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July 17, 1997

John Cofman, P.E., Lead Engineer
Environmental Technology and Compliance
Northrop Grumman Corporation
Mail Stop: D08-001
Bethpage, NY 11714-3582

Re: Remediation Oversight Activities
Credit Union/South - Parcel F
Bethpage, New York 11714
D&B No. 801/96-83

Dear Mr. Cofman:

The purpose of this letter report is to document soil remediation activities that were completed at the Northrop Grumman Corporation (NGC) property known as "Credit Union/South - Parcel F."

The soil remediation activities consisted of the excavation, transportation and off-site disposal of approximately 22 tons of nonhazardous, petroleum contaminated soil. A description of the project site, remediation activities and conclusions are provided below.

Site Description

The Credit Union/South - Parcel F site is located on South Oyster Bay Road, in Bethpage, within the Town of Oyster Bay, in Nassau County, New York. The Credit Union/South - Parcel F property is located immediately adjacent to the northern boundary of the Plant 20 site, which is owned by the Navy and operated by NGC. A site location map is presented on Figure 1 (see Attachment A).

The Credit Union/South - Parcel F property comprises approximately 2.4 acres and is currently owned by NGC. A site plan is presented on Figure 2 (see Attachment A). The property is rectangular in shape and measures approximately 170 feet wide and 615 feet long. One building, known as the Service Building, was located on the site. The Service Building, which was a 4,500 square foot, one-story building, was formerly located in the southwest quadrant of the property. The Service Building (also once known as the Plant 20 Tire Shop) was historically utilized as a routine maintenance facility for NGC vehicles including oil changes and other fluid checks, tire replacement, balancing, rotation and lubrication. The building was constructed in 1985 and was initially utilized as an accessory maintenance garage for Plant 20. Operations ceased in 1996 and the Service Building was demolished and removed from the property in October 1996. At present, the site is essentially vacant with the exception of some portions being used for storage and vehicle parking.

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Scope of Work

Dvirka and Bartilucci Consulting Engineers (D&B) of Woodbury, New York, was retained by NGC to provide engineering oversight of the remediation activities conducted by NGC at the Credit Union/South - Parcel F site. The scope of work for the remediation activities was based upon the recommendations presented in the report prepared by D&B, entitled "Supplemental Phase II Site Assessment, Credit Union/South - Parcel F, Bethpage, New York," dated May 1997. The recommendations presented in the Supplemental Phase II Site Assessment report are provided in Attachment B.

The scope of work for the remediation activities included the excavation and off-site disposal of soil from Storage Area S201 in the vicinity of soil borings B-1A (adjacent to former boring CUB-1) and B-2A (adjacent to former boring CUB-2), and the excavation and off-site disposal of soil from the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs in the vicinity of previous soil sample locations HYD1-2 and HYD1-3.

Specifically, soil contaminated by total petroleum hydrocarbons (TPHCs) identified as motor oil in the vicinity of soil boring location B-1A (former CUB-1) was to be excavated to a minimum depth of 2 feet below ground surface across an area of approximately 5 feet (length) by 5 feet (width). In addition, soil contaminated by TPHCs identified as motor oil in the vicinity of soil boring location B-2A (former CUB-2) was to be excavated to a minimum depth of 4 feet below ground surface across an area of approximately 5 feet (length) by 5 feet (width). The excavated material would be loaded into a roll-off container with leaktight cover for proper containment, transportation and off-site disposal.

In addition, soil contaminated by TPHCs identified as motor oil in the vicinity of previous soil sample locations HYD1-2 and HYD1-3 was to be excavated to a minimum depth of 4 to 6 feet below ground surface across an area of approximately 10 feet (length) by 5 feet (width). The excavated material would be loaded into a roll-off container with leaktight cover for proper containment, transportation and off-site disposal.

The scope of work for the remediation activities also included waste characterization sampling for disposal purposes by collecting at least one composite sample from the roll-off container for laboratory analysis, or at a frequency required by the disposal facility.

In addition, endpoint sampling activities would not be conducted due to the fact that in situ soil samples were obtained at appropriate depths during the Supplemental Phase II Site Assessment. Accordingly, the analytical results were utilized to define the extent of soil contamination and remediation activities.

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Remediation Activities

As discussed above, D&B was retained by NGC to provide engineering oversight of the remediation activities conducted by NGC at the Credit Union/South - Parcel F site. The field activities were conducted on June 20, 1997. Daily field activity reports, which are available in the project file, provide documentation of the remediation activities that were conducted at the site.

NGC retained Blue Water Environmental Inc. (Blue Water) of Farmingdale, New York to conduct the remediation activities for the project. All excavation, loading, transportation, disposal services and site restoration activities, as required, were conducted by Blue Water. D&B provided engineering oversight of the remediation activities. The excavated soil was transported as nonhazardous material in a 20 cubic yard roll-off container with leaktight cover by Blue Water to Phoenix Soil LLC in Waterbury, Connecticut. In addition, one composite soil sample was collected from the 20 cubic yard roll-off container by Blue Water for waste characterization purposes and analyzed for Resource Conservation and Recovery Act (RCRA) metals by Toxicity Characteristic Leaching Procedure (TCLP), Polychlorinated Biphenyls (PCBs), Volatile Organic Compounds (VOCs), Total Petroleum Hydrocarbons (TPHCs) and total solids by Environmental Testing Laboratories, Inc. of Farmingdale, New York. The analytical results of the composite waste characterization sample are presented in Attachment C. In addition, the waste manifest, weight ticket from the disposal facility, and a certification letter stating that clean sand was utilized for backfill material are presented in Attachments D, E and F, respectively.

An area by area discussion of the remediation activities is presented below.

Storage Area S201

Soil remediation activities associated with Storage Area S201 were conducted in accordance with the recommendations of the Supplemental Phase II Site Assessment report prepared by D&B. All excavation, loading, transportation, disposal services and site restoration activities for Storage Area S201 were conducted by Blue Water.

Storage Area S201 remediation activities included the removal of asphalt pavement across an area of approximately 7.5 feet (length) by 7.5 feet (width) in order to access the underlying TPHC/motor oil contaminated soil in the vicinity of soil boring B-1A (former CUB-1). Subsequent to the removal of the asphalt, the soil in the vicinity of soil boring B-1A (former CUB-1) was excavated to a depth of approximately 2.5 feet across an area of approximately 7.5 feet (length) by 7.5 feet (width). In addition, a 7 foot (length) by 8 foot (width) area of asphalt pavement was removed to access the underlying TPHC/motor oil contaminated soil in the vicinity of soil boring B-2A (former CUB-2). Subsequent to the removal of the asphalt, the soil in the vicinity of soil boring B-2A (former CUB-2) was excavated to a depth of approximately 6 feet across an area of approximately 7 feet (length) by 8 feet (width). Removal of the asphalt pavement and excavation of the underlying soil was

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accomplished utilizing a backhoe which was also used to load the material into a 20 cubic yard roll-off container with leaktight cover for proper transportation and off-site disposal. Figure 3 (see Attachment A) illustrates the approximate limits of each excavation in the vicinity of soil borings B-1A (former CUB-1) and B-2A (former CUB-2) in Storage Area S201.

Following completion of the excavation activities, both areas were backfilled with clean sand fill. A copy of the clean fill certification letter is provided in Attachment F. In addition, according to NGC, Blue Water was not required to resurface the areas of excavation.

Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs

Soil remediation activities associated with the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs were conducted in accordance with the recommendations of the Supplemental Phase II Site Assessment report prepared by D&B. All excavation, loading, transportation, disposal services and site restoration activities in the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs were conducted by Blue Water.

