

**PHASE I
ENVIRONMENTAL ASSESSMENT
of the
GEORGE AND LYNCH, INC. PROPERTY
422 WATER STREET
DOVER, DELAWARE**

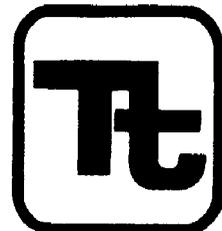
NOVEMBER 2004

Prepared for:

State of Delaware
Department of Transportation
Dover, Delaware

Prepared by:

Tetra Tech, Inc.
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R13735.23

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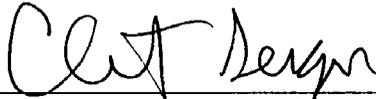
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None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

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1.0 INTRODUCTION

Tetra Tech, Inc. was retained by the Delaware Department of Transportation (DelDOT) to conduct a Phase I Environmental Site Assessment of the George and Lynch property (Tax Parcels ED2-05-07713-01-0700-00001, ED2-05-07713-01-0800-00001, and ED2-05-07713-01-0900-00001) located in Kent County, Delaware. This Phase I Environmental Site Assessment adheres to the standard practice issued by the American Society for Testing and Materials (ASTM E-1527-00) and includes: a review of the physical setting; a historical land use evaluation; a review of environmental compliance data; a site inspection; and an overall evaluation of environmental concerns, if any, related to the site.

2.0 PHYSICAL SETTING

2.1 GENERAL SITE DESCRIPTION

The subject property is located at 422 West Water Street in the Dover, Kent County, Delaware (Figure 1). George and Lynch, Inc. is one of the largest, most diverse Infrastructure Contractors serving the Mid-Atlantic region of the United States specializing in concrete construction, site work, road building, marine work, water and wastewater plants, landfill construction, etc. The subject property consists of three different tax parcels; it is approximately 3.35 acres in size and zoned commercial and residential. There are several buildings on the property used for offices and for equipment maintenance. Land use in the immediate vicinity of the site is a combination of residential and commercial.

