deed restrictions." Do you see that?
A. Yes.
Q. Number 3 in that subparagraph E says, "Installation of a passive soil vapor venting system for all new on-site buildings where appropriate." Do you see that?
A. Yes.
Q. What's a soil vapor venting system?
A. That's a series of perforated pipes that would be placed below a plastic barrier that would be underneath the foundation of the building, and these plastic pipes would be situated such that any vapors coming from below the foundation would be vented and not driven into the building.
Q. Where was it proposed here that the soil vapor venting system be placed?
A. Any new on-site building.
Q. So only if there was a new on-site building. Was it proposed here that a soil vapor venting system be placed?

A. Yes, a passive soil vapor venting system, yes.
Q. Did you understand Exhibit 9 to be suggesting here that a soil vapor venting system be placed underneath the ice rink?
A. Yes, a passive soil venting system.
Q. Underneath the ice rink?
A. My understanding, though, is based on my understanding of the ice rink being an enclosed ice rink as opposed to the ice rink that was demolished.
Q. A new ice rink?
A. A new ice rink, but enclosed, inside a building, not an ice rink as an open air ice rink.
Q. I understand.
Did you have an understanding as to the depth at which the passive soil vapor venting system would be placed?
A. My understanding is, and I haven't designed one, but from what I understand, it's directly below the impermeable membrane, a plastic sheet, that's

placed underneath the foundation.
Q. Did you have an understanding as to the depth of this plastic sheet underneath the ice rink?
A. Yes, immediately underneath the foundation.
Q. What depth was that?
A. Whatever the foundation is, I don't know.
Q. You didn't know what the foundation is for the ice rink?
A. No.
Q. Do you have any idea as to the cost of operating this soil vapor venting system?
A. Yes.
Q. What's the cost?
A. None.
Q. No cost?
A. The passive soil vapor venting system, yes, that's what's recommended here (indicating), as opposed to some other kind of system.
Q. How much would it cost to put

that in place?
A. I don't know, but from what I understand from a discussion with the construction people, at the time of installation of the building it's a trivial cost.
MR. SMIRTI: Let's take five. I think I just have one or two clean up questions.
(Recess taken at 3:57 p.m.)
(Examination resumed at 4:04 p.m.)
Q. Mr. Cofman, do you have an understanding as to whether Grumman transported or caused the transportation of waste from any other Grumman site to be disposed on the Park property, any site other than the Grumman 550 acre site that we've talked about or the Navy 110 acre site that we've talked about?
A. No.
MR. SMIRTI: Off the record.
(Discussion off the record.)
MR. SMIRTI: I have no further

questions of the witness at this time, but the Town is reserving its right to recall Mr. Cofman to inquire about, number one, the meeting that Mr. Cofman testified about where the power point presentation was made and apparently internal counsel for Grumman was present. The exhibit that Mr. Cofman testified about was produced not by Grumman, but by the Navy, and it is the Town's belief that the Navy may have been present at that meeting, in which event there would be no privilege objection that could attach to the discussions that took place at that meeting.
We intend to pursue whether or not there is an appropriate privilege objection that can be made with respect to that meeting, and if there is not, then we will reserve our right to recall Mr. Cofman on that issue.
Number two, we're also reserving our right to recall Mr. Cofman with

respect to the line of testimony that counsel directed Mr. Cofman not to answer concerning the meeting between and among Mr. Amoroso and Mr. Jasinkonis, because the Town does not believe that counsel's objection and direction not to answer on the basis of privilege is appropriate.
MR. TOPOL: And I am reserving all of my rights to object to any effort to recall Mr. Cofman in either area.
MR. KAMBIC: I don't have any questions.
MR. SMIRTI: Thank you, Mr. Cofman.
(Time noted: 4:06 p.m.)

A C K N O W L E D G M E N T

STATE OF NEW YORK)
:ss
COUNTY OF)

I, JEAN-PIERRE COFMAN, hereby certify that I have read the transcript of my testimony taken under oath in my deposition of February 1, 2007; that the transcript is a true, complete and correct record of my testimony, and that the answers on the record as given by me are true and correct.

_____
JEAN-PIERRE COFMAN

Signed and subscribed to before me, this day of , 2007.

_____
Notary Public, State of New York

C E R T I F I C A T E

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

I, JENNIFER FUCHS, a Notary Public within and for the State of New York, do hereby certify:

That JEAN-PIERRE COFMAN, the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by such witness.

I further certify that I am not related to any of the parties to this action by blood or marriage; and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 15th day of February, 2007.

JENNIFER FUCHS

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