The remediation field activities in the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs consisted of the excavation of TPHC/motor oil contaminated soil in the vicinity of previous soil sample locations HYD1-2 and HYD1-3 to a depth of approximately 5.5 feet below grade across an area of approximately 10 feet (length) by 8 feet (width). Excavation of the contaminated soils was accomplished utilizing a backhoe which was also used to load the material into a 20 cubic yard roll-off container with leaktight cover for proper transportation and off-site disposal. Figure 3 (see Attachment A) illustrates the approximate limits of the excavation in the vicinity of previous soil sample locations HYD1-2 and HYD1-3 in the area of the previous Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs.

Following completion of the excavation activities, the area was backfilled with clean sand fill. A copy of the clean fill certification letter is provided in Attachment F.

A total of 22.24 tons of TPHC/motor oil contaminated soil from Storage Area S201 and the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs was loaded into a 20-cubic yard roll-off container with leaktight cover and transported by Blue Water for proper off-site disposal as nonhazardous waste at the Phoenix Soil LLC facility in Waterbury, Connecticut.

In addition, prior to disposal, one composite soil sample was collected from the 20-cubic yard roll-off container by Blue Water for waste characterization purposes and analyzed for RCRA metals by TCLP, PCBs, VOCs, TPHCs and total solids. The analytical results of the sample indicated that the soil was nonhazardous.

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Conclusions

Remediation activities including the excavation, loading, transportation and off-site disposal of soil from Storage Area S201 and from the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs at the Credit Union/South - Parcel F site were conducted and completed in accordance with the scope of work and recommendations of the Supplemental Phase II Site Assessment report prepared by D&B.

A total of 22.24 tons of TPHC/motor oil contaminated soil was excavated and transported off-site for proper disposal as nonhazardous waste. Following completion of the excavation activities, all excavated areas were backfilled with clean sand fill to grade.

Based upon the results of this soil remediation program, further investigation or remediation activities are not warranted in Storage Area S201 and in the area of the former Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs at the Credit Union/South - Parcel F site.

If you have any questions or comments, please do not hesitate to contact Mr. Errol Kitt or me at (516) 364-9890.

Very truly yours,



Richard M. Walka
Vice President

RMW/KK/scs,de

Enclosure

cc: J. Ohlmann (NGC)

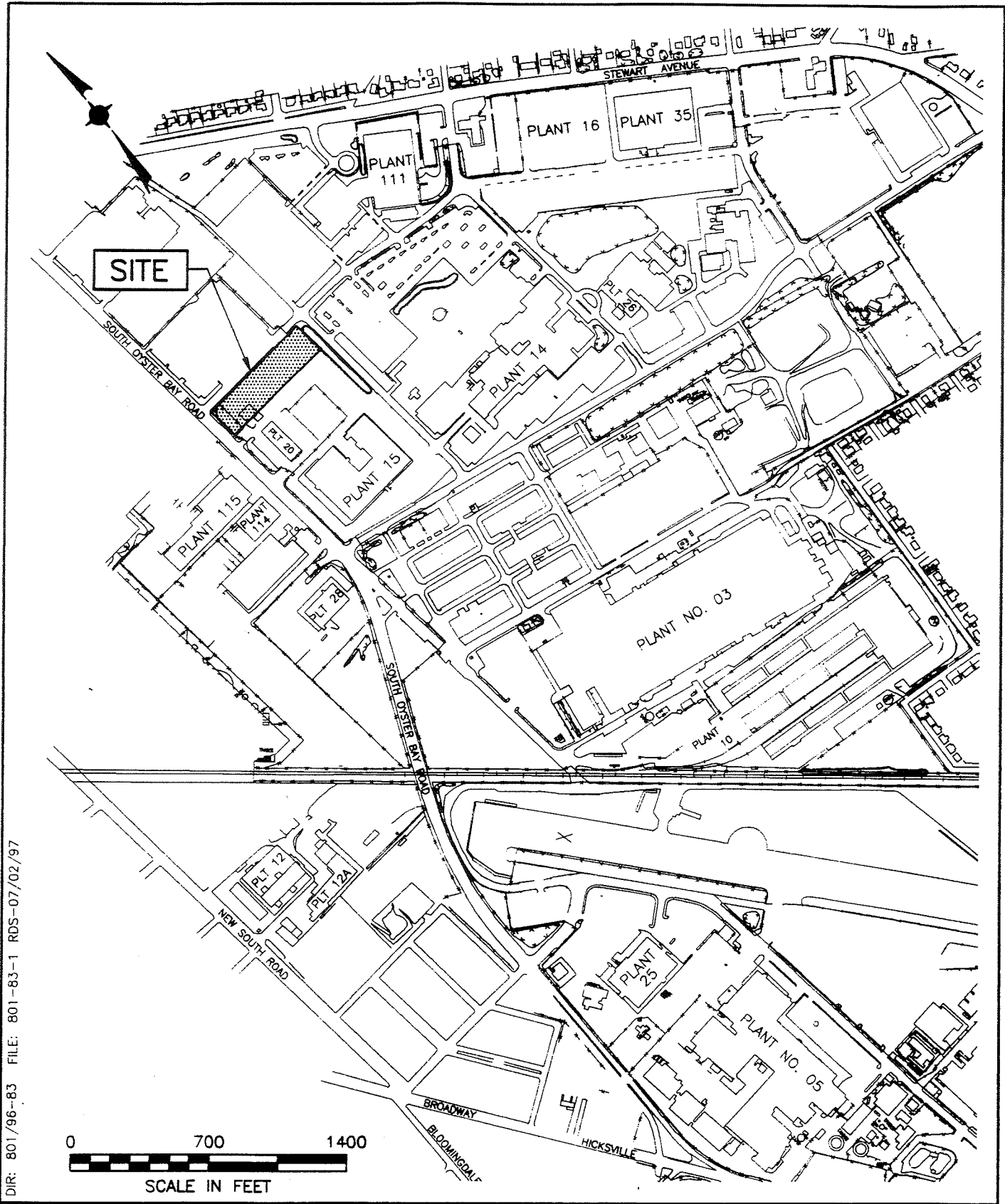
A. Postyn (NGC)

E. Kitt (D&B)

◆0801/RMW06107.JC(R04)