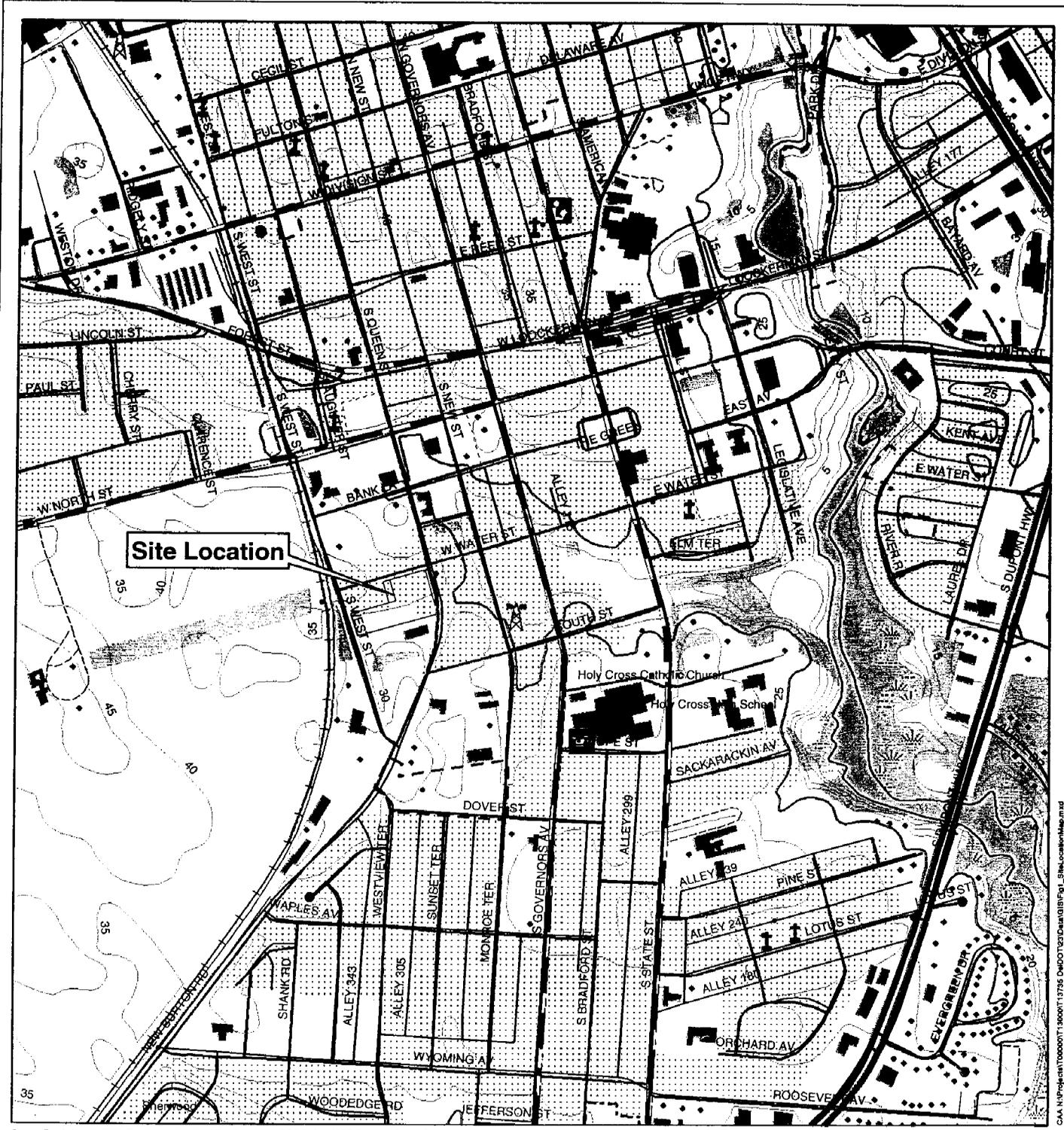
2.2 SOILS

The soils in the vicinity of the site are classified by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) as Sassafras sandy loam, 2 to 5 percent slopes (SaB); and Sassafras loam, 0 to 2 percent slopes (SfA) (USDA, 1970).

The Sassafras series consist of deep, well-drained soils on uplands. These soils formed in very old, predominantly sandy sediments. The native vegetation is chiefly mixed hardwoods, but pines are common in second-growth and cutover areas. A typical profile in a cultivated area has an 8-inch surface layer of dark grayish-brown sandy loam and a 3-inch subsurface layer of brown sandy loam. The subsoil is about 22 inches thick. The uppermost 4 inches are a dark yellowish-brown, friable heavy sandy loam. The next 10 inches are a strong-brown, friable, slightly sticky and slightly plastic sandy clay loam. The rest is a strong-brown variegated with yellowish-brown, very friable heavy sandy loam or light sandy clay loam. The substratum, to a depth of at least 54 inches, consist of yellowish-brown, loose to very friable sand or loamy sand. Sassafras soils are easy to work, and they warm up early in spring. They are suitable for most uses, but are limited by slope and the hazard of erosion (USDA, 1970).

The profile of Sassafras sandy loam (SaB) is like the one described as representative of the Sassafras series, except that in some areas it has lost a few inches of its original surface layer. There are a few widely scattered, shallow gullies and a few scattered galled spots where erosion has exposed or nearly exposed the subsoil. This is one of the most productive soils in the county, and it is the most extensive of the well-drained soils. It is intensively cropped, especially where it occurs in large areas.

Sassafras loam (SfA) has a finer textured surface layer than the soil that has the representative profile. The A horizon contains more silt, generally a little more clay, and less sand than the corresponding horizon of the Sassafras sandy loam. This soil holds a larger supply of moisture and plant nutrients than Sassafras sandy loam and is a little more productive of most crops, especially in drier seasons. Generally, the hazard of erosion is slight, and the soil has few or no limitations for most uses (USDA, 1970).