ATTACHMENT A

FIGURES



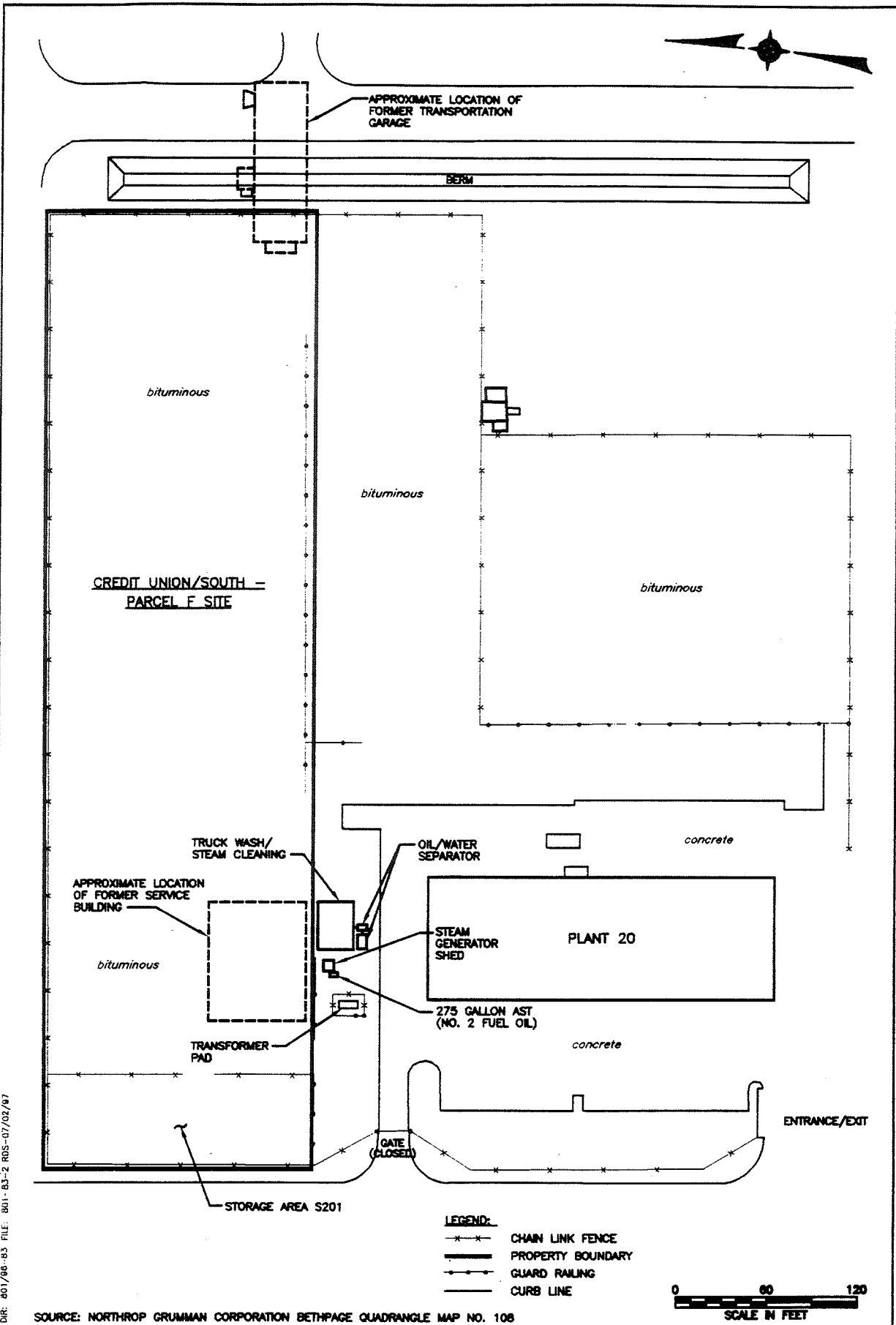
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 BETHPAGE, NEW YORK
 CREDIT UNION/SOUTH - PARCEL F

SITE LOCATION MAP

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FIGURE 1



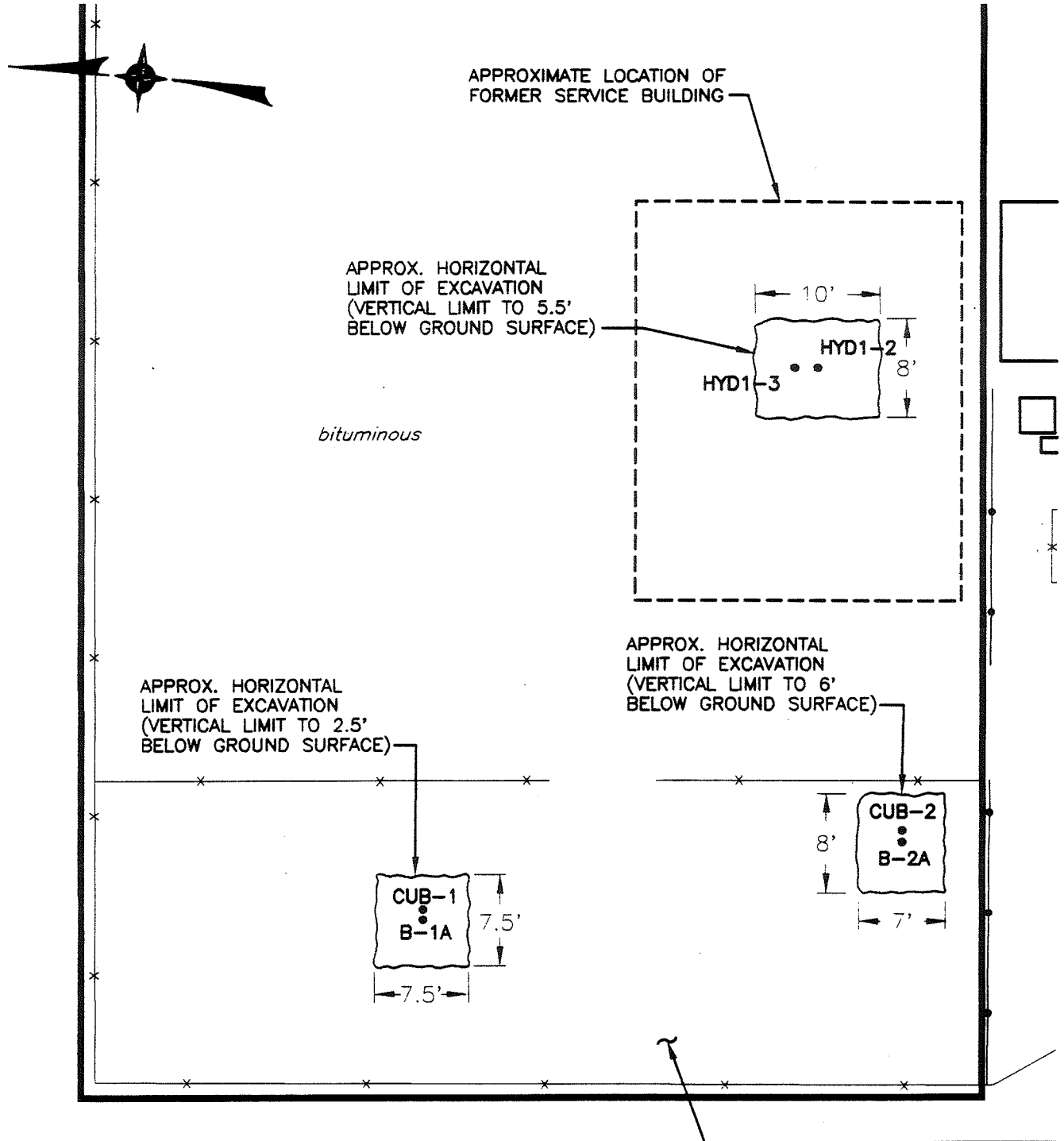
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SOURCE: NORTHROP GRUMMAN CORPORATION BETHPAGE QUADRANGLE MAP NO. 108

- LEGEND:**
- x-x- CHAIN LINK FENCE
 - PROPERTY BOUNDARY
 - o-o- GUARD RAILING
 - CURB LINE



DIR: 801/96-83 FILE: 801-83-3 RDS-07/08/97



- LEGEND:**
- SOIL BORING
 - x-x- CHAIN LINK FENCE
 - ▬ PROPERTY BOUNDARY
 - GUARD RAILING
 - ▬ CURB LINE

NOT TO SCALE

NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK
CREDIT UNION/SOUTH - PARCEL F



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AREAS OF SOIL REMEDIATION

FIGURE 3

ATTACHMENT B

EXCERPT FROM THE SUPPLEMENTAL PHASE II SITE ASSESSMENT

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the findings of the Supplemental Phase II Site Assessment field investigation discussed in Section 5, conclusions are presented in this section, and recommendations are provided regarding remedial actions at the Credit Union/South - Parcel F site.

In support of providing conclusions and technical recommendations with regard to the level and degree to which cleanup or remediation of the property is required, we have relied on the revised Technical and Administrative Guidance Memorandum (TAGM) No. 4046 - Determination of Soil Cleanup Objectives and Cleanup Levels dated January 24, 1994 published by the New York State Department of Environmental Conservation (NYSDEC).