Source: Roads from DeDOT; Tax Parcels from Kent Co.; Topo from USGS DLGs; USGS State and County Boundaries from National Atlas (nationalatlas.gov).

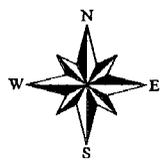


Figure 1
 Site Location Map
 George and Lynch
 Dover, Kent Co., DE

1 inch equals 1,000 feet
 0 500 1,000 2,000
 Feet

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2.3 GEOLOGY

The site is located within the Atlantic Coastal Plain physiographic province, and overlies the Tertiary Chesapeake Group. It is approximately 45 miles south of the Appalachian Piedmont Fall Zone. The Piedmont-type rocks are covered by a thick wedge of unconsolidated and semiconsolidated sedimentary rocks. The oldest and most extensive of these sediments are at the base of the Potomac Formation and are about 120 million years old. It consists of color-banded clays with interbedded sands that eroded off the ancestral Appalachian Mountains (<http://ners.noaa.gov>).

2.4 HYDROGEOLOGY

According to Delaware Department of Natural Resources and Environmental Control (DNREC), 90% of Kent County's water is supplied mainly by ground water sources; these sources are the aquifers. The Pleistocene sand and subordinate interbedded gravel, silt and clay deposits form a regional unconfined aquifer, Delaware's most important ground water resource. The Pleistocene unconfined aquifer, known as the Columbia Formation, or Columbia deposits, is a fine to coarse sand, interbedded gravel and fine silt, yellow to dark reddish-brown, locally gray or cream colored. North of Dover the Columbia contains orange to reddish brown sands.

In the Dover area sands of the Pleistocene unconfined aquifer lie directly on older Miocene sands, and the entire sequence functions as a water-table aquifer. This aquifer system is separated from the underlying Miocene artesian aquifers by silty clay of the confining beds. In some places, the sands of the Columbia, Frederica, and Federalsburg aquifers act as one geohydrologic unit. The effective thickness of this unit varies with the thickness of the individual aquifers.

Water is supplied to the subject site through the City of Dover municipal water supply system. There are no known on-site water supply wells. Database searches identified one public water supply well within a quarter mile radius south of the site and two USGS water wells approximately half a mile north and east of the site. A Public Water System is any water system that provides water to at least 25 people for at least 60 days annually. USGS wells are used to collect data on surface water and/or groundwater.

2.5 SURFACE WATER

The closest surface water body to the George and Lynch, Inc. property is the St. Jones River, located approximately half a mile east of the subject property (USGS, 1993).

The entire property is mapped outside 100-year and 500-year flood plains in an area of minimal flooding (FEMA, 2000).

2.6 WETLANDS

According to the United States Department of the Interior (DOI) National Wetlands Inventory Map of this area, there are no mapped wetlands on the property. Wetlands are present along the St. Jones River approximately half a mile east of the subject site (DOI, 1981).

2.7 WATER RESOURCE PROTECTION AREAS

According to the EDR Report, the subject site is mapped approximately $\frac{1}{8}$ of a mile north of public water supply well located on South Queen Street (PWS ID: DE0000571).

2.8 RADON

Radon is a naturally occurring colorless, odorless, radioactive gas found in soils and rocks as a result of the natural decay or breakdown of native uranium and radium. Radon may become a concern to human health if it accumulates in basements or below grade areas of structures.

Tetra Tech reviewed the radon survey conducted by the Delaware Division of Public Health (DPH) to assess the potential for radon accumulation in buildings at the site. Based on the findings of the DPH report, in Kent County, Delaware (where the subject site is located), 23 of a total of 23 radon tests performed (100 %) had a concentration of radon below the United States Environmental Protection Agency (USEPA) recommended limit of 4 picoCuries/liter (pCi/l). The national average of homes tested that had radon levels greater than 4 pCi/l was 10 percent (DPH, 1991).

The DPH Kent County area data indicate a lower than average potential for elevated concentrations of radon in buildings in the vicinity of the subject property, but does not guarantee the site to be free of radon issues. No site-specific radon data were collected as part of this assessment.