As discussed in the introduction of the TAGM, the document is designed to provide a technical basis for NYSDEC Project Managers at "...individual Federal Superfund, State Superfund, 1986 EQBA Title 3 and Responsible Party (RP) sites..." to determine soil cleanup levels. The TAGM provides a number of methods to determine the degree to which these sites are cleaned up including published recommended soil cleanup objectives (NYSDEC TAGM criteria) and Eastern USA background concentrations.

The Credit Union/South - Parcel F site is not a Federal Superfund or State Superfund site nor is it an RP or 1986 EQBA Title 3 property. However, we believe it is reasonable to establish the NYSDEC TAGM criteria for VOCs and SVOCs and the Eastern USA background levels for metals, as presented in the TAGM, as the levels of cleanup across the site.

Also, the TCLP Extraction Guidance Values listed in Table 2, "Guidance Values for Fuel Oil Contaminated Soil," of Appendix B of NYSDEC's STARS Memo #1 (STARS Table 2 guidance values) were utilized for soil cleanup levels at specific locations at the site.

As discussed in Section 5, the Supplemental Phase II field investigation at the Credit Union/South - Parcel F site was conducted at the following four areas:

- Storage Area S201
- Area of Former Transportation Garage
- Area Adjacent to Plant 20
- Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs

Conclusions and recommendations regarding additional investigations and/or remedial activities in these areas are presented in Sections 6.1 through 6.4, respectively.

6.1 Storage Area S201

Conclusions

As discussed in Section 5.1, a total of 10 soil borings were advanced in Storage Area S201 at boring locations B-1A, B-1N, B-1S, B-1E, B-1W, B-2A, B-2N, B-2S, B-2E and B-2W during the Supplemental Phase II field investigation. A total of 50 soil samples were collected from these borings; however, based on the protocol established for sample analysis specified in the scope of work, as described in Section 3, a total of 22 samples were analyzed by the laboratory for methylene chloride, and/or STARS Table 2 VOCs and SVOCs by TLCP, and/or TPHCs. In addition, nine of these samples were analyzed for fuel-related constituents.

Four soil samples were analyzed for methylene chloride in order to confirm the presence (or absence) of methylene chloride and delineate the horizontal and vertical extent of methylene chloride contamination, if present, that was detected during the previous Phase II field investigation. However, the analytical results of the samples collected as part of the Supplemental Phase II field investigation indicated that methylene chloride was detected at concentrations well below the NYSDEC TAGM criterion for this compound. According to NGC representatives, there are no records which indicate the use and/or storage of methylene chloride at the site. In addition, methylene chloride is a common laboratory contaminant. It was detected

in laboratory method blanks during both the previous Phase II and Supplemental Phase II field investigations. Therefore, the concentrations of methylene chloride detected in excess of the NYSDEC TAGM criterion during the previous Phase II field investigation appear suspect and are believed to be due to laboratory contamination and are unrelated to the site.

A total of 18 soil samples were analyzed for TPHCs in order to determine the horizontal and vertical extent of TPHC contamination detected during the previous Phase II field investigation. In addition, nine of these soil samples were also analyzed for fuel-related constituents.

The analytical results of the soil samples collected from former borings CUB-1 and CUB-2 during the previous Phase II field investigation indicated that TPHCs were detected at concentrations of 2,210 mg/kg in CUB-1-S1 (0-2'), 351 mg/kg in CUB-1-S2 (2'-4'), 2,110 mg/kg in CUB-2-S1 (0-2'), and 9,740 mg/kg in CUB-2-S2 (2'-4'). Also, the results of the samples analyzed for fuel-related constituents indicated that TPHC, as 10W40 motor oil, was detected in samples CUB-1-S1 (0-2') and CUB-2-S2 (2'-4') at concentrations of 300 mg/kg and 20,000 mg/kg, respectively.

TPHC's detected in the soil samples collected during the Supplemental Phase II field investigation were below the 500 mg/kg limit accepted at similar sites in consultation with the NYSDEC, with the exception of soil sample B2W0-2 (0-2'), which was collected from boring B-2W located approximately 5 feet west of former soil boring CUB-2. Accordingly, soil sample B2W0-2 (0-2') was analyzed for STARS Table 2 VOCs and SVOCs by TCLP along with samples B1A0-2 (0-2'), B1A2-4 (2'-4'), B2A0-2 (0-2') and B2A2-4 (2'-4'), which were collected from borings located immediately adjacent to former samples CUB-1-S1 (0-2'), CUB-1-S2 (2'-4'), CUB-2-S1 (0-2') and CUB-2-S2 (2'-4'), respectively. However, the analytical results indicated that VOCs and SVOCs were not detected.

In addition, samples B1N0-2 (0-2'), B1E0-2 (0-2'), B1S0-2 (0-2'), B1W0-2 (0-2'), B2A4-6 (4'-6'), B2N0-2 (0-2'), B2E0-2 (0-2'), B2S0-2 (0-2') and B2W0-2 (0-2') were analyzed

for fuel-related constituents. The analytical results indicated that fuel-related constituents were not detected.

The TPHC analysis was used for the purpose of screening in order to initially determine whether petroleum hydrocarbons were present in the soil and then, if present, to determine whether the petroleum hydrocarbons were related to fuels. It is important to note that elevated levels of TPHCs are not atypical of shallow subsurface soils that receive storm water runoff from areas of extensive asphalt pavement and areas underlying asphalt/macadam/concrete, as exhibited at this site. Therefore, if TPHCs were detected in a soil sample at a concentration greater than 500 mg/kg, the sample was then analyzed for fuel-related constituents. As indicated above, the soil sample results indicated that fuels were not identified. Therefore, it appears that the TPHCs detected in these samples are not associated with any fuel-related spills.

Recommendations

Thus, since elevated levels (greater than 500 mg/kg) of TPHCs identified as motor oil are present in the soil, it is recommended that the TPHC/motor oil contaminated soil in the vicinity of soil boring location B-1A (former boring CUB-1) be excavated to a minimum depth of 2 feet below ground surface across an area of approximately 5 feet (length) by 5 feet (width). In addition, the TPHC/motor oil contaminated soil in the vicinity of soil boring B-2A (former boring CUB-2) be excavated to a minimum depth of 4 feet below ground surface across an area of approximately 5 feet by 5 feet. The excavated material should be properly transported and disposed of off-site.

6.2 Area of Former Transportation Garage

Conclusions

As discussed in Section 5.2, a total of five soil borings were advanced in the area of the former Transportation Garage at soil boring locations B-5A, B-5N, B-5S, B-5E and B-5W during

the Supplemental Phase II field investigation. A total of 20 soil samples were collected from these borings; however, based on the protocol established for sample analysis specified in the scope of work, as described in Section 3, a total of 12 samples were analyzed by the laboratory for STARS Table 2 VOCs and SVOCs by TCLP and/or TPHCs. In addition, five of these samples were analyzed for fuel-related constituents.

A total of 11 subsurface soil samples were analyzed for TPHCs in order to delineate the horizontal and vertical extent of TPHC contamination detected during the previous Phase II field investigation. The analytical results of the soil samples collected as part of the previous Phase II investigation indicated that TPHCs were detected at a level of 2,690 mg/kg in sample CUB-5-S1 (2'-4'), which was obtained from former boring location CUB-5. However, the results also indicated that fuel-related constituents were not detected. The analytical results of soil samples collected during the Supplemental Phase II investigation indicated that elevated TPHC levels were detected in soil samples B5N0-2 (0-2'), B5E0-2 (0-2') and B5W0-2 (0-2'), at 811 mg/kg, 901 mg/kg and at 1,490 mg/kg, respectively. These samples were collected from borings located approximately 5 feet north (boring B-5N), east (boring B-5E) and west (boring B-5W) of former boring location CUB-5. In addition, samples B5A0-2 (0-2'), B5N0-2 (0-2'), B5E0-2 (0-2'), B5S0-2 (0-2') and B5W0-2 (0-2') were analyzed for fuel-related constituents. However, the analytical results indicated that fuel-related constituents were not detected.

As discussed previously, the TPHC analysis was used for the purpose of screening in order to initially determine whether petroleum hydrocarbons were present in the soil and then, if present, to determine whether the petroleum hydrocarbons were related to fuels. It is important to note that elevated levels of TPHCs are not atypical of shallow subsurface soils that receive storm water runoff from areas of extensive asphalt pavement and areas underlying asphalt/macadam/concrete, as exhibited at this site. Therefore, if TPHCs were detected in a soil sample at a concentration greater than 500 mg/kg, the sample was then analyzed for fuel-related constituents. As indicated above, the soil sample results indicated that fuels were not identified. Therefore, it appears that the TPHCs detected in these samples are not associated with any fuel-related spills.

Four soil samples, including B5N0-2 (0-2'), B5E0-2 (0-2'), B5W0-2 (0-2'), and B5A2-4 (2'-4'), were analyzed for STARS Table 2 VOCs and SVOCs by TCLP due to the elevated levels of TPHCs detected in samples B5N0-2 (0-2'), B5E0-2 (0-2'), B5W0-2 (0-2') and former sample CUB-5-S1 (2'-4'), respectively. However, the analytical results indicated that VOCs and SVOCs were not detected.

Recommendations

Although elevated levels (greater than 500 mg/kg) of TPHCs were present in soil samples, fuel-related constituents were not identified in these samples and the results of the TCLP analyses indicated that VOCs and SVOCs were not detected. Therefore, the presence of TPHCs in the soil is not fuel-related and is not an environmental concern. Thus, further investigation and/or remediation of this area is not warranted.

6.3 Area Adjacent to Plant 20

Conclusions

As discussed in Section 5.3, a total of eight soil borings were advanced in the area adjacent to Plant 20 at soil boring locations B-6A, B-6N, B-6E, B-6W, B-7A, B-7N, B-7E and B-7W during the Supplemental Phase II field investigation. A total of 32 soil samples were collected from these borings; however, based on the protocol established for sample analysis specified in the scope of work, as described in Section 3, a total of 17 samples were analyzed by the laboratory for acetone and/or methylene chloride, and/or STARS Table 2 VOCs and SVOCs by TCLP, and/or TPHCs, and/or copper. In addition, ten of these samples were analyzed for zinc, and six of the samples were also analyzed for fuel-related constituents.

Four soil samples were analyzed for acetone and methylene chloride in order to confirm the presence (or absence) of acetone and methylene chloride and to delineate the horizontal and vertical extent of acetone and methylene chloride contamination, if present, that was detected

during the previous Phase II field investigation. However, the analytical results of the samples collected as part of the Supplemental Phase II field investigation indicated that acetone and methylene chloride were either not detected or detected at concentrations that were below the NYSDEC TAGM criteria for these compounds. According to NGC representatives, there are no records which indicate the use and/or storage of acetone and methylene chloride at the site. In addition, acetone and methylene chloride are common laboratory contaminants. Methylene chloride was detected in laboratory method blanks during both the previous Phase II and Supplemental Phase II field investigations. Therefore, the concentrations of acetone and methylene chloride detected in excess of the NYSDEC TAGM criteria during the previous Phase II field investigation appear suspect and are believed to be attributed to laboratory contamination and are unrelated to the site.

With regard to TPHCs, a total of 10 soil samples were collected and analyzed for TPHCs in order to delineate the horizontal and vertical extent of TPHC contamination detected during the previous Phase II field investigation. The analytical results of the samples collected during the previous Phase II field investigation indicated that TPHCs were detected at elevated levels of 935 mg/kg in sample CUB-6-S1 (0-2') and 574 mg/kg in sample CUB-7-S1 (0-2'), which were collected from former borings CUB-6 and CUB-7, respectively. However, the results also indicated that fuel-related constituents were not detected. The analytical results of soil samples collected during the Supplemental Phase II field investigation indicated that elevated levels of TPHCs were detected in soil samples B7N0-2 (0-2'), B7E0-2 (0-2'), B7E2-4 (2'-4') and B7W0-2 (0-2') at 1,230 mg/kg, 2,620 mg/kg, 690 mg/kg and 1,550 mg/kg, respectively. These samples were collected from borings located approximately 5 feet north (boring B-7N), east (boring B-7E) and west (boring B-7W) of former boring CUB-7. TPHCs were not detected at elevated levels in the samples collected from borings B-6N, B-6E and B-6W located approximately 5 feet north, east and west, respectively, of former boring CUB-6. In addition, samples B6N0-2 (0-2'), B6E0-2 (0-2'), B6W0-2 (0-2'), B7N0-2 (0-2'), B7E0-2 (0-2') and B7W0-2 (0-2') were analyzed for fuel-related constituents. However, the analytical results indicated that fuel-related constituents were not detected.

As discussed previously, the TPHC analysis was used for the purpose of screening in order to initially determine whether petroleum hydrocarbons were present in the soil and then if present, to determine whether the petroleum hydrocarbons were related to fuels. It is important to note that elevated levels of TPHCs are not atypical of shallow subsurface soils that receive storm water runoff from areas of extensive asphalt pavement and areas underlying asphalt/macadam/concrete, as exhibited at this site. Therefore, if TPHCs were detected in a soil sample at a concentration greater than 500 mg/kg, the sample was then analyzed for fuel-related constituents. As indicated above, the soil sample results indicate that fuels were not identified. Therefore, it appears that the TPHCs detected in these samples are not associated with any fuel-related spills.

Six soil samples, including B7N0-2 (0-2'), B7E0-2 (0-2'), B7E2-4 (2'-4'), B7W0-2 (0-2'), B6A0-2 (0-2') and B7A0-2 (0-2'), were analyzed for STARS Table 2 VOCs and SVOCs by TCLP due to the elevated levels of TPHCs detected in samples B7N0-2 (0-2'), B7E0-2 (0-2'), B7E2-4 (2'-4'), B7W0-2 (0-2'), and former samples CUB-6-S1 (0-2') and CUB-7-S1 (0-2'), respectively. However, the analytical results indicated that VOCs and SVOCs were not detected.

In addition, eight soil samples were collected and analyzed for copper in order to confirm the presence (or absence) of elevated levels of copper detected during the previous Phase II field investigation, and to delineate the horizontal and vertical extent of copper contamination, if present. The analytical results of the samples collected during the previous Phase II field program indicated that copper was detected at a level (89 mg/kg) in excess of the Eastern USA background level (50 mg/kg) in soil sample CUB-6-S1 (0-2'), which was collected from former boring CUB-6. However, the results of the samples collected as part of the Supplemental Phase II field investigation could not confirm the presence of copper at the elevated level found during the previous investigation. The Supplemental Phase II sample results indicated that copper was not detected at concentrations that exceeded Eastern USA background levels. Also, it is important to note that copper is not classified as a RCRA metal, that is, a metal which in elevated concentrations could classify a waste material as a hazardous waste. Furthermore, elemental copper is not identified as a hazardous constituent in Appendix 23 of the NYSDEC's regulations

found at 6 NYCRR Part 371. Therefore, it does not appear that this constituent warrants further investigation.