3.0 HISTORICAL EVALUATION

To characterize ownership history and historical land use, the historical site evaluation included a review of ownership records, an aerial photograph review.

3.1 OWNERSHIP RECORDS

The following ownership information was obtained from the Office of Recorder of Deeds in Dover, Delaware. The following tables summarize the deed records for the tax parcel numbers reviewed by Tetra Tech (ED2-05-077.13-01-0700-00001, ED2-05-077.13-01-0800-00001, and ED2-05-077.13-01-0900-00001). Copies of the related deeds are included in Appendix A.

Tax Parcel ED2-05-077.13-01-0700-00001

George and Lynch, Inc. (Deed Ref.: D119-321) purchased on March 3, 1995 from:
G & L Holding, Inc. (former George and Lynch, Inc.) (Deed Ref.: L41-234) purchased on November 18, 1985 from:
Robert Duane Kreider (Deed Ref.: L41-232) purchased on November 4, 1985 from:
Myrle V. Miller (Deed Ref.: Q34-3) purchased on December 19, 1979 from:

G. Leslie Gooden (Farmers Bank of the state of Delaware) (Deed Ref.: M25-238) purchased on December 9, 1968 from:
William H. Vaughn, Trustee (of Anna Trifillis) (Deed Ref.: S21-189) purchased on January 16, 1958 from:
George E. Kehoe (Deed Ref.: P19-177) purchased on May 6, 1952 from:
Charles L. Fountain and Louise E. Fountain (Deed Ref.: K19-426) purchased on February 18, 1952 from:
William M. Paskey, sheriff (Albert W. Martin and Grace R. Martin) (Deed Ref.: Q17-265) purchased on September 11, 1946 from:
John Kucek (Deed Ref.: S16-501) purchased on February 27, 1945 from:
Paul C. Cook (Deed Ref.: K15-258) purchased on October 21, 1938 from:
George Leslie Gooden (Deed Ref.: Y12-331) purchased on May 22, 1926 from:
Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill

Tax Parcel ED2-05-077.13-01-0800-00001

George and Lynch, Inc. (Deed Ref.: D119-321) purchased on March 3, 1995 from:
G & L Holding, Inc.(former George and Lynch, Inc.) – Dover Equipment and Machine Co. (Deed Ref.: K19-226) purchased on December 24, 1951 from:

Hyland P. George (Deed Ref.: R17-167) purchased on June 3, 1940 from:	Hyland P. George (Deed Ref.: V15-323) purchased on May 31, 1941 from:	Hyland P. George (Deed Ref.: F16-177) purchased on October 20, 1942 from:	Hyland P. George (Deed Ref.: K16-57) purchased on March 30, 1943 from:	Hyland P. George (Deed Ref.: M16-138) purchased on September 29, 1943 from:	Hyland P. George (Deed Ref.: R17-89) purchased on July 26, 1946 from:
Security Trust Company (Deed Ref. Y12-331) purchased on May 22, 1926 from:	George L. Gooden (Deed Ref.: Y12-331) purchased on May 22, 1926 from:	George L. Gooden (Deed Ref.: Y12-331) purchased on May 22, 1926 from:	Jennie N. Aaron (Deed Ref.: O15-497) purchased on October 16, 1939 from:	George L. Gooden (Deed Ref.: Y12-331) purchased on May 22, 1926 from:	Paul C. Cook (Deed Ref.: Y15-235) purchased on August 8, 1941 from:
Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill	Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill	Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill	George L. Gooden (Deed Ref.: C15-173) purchased on May 15, 1937 from:	Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill	Home Owners Loan Corp (Deed Ref.: W15-454) purchased on July 11, 1941 from:
			Jennie N. Aaron (Deed Ref.: W14-440) purchased on October 15, 1936 from:		Norris C. Adams, Sheriff(Manuel Buarque) (Deed Ref.: L15-12) purchased on September 9, 1938 from:
			George L. Gooden (Deed Ref.: Y12-331) purchased on May 22, 1926 from:		Home Owners Loan Corp (Deed Ref.: B15-337) purchased on October 26, 1937 from:
			Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill		James M. Green (Deed Ref.: E14-174) purchased on January 13, 1932 from:

					George L. Gooden (Deed Ref.: Y12-331) purchased on May 22, 1926 from:
					Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill

Tax Parcel ED2-05-077.13-01-0900-00001

George and Lynch, Inc. (Deed Ref.: D119-321) purchased on March 3, 1995 from:
G & L Holding, Inc.(former George and Lynch, Inc.) (Deed Ref.: L25-28) purchased on October 14, 1968 from:
Ralph Lord (Deed Ref.: L11-181) willed on September 28, 1918 from Caleb S. Pennewill

The George and Lynch, Inc. property consists of three adjacent parcels (Tax Parcels ED2-05-077.13-01-0700-00001, ED2-05-077.13-01-0800-00001, and ED2-05-077.13-01-0900-00001). Based on the deed search, George and Lynch, Inc. acquired the largest portion of the property in 1951. The other two bordering properties were acquired in 1968 and 1985. According to deeds, none of the properties were associated with any industrial or commercial facility prior to acquisition of the above-mentioned parcels.

3.2 AERIAL PHOTOGRAPHS

Land-use history of the site was evaluated by reviewing aerial photographs for Kent County, Delaware, on file with the U.S. Department of Agriculture, Kent Conservation District. Aerial photographs from 1948, 1954, 1961, 1968, 1977, 1989, and 1998 were examined and evaluated. Copies of the aerial photographs are included in Appendix B. A summary of information obtained from the aerial photographs follows:

1948 Aerial Photograph

The railroad to the west of the site is present on this photograph. The site appears to be used as industrial or commercial land. There are two buildings present on site. The rest of the lot appears to be empty except for a small pile of debris in the northeastern corner of the property. The area south and west of the site is mostly agricultural. The area northeast of the site seems to be a residential neighborhood.

1954 Aerial Photograph

No significant changes to the subject property or area of the site are noted on this photograph. This aerial shows one more structure present on the site built along the northern border of the property some time between 1954 and 1948.

1961 Aerial Photograph

No significant changes to the subject property or area of the site are noted on this aerial photograph.

1968 Aerial Photograph

This aerial shows a total of six structures present on site located on the northern part of the property. There is one small structure in the southeastern corner of the property. The site appears to be more congested with debris, parked cars, and equipment. South Queen Street was built along the eastern border of the site between 1961 and 1968. The area around the site did not change significantly.

1977 Aerial Photograph

No significant changes to the subject property or area of the site are noted on this aerial photograph.

1989 Aerial Photograph

No significant changes to the subject property or area of the site are noted on this aerial photograph.

1998 Aerial Photograph

No significant changes to the subject property or area of the site are noted on this aerial photograph.

In conclusion, based on the aerial photograph review, it appears that the property is located in an area used for commercial purposes. Prior to 1954, land use at the site appears to be residential, and there appears to be two residential buildings on the property. After 1954, land use at the site appears to be commercial, and an additional four more structure were built on the property over a period of 14 years from 1954 to 1968. By 1968 all present day structures are present on the property. The area around the site was mainly used for agricultural purposes prior to 1960s. With the expansion of the City of Dover over the years, the area became more developed and commercialized.

3.3 HISTORICAL MAP SEARCH

A historical map review was performed by Environmental Data Resources, Inc. (EDR) of their Historical Map Collection. The EDR Historical Map Collection includes maps dating back to 1866, and is the most extensive private collection of prior use maps in the United States. According to EDR, no historical map coverage exists for the subject property.

4.0 ENVIRONMENTAL COMPLIANCE

4.1 EDR DATABASE SEARCH

Tetra Tech contracted with EDR to compile a listing of environmental compliance data related to the sites and surrounding properties. Maps and a complete listing of sites are included in the EDR report in Appendix C. The major findings of the report are summarized below:

- The George and Lynch, Inc. property is not listed on any of the databases reviewed.
- The Dover Gas Light Company Newport Plant is listed on the National Priority List (NPL), the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), the State Hazardous Substance Release sites (SHWS), and the Former Manufactured Coal Gas Sites databases. The Dover Gas Light Co. site is located between $\frac{1}{8}$ and $\frac{1}{4}$ mile northeast of the subject property. Based on information provided in the EDR report, from 1859 to 1948, the Dover Light Gas Co. was used for the production of gas from coal. Much of the plant was removed, but sections of process equipment were buried on site. Shallow groundwater southeast of the gas plant was found contaminated with numerous VOCs and PAHs. A Record of Decision (ROD) was completed in August 1994, which addressed soil contamination at the location of the former coal gas plant and groundwater contamination in the Columbia Aquifer associated with the former coal gas plant.
- There are four Hazardous Substance Release Sites (Dover Light Gas Co., Capitol Cleaners Inc., former Dover Ice Plant, and City of Dover – Public Works) located between $\frac{1}{8}$ and 1 mile from the subject property. One site, Capitol Cleaners, Inc., had a violation reported in 1991; however, compliance was achieved one month after the violation was detected.
- Four Resource Conservation and Recovery Information System (RCRIS) facilities (Tooze & Easter MD PA, Manlove Auto Parts, East Coast Auto Body, and Auto Body Supply) are located between $\frac{1}{8}$ and $\frac{1}{4}$ mile south and southeast of the subject site. These facilities are small quantity generators. No violations were found for any of the four facilities.
- There are 28 leaking underground storage tank (LUST) sites located within the EDR search radius. One site (City of Dover Police) is located between 0 and $\frac{1}{8}$ mile north of the property. The site has an inactive status. Nine of the sites are located between $\frac{1}{8}$ and $\frac{1}{4}$ mile from the property, and all are inactive. Eighteen of the sites are located between $\frac{1}{4}$ and $\frac{1}{2}$ mile from the property. Two facilities (Dover Ice Company and Robbins Hose Company) are listed as active LUST sites. The rest of the sites are inactive. Inactive sites are facilities that have addressed the issues related to the leaking tanks and currently require no further action.
- Ten underground storage tanks (UST) are located within $\frac{1}{4}$ mile of the subject property.
- One Voluntary Cleanup Program (VCP) Site (Morris Work Release Center) is located within $\frac{1}{8}$ mile east/northeast of the property.
- On US Brownfield site (Capitol Scrapyard, a.k.a. Gordons Scrapyard) is located between $\frac{1}{4}$ and $\frac{1}{2}$ mile north northwest from the property.
- No other sites were listed within the respective search radii of any other state or federal databases reviewed during the EDR database search. In addition, due to poor or inadequate address information, 64 properties were not mapped. Only 24 of 64 properties are within half a mile radius from the subject property. The properties are:
 - ✓ Eight (8) UST facilities with no reported violations at any of them.
 - ✓ Eight (8) facilities with reported LUSTs. Only two sites (Rynkowski Property and Shore Stop #274) are listed as active.

- ✓ Four (4) CERCLIS No Further Remedial Action Planned (CERC-NFRAP) sites (Holy Cross Landfill, Silver Lake Park Fill Area, City of Dover – Public Works, and Skull Property).
- ✓ Two (2) Hazardous Substance Release Sites (Silver Lake Park Fill Area and South State Street Landfill).
- ✓ One (1) Voluntary Cleanup Program site (Scull Property).
- ✓ One (1) Resource Conservation and Recovery Information System small quantity generator (Speed Queen Landromat).

4.2 DNREC ONLINE UNDERGROUND STORAGE TANK FACILITY REVIEW

In addition to the EDR environmental database review, Tetra Tech reviewed the Delaware Department of Natural Resources and Environmental Control (DNREC) Underground Storage Tank Branch's Online Database of Underground Storage Tank Facilities. The findings of the DNREC database review are as follows:

- The subject site was listed on the UST database with five tanks permanently out of use. There was one waste oil spill reported in 1994, but the status of the release is inactive.
- There are 42 facilities with the USTs listed within a half-mile radius from the site.
- There are 30 properties listed as LUST facilities. The following five (5) facilities are listed as active LUST sites: Capitol Uniform & Linen Service, Robbins Hose Company, Kent County Engineering (O'Brien Building), Holden Dodge Incorporated, and Dover Ice Company. All other facilities are listed as inactive.
- No other potential sites of concern were identified during the DNREC database search.