Also, ten soil samples were analyzed for zinc in order to confirm the presence (or absence) of elevated levels of zinc detected during the previous Phase II field investigation, and to delineate the extent of zinc contamination, if present. The analytical results of the samples collected from former borings CUB-6 and CUB-7 during the previous Phase II field program indicated that zinc was detected at levels of 123 mg/kg, 50.1 mg/kg, 61.7 mg/kg and 74.1 mg/kg in soil samples CUB-6-S1 (0-2'), CUB-6-S2 (2'-4'), CUB-7-S1 (0-2') and CUB-7-S2 (2'-4'), respectively, that exceeded the Eastern USA background level of 50 mg/kg. However, the results of the samples collected as part of the Supplemental Phase II field investigation could not confirm the presence of zinc at the elevated levels found during the previous investigation. The Supplemental Phase II sample results indicated that zinc was not detected at concentrations that exceeded the Eastern USA background level for zinc of 50 mg/kg with the exception of sample B6E0-2 (0-2'), which contained a level of 50.5 mg/kg. Also, it is important to note that zinc is not classified as a RCRA metal, that is, a metal which at elevated concentrations could classify a waste material as a hazardous waste. Furthermore, elemental zinc is not identified as a hazardous waste constituent in Appendix 23 of the NYSDEC's regulations found at 6 NYCRR Part 371. Therefore, it does not appear that this constituent warrants further investigation.

Recommendations

Although elevated levels (greater than 500 mg/kg) of TPHCs were present in soil samples, fuel-related constituents were not identified in these samples and the results of the TCLP analyses indicated that VOCs and SVOCs were not detected. Therefore, the presence of TPHCs in the soil is not fuel-related and is not an environmental concern. Thus, further investigation and/or remediation of this area is not warranted.

6.4 Hydraulic Lifts and Hydraulic Oil Tanks/Reservoirs

Conclusions

As discussed in Section 5.4, a total of five soil borings were advanced in the vicinity of the former hydraulic lifts and associated hydraulic oil tanks/reservoirs at soil boring locations HYD-1A, HYD-1N, HYD-1S, HYD-1E and HYD-1W during the Supplemental Phase II field investigation. A total of 15 soil samples were collected from these borings. All of the soil samples were analyzed by the laboratory in accordance with the protocol established for sample analysis specified in the scope of work, as described in Section 3. In addition, six of these samples were also analyzed for fuel-related constituents.

A total of 15 soil samples were analyzed for TPHCs in order to delineate the horizontal and vertical extent of TPHC contamination detected during the previous Phase II field investigation. The analytical results of samples collected during the previous Phase II field investigation indicated that TPHCs were detected at an elevated level of 924 mg/kg in soil sample HYD1-2 collected at a depth of approximately 4 feet below grade at the bottom of former excavation HYD-1. Also, the results indicated that TPHC, as 10W40 motor oil, was detected in samples HYD1-2 and HYD1-3 at concentrations of 190 mg/kg and 340 mg/kg, respectively.

The analytical results of soil samples collected as part of the Supplemental Phase II field investigation indicated that an elevated level (greater than 500 mg/kg) of TPHCs was detected in soil sample HYD1W68 (6'-8') at 507 mg/kg. This sample was collected from boring HYD-1W located approximately 5 feet west of former sample location HYD1-2. TPHCs were not detected at elevated levels in samples collected from borings HYD-1E HYD-1N and HYD-1S located approximately 5 feet east, north and south, respectively, of former soil sample location HYD-1, nor were they detected at elevated levels in samples collected from boring HYD-1A located immediately adjacent to former soil sample location HYD-1. In addition, samples HYD1A46 (4'-6'), HYD1E46 (4'-6'), HYD1S46 (4'-6'), HYD1W46 (4'-6'), HYD1W68 (6'-8') and

HYD1N46 (4'-6') were analyzed for fuel-related constituents. However, the results indicated that fuel-related constituents were not detected in these samples.

As discussed previously, the TPHC analysis was used for the purpose of screening in order to initially determine whether petroleum hydrocarbons were present in the soil and then, if present, to determine whether the petroleum hydrocarbons were related to fuels. It is important to note that elevated levels of TPHCs are not atypical of shallow subsurface soils that receive storm water runoff from areas of extensive asphalt pavement and areas underlying asphalt/macadam/concrete, as exhibited at this site. Therefore, if TPHCs were detected in a soil sample at a concentration greater than 500 mg/kg, the sample was then analyzed for fuel-related constituents. As indicated above, the soil sample results indicated that fuels were not identified. Therefore, it appears that the TPHCs detected in these samples are not associated with any fuel-related spills.

One soil sample, HYD1W68 (6'-8'), was analyzed for STARS Table 2 VOCs and SVOCs by TCLP due to the elevated level of TPHCs detected in this sample. However, the analytical results indicated that VOCs and SVOCs were not detected.

Recommendations

Since elevated levels (greater than 500 mg/kg) of TPHCs identified as motor oil are present in the soil, it is recommended that the TPHC contaminated soil in the vicinity of former soil sample locations HYD1-2 and HYD1-3 be excavated, at a minimum, to a depth of 4 to 6 feet below grade across an area of approximately 10 feet by 5 feet. The excavated material should be properly transported and disposed of off-site.

ATTACHMENT C

WASTE CHARACTERIZATION SAMPLING RESULTS

Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

Case Narrative

Project

Northrop Grumman

Custody Document F5572

Print Date: 06/27/97

Bethpage, NY

Handler: Tom Spatafora

TCLP 8240:

The following compounds were calibrated at 25, 50, 100, 150 and 200 ppb levels in the initial calibration curve:

Acetone
2-Butanone
4-Methyl, 2-pentanone
2-Hexanone

m,p-Xylenes were calibrated at 10, 40, 100, 200 and 300 ppb levels.


All other compounds were calibrated at 5, 10, 20, 50, 100 and 150 ppb levels.

Samples were quantitated using the continuing calibration standard response factor as opposed to the initial calibration average response factor.

Sample F5572-1 was analyzed twice with both results indicating a poor recovery of the Internal Standard 1,4-Dichlorobenzene-d4. Matrix interference was proven to cause the low recovery of this Internal Standard.

Reviewed by: _____



OK  7/3/97

Member

 **The
Tyree
Organization**

Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

ANALYSIS REPORT - TCLP - Metals

06/27/97

Project

Northrop Grumman

Bethpage, NY

Manager: Tom Spatafora

Custody Document F5572

Received: 06/20/97 1:10 PM

Sampled by: Des Corridon

Job Number:

Area: Adj. Area to Maint. Area

Sample 1

Custody: F5572

Collected: 06/20/97 9:15 AM

Location: R/O Container

Remarks:

Type: Grab

Matrix: Soil

Analysis Information

Analyzed: 06/24/97

Remarks:

<u>Analyte</u>	<u>Concentration</u>	<u>Units</u>	<u>Dilution</u>	<u>MDL</u>	<u>Units</u>
Arsenic	<0.039	ppm	1.11	0.039	ppm
Barium	0.299	ppm	1.11	0.019	ppm
Cadmium	<0.003	ppm	1.11	0.003	ppm
Chromium	<0.002	ppm	1.11	0.002	ppm
Lead	0.031	ppm	1.11	0.028	ppm
Mercury	0.00005	ppm	1.0	0.00005	ppm
Selenium	<0.073	ppm	1.11	0.073	ppm
Silver	<0.002	ppm	1.11	0.002	ppm

Reviewed by: 

ppb=ug/L, ug/Kg; ppm=mg/L, mg/Kg; ND=Not Detected; B=in blank; NA=Not Analyzed; MDL=Method Detection Limit; nd=Not Determined; E=Quantitated Above Calibration; IDL=Instrument Detection Limit.
Soil sample based on dry weight basis; Air MDLs based on 1 L of sample. ELAP Cert #10969.

Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

ANALYSIS REPORT - Polychlorinated Biphenyls

06/27/97

Project

Northrop Grumman

Bethpage, NY

Manager: Tom Spatafora

Custody Document F5572

Received: 06/20/97 1:10 PM

Sampled by: Des Corridon

Job Number:

Area: Adj. Area to Maint. Area

Sample 1

Custody: F5572

Collected: 06/20/97 9:15 AM

Location: R/O Container

Remarks:

Type: Grab

Matrix: Soil

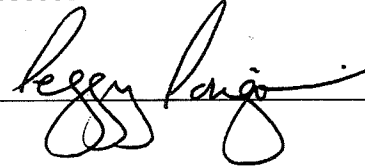
Analysis Information

Analyzed: 06/24/97

Remarks:

<u>Analyte</u>	<u>Concentration</u>	<u>Units</u>	<u>Dilution</u>	<u>MDL</u>	<u>Units</u>
PCB 1016	<12.3	ppb	1	12.3	ppb
PCB 1221	<15.5	ppb	1	15.5	ppb
PCB 1232	<63.9	ppb	1	63.9	ppb
PCB 1242	<24.9	ppb	1	24.9	ppb
PCB 1248	<29.2	ppb	1	29.2	ppb
PCB 1254	<15.1	ppb	1	15.1	ppb
PCB 1260	<26.5	ppb	1	26.5	ppb

Reviewed by: _____



ppb=ug/L, ug/Kg; ppm=mg/L, mg/Kg; ND=Not Detected; B=in blank; NA=Not Analyzed; MDL=Method Detection Limit; nd=Not Determined; E=Quantitated Above Calibration; IDL=Instrument Detection Limit.
Soil sample based on dry weight basis; Air MDLs based on 1 L of sample. ELAP Cert #10969.

Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

ANALYSIS REPORT - 8240 Compounds by EPA 8260

06/27/97

Project

Northrop Grumman

Bethpage, NY

Manager: Tom Spatafora

Custody Document F5572

Received: 06/20/97 1:10 PM

Sampled by: Des Corridon

Job Number:

Area: Adj. Area to Maint. Area

Sample 1

Custody: F5572

Collected: 06/20/97 9:15 AM

Location: R/O Container

Remarks:

Type: Grab

Matrix: Soil

Analysis Information

Analyzed: 06/23/97

Remarks: See Case Narrative

<u>Analyte</u>	<u>Concentration</u>	<u>Units</u>	<u>Dilution</u>	<u>MDL</u>	<u>Units</u>
Dichlorodifluoromethane	<0.64	ppb	1.05	0.64	ppb
Chloromethane	<0.53	ppb	1.05	0.53	ppb
Vinyl Chloride	<0.64	ppb	1.05	0.64	ppb
Bromomethane	<0.83	ppb	1.05	0.83	ppb
Chloroethane	<0.98	ppb	1.05	0.98	ppb
Trichlorofluoromethane	<0.38	ppb	1.05	0.38	ppb
Acetone	<2.67	ppb	1.05	2.67	ppb
1,1-Dichloroethene	<0.64	ppb	1.05	0.64	ppb
Methylene Chloride	<1.43	ppb	1.05	1.43	ppb
Carbondisulfide	<0.51	ppb	1.05	0.51	ppb
t-1,2-Dichloroethene	<0.56	ppb	1.05	0.56	ppb
1,1-Dichloroethane	<0.64	ppb	1.05	0.64	ppb
2-Butanone	<2.04	ppb	1.05	2.04	ppb
Chloroform	<0.47	ppb	1.05	0.47	ppb
1,1,1-Trichloroethane	<0.42	ppb	1.05	0.42	ppb
Carbon Tetrachloride	<0.4	ppb	1.05	0.4	ppb
1,2-Dichloroethane	<0.4	ppb	1.05	0.4	ppb
Benzene	<0.44	ppb	1.05	0.44	ppb
Trichloroethene	<0.47	ppb	1.05	0.47	ppb
1,2-Dichloropropane	<0.42	ppb	1.05	0.42	ppb
Bromodichloromethane	<0.47	ppb	1.05	0.47	ppb
Dibromomethane	<0.67	ppb	1.05	0.67	ppb
4-Methyl-2-Pentanone	<2.47	ppb	1.05	2.47	ppb
2-Hexanone	<2.36	ppb	1.05	2.36	ppb
c-1,3-Dichloropropene	<0.58	ppb	1.05	0.58	ppb
Toluene	<0.62	ppb	1.05	0.62	ppb
t-1,3-Dichloropropene	<0.64	ppb	1.05	0.64	ppb
1,1,2-Trichloroethane	<0.75	ppb	1.05	0.75	ppb

ppb=ug/L, ug/Kg; ppm=mg/L, mg/Kg; ND=Not Detected; B=in blank; NA=Not Analyzed; MDL=Method Detection Limit; nd=Not Determined; E=Quantitated Above Calibration; IDL=Instrument Detection Limit. Soil sample based on dry weight basis; Air MDLs based on 1 L of sample. ELAP Cert #10969.



Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

ANALYSIS REPORT - 8240 Compounds by EPA 8260

06/27/97

Project

Northrop Grumman

Bethpage, NY

Manager: Tom Spatafora

Custody Document F5572

Received: 06/20/97 1:10 PM

Sampled by: Des Corridon

Job Number:

Area: Adj. Area to Maint. Area

Sample 1 (continued)

Custody: F5572

Collected: 06/20/97 9:15 AM

Location: R/O Container

Remarks:

Type: Grab

Matrix: Soil

Analysis Information

Analyzed: 06/23/97

Remarks: See Case Narrative

<u>Analyte</u>	<u>Concentration</u>	<u>Units</u>	<u>Dilution</u>	<u>MDL</u>	<u>Units</u>
Tetrachloroethene	<0.47	ppb	1.05	0.47	ppb
Dibromochloromethane	<0.58	ppb	1.05	0.58	ppb
1,2-Dibromoethane	<0.72	ppb	1.05	0.72	ppb
Chlorobenzene	<0.43	ppb	1.05	0.43	ppb
Ethylbenzene	<0.72	ppb	1.05	0.72	ppb
m,p-xylene	<0.97	ppb	1.05	0.97	ppb
o-xylene	<0.56	ppb	1.05	0.56	ppb
Styrene	<0.6	ppb	1.05	0.6	ppb
Bromoform	<0.71	ppb	1.05	0.71	ppb
1,1,2,2-Tetrachloroethane	<0.72	ppb	1.05	0.72	ppb
1,2,3-Trichloropropane	<0.68	ppb	1.05	0.68	ppb
1,3-Dichlorobenzene	<0.57	ppb	1.05	0.57	ppb
1,4-Dichlorobenzene	<0.63	ppb	1.05	0.63	ppb
1,2-Dichlorobenzene	<0.57	ppb	1.05	0.57	ppb
1,2-Dibromo-3-chloropropane	<0.82	ppb	1.05	0.82	ppb

Reviewed by: 

ppb=ug/L, ug/Kg; ppm=mg/L, mg/Kg; ND=Not Detected; B=in blank; NA=Not Analyzed; MDL=Method Detection Limit; nd=Not Determined; E=Quantitated Above Calibration; IDL=Instrument Detection Limit. Soil sample based on dry weight basis; Air MDLs based on 1 L of sample. ELAP Cert #10969.



Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

ANALYSIS REPORT - Total Pet. Hydrocarbons 418.1

06/27/97

Project

Northrop Grumman

Bethpage, NY

Manager: Tom Spatafora

Custody Document F5572

Received: 06/20/97 1:10 PM

Sampled by: Des Corridon

Job Number:

Area: Adj. Area to Maint. Area

Sample 1

Custody: F5572

Collected: 06/20/97 9:15 AM

Location: R/O Container

Remarks:

Type: Grab

Matrix: Soil

Analysis Information

Analyzed: 06/24/97

Remarks:

Analyte

Total Recoverable

Petroleum Hydrocarbon

Concentration

355

Units

ppm

Dilution

1

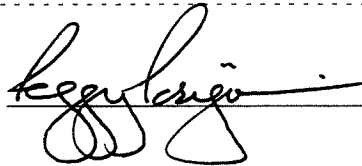
MDL

5.0

Units

ppm

Reviewed by: _____



ppb=ug/L, ug/Kg; ppm=mg/L, mg/Kg; ND=Not Detected; B=in blank; NA=Not Analyzed; MDL=Method Detection Limit; nd=Not Determined; E=Quantitated Above Calibration; IDL=Instrument Detection Limit.
Soil sample based on dry weight basis; Air MDLs based on 1 L of sample. ELAP Cert #10969.

Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale, NY 11735 · Fax: 516-249-8344 · Phone: 516-249-1456

ANALYSIS REPORT - Total Solids

06/27/97

Project

Northrop Grumman

Bethpage, NY

Manager: Tom Spatafora

Custody Document F5572

Received: 06/20/97 1:10 PM

Sampled by: Des Corridon

Job Number:

Area: Adj. Area to Maint. Area

Sample 1

Custody: F5572

Collected: 06/20/97 9:15 AM

Location: R/O Container

Remarks:

Type: Grab

Matrix: Soil

Analysis Information

Analyzed: 06/23/97

Remarks:

Analyte
% Solids

Concentration
94.9

Units
%

Dilution
1

MDL

Units
%

Reviewed by: 

ppb=ug/L, ug/Kg; ppm=mg/L, mg/Kg; ND=Not Detected; B=in blank; NA=Not Analyzed; MDL=Method Detection Limit; nd=Not Determined; E=Quantitated Above Calibration; IDL=Instrument Detection Limit.
Mer Soil sample based on dry weight basis; Air MDLs based on 1 L of sample. ELAP Cert #10969.

ATTACHMENT D

WASTE MANIFEST

A 3059



NON-RCRA HAZARDOUS WASTE MANIFEST

PS A 20506

1. GENERATOR'S NAME AND MAILING ADDRESS Northrop Grumman, Corp. Mail Stop D08-GHQ, Bethpage, NY 11715-3586		GENERATOR'S SITE ADDRESS South Oyster Bay Rd. Adjacent Area to Maintenance Area				
2. GENERATOR'S PHONE: (516) 575-8176	4. US EPA ID NUMBER NOT APPLICABLE	A. TRANSPORTER 1'S PHONE (516) 753-2145	TRANSPORTER'S PLATE NUMBER			
3. TRANSPORTER 1 COMPANY NAME Blue Water Environmental, Inc.	6. US EPA ID NUMBER NOT APPLICABLE	B. TRANSPORTER 2'S PHONE ()	TRANSPORTER'S PLATE NUMBER			
5. TRANSPORTER 2 COMPANY NAME	8. MAILING ADDRESS PHOENIX SOIL LLC 130 FREIGHT STREET WATERBURY, CT 06702	C. FACILITY'S PHONE (203)-759-0053				
7. DESIGNATED FACILITY NAME AND SITE ADDRESS PHOENIX SOIL LLC 130 FREIGHT STREET WATERBURY, CT 06702		8. MAILING ADDRESS PHOENIX SOIL LLC PO BOX 1750 WATERBURY, CT 06721-1750				
9. US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID NUMBER)		10. CONTAINERS	11. TOTAL QUANTITY	12. UNIT WT/VOL		
a. CONNECTICUT REGULATED WASTE SOLID, NONE, NONE		NO TYPE	00020	T		
b.						
c.						
D. ADDITIONAL DESCRIPTIONS FOR MATERIALS LISTED ABOVE SOIL CONTAMINATED WITH PETROLEUM HYDROCARBONS		E. HANDLING CODES FOR WASTES LISTED ABOVE INTERIM SO2 FINAL T57				
13. SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION						
14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable national government regulations and all applicable State of Connecticut laws and regulations. I certify that this material neither contains polychlorinated biphenyls (PCB's) in concentrations greater than 25 ppm, nor has been mixed in anyway with PCB's in concentrations greater than or equal to 50 ppm. I certify that the material listed above contained no free liquids at the time of loading.						
PRINTED/TYPED NAME Adam Poston		SIGNATURE <i>[Signature]</i>		MONTH 7	DAY 7	YEAR 97
15. TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF MATERIALS						
PRINTED/TYPED NAME Don Cummo		SIGNATURE <i>[Signature]</i>		MONTH 7	DAY 7	YEAR 97
16. TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF MATERIALS						
PRINTED/TYPED NAME MIKE CLINTON		SIGNATURE <i>[Signature]</i>		MONTH 7	DAY 8	YEAR 97
17. DISCREPANCY INDICATION SPACE 11(a) CORRECTED WEIGHT AS SCALED 20.24 TON'S						
18. FACILITY OWNER OR OPERATOR: CERTIFICATION OF RECEIPT OF WASTE MATERIALS COVERED BY THIS MANIFEST EXCEPT AS NOTED IN ITEM 13.						
PRINTED/TYPED NAME Stacy Hill		SIGNATURE <i>[Signature]</i>		MONTH 7	DAY 2	YEAR 97

ATTACHMENT E

DISPOSAL FACILITY WEIGHT TICKET

ATTACHMENT F

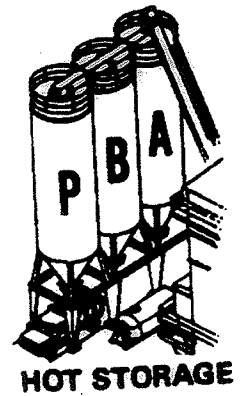
CLEAN FILL CERTIFICATION LETTER

Posillico Bros. Asphalt Co.

1610 New Highway, Farmingdale, NY 11735-1534

Plant Tel: (516) 293-2620, 2621

Office Tel: (516) 249-1872



July 17, 1997

Mr. Adam Postyn
NORTHERN GRUMMAN CORP.
South Oyster Bay Road
Bethpage, NY 11714


Reference: Adjacent Property to Vehicle Maintenance Shop
Bethpage, NY

Dear Mr. Postyn:

On June 19, 1997 Blue Water Environmental, Inc. picked up a total of 27.67 tons of select fill (ticket #60929), for your project at the above referenced location. This material, as well as all other materials for sale at Posillico Bros. Asphalt, Co. are clean materials and are free of any contamination.

If you have any questions, please do not hesitate to contact us.

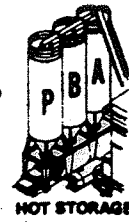
Very truly yours,
POSILLICO BROS ASPHALT CO.


Thomas R. Spatafora

TRS/kp

Posillico Bros. Asphalt Co.

1610 New Highway, Farmingdale, N.Y. 11735
Plant Tele: 293-2620, 2621



06/19/97

15:21

Ticket #
60929

Customer: 178
BLUE WATER ENVIRONMENTAL INC.
1610 NEW HIGHWAY
FARMINGDALE, NY 11735
P.O. #:

Job: 01639

Truck #
BW104

PICKUP

Products

54 SELECT FILL

Amount

27.67

Plant Name: PBA

Received By: _____

Driver Name: Don Cumbie

G = 45.02

I = 17.52

A = 27.67