Copies of the DNREC Facility Reports are included in Appendix D.

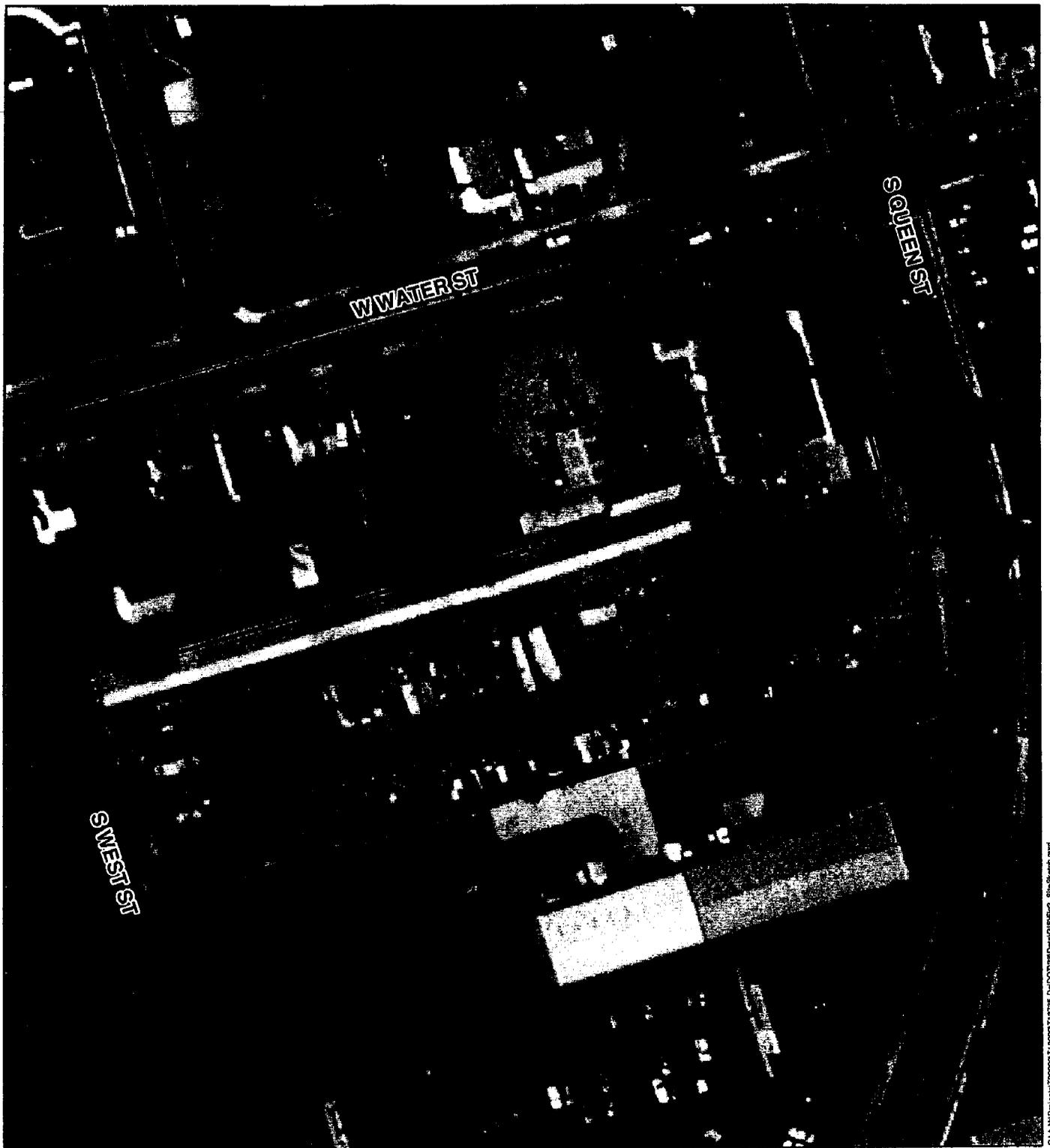
5.0 SITE INSPECTION

Tetra Tech conducted an inspection/walkthrough of the property on October 8, 2004 to identify evidence (if any) of recognized environmental conditions, such as the presence of hazardous materials or waste, and/or evidence of release of these materials (Figure 2). Paul Welsh, DeIDOT HAZMAT Coordinator, accompanied Tetra Tech personnel during the site inspection. Photographs of observed site conditions are included in Appendix E. The major observations of the site inspection are as follows.

Buildings and Physical Setting

Buildings on the property consist of an office building, two machine shops, one storage shed used for chemicals storage, one storage shed used for parts storage and a structure formerly used as a stable, which is now used for storage of various chemicals, materials and equipment.

Two machine shops and an office building are connected by means of walkways and form one big structure. One of the machine shops and the office building were built in the first half of the nineteenth century. According to Mr. Paige Lynch, who accompanied Tetra Tech, Inc. personnel during the site inspection, the second machine shop was built approximately 10 years ago and is now used for truck maintenance and

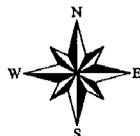
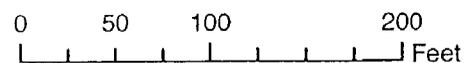


Source: Roads from DeIDOT; Tax Parcels from Kent Co.; 1:2400 scale 2002 Ortho Image originated by EarthData International of Maryland, LLC, obtained with permission through DeIDOT.

CAA:\Projects\100000115000119738_DeIDOT\250\SiteSketch.mxd

Figure 2
 Site Layout Map
 George and Lynch
 Dover, Kent Co., DE

1 inch equals 100 feet



Legend

 Site Outline



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equipment cleaning purposes. A small office area was noted inside the machine shop. The older of the two machine shops has historically been used as a paint shop, but it was later converted into a welding shop and a break room. The attic above the break room is currently used for storage of maintenance and kitchen supplies such as paints, plastic cups, paper plates, paper towels, etc. There is also a small room used for parts and tools storage in the old welding shop area. Both buildings are made of concrete blocks with concrete floors. A small spill of machine oil or some other chemical was noted in the work trench of the machine shop. The spill area was covered with an absorbent material and appeared contained inside the trench. The main office building looked like it has been recently renovated and well maintained. The offices had a wooden paneling on the walls, acoustic ceiling tiles and carpeted floors.

The new chemicals storage shed located west of the machine shop and an office building consists of concrete blocks and was built approximately six years ago. It has a solid concrete floor with no floor drains. Most of the chemicals and supplies are stored on metal shelves in cardboard boxes. There are car batteries, fire extinguishers, various lubricants, chlorinated chemicals, and sprays. The parts storage shed was built within the same timeframe as the office building and is made of wood. All parts are organized by type and stored on the wooden shelves. No chemicals were noted inside this structure.

The last structure on site is an old stable made of wood. During the yearly years of the nineteenth century the work horses that pulled the equipment were kept in that area. It is now used for storage of various landscaping supplies, waste products, old parts, tires and equipment. The eastern corner of the stable was transformed into a small waste oil, lubricant, and hydraulic fluids storage area.

The site is completely fenced, and current land use of the property is commercial. Vegetation at the property consists of small areas of grass and weeds.

Utilities

The property is serviced by overhead electric power and public water supply. According to Mr. Lynch, the occupied buildings are heated by oil from an AST in the basement. One floor drain was noted inside the old machine shop. The drain was covered with a piece of plywood in order to prevent water seepage. It is tied into the storm water drain. No monitoring wells were observed during the site inspection.

Chemical and Waste Storage

Six ASTs are present on the subject property. One AST is located in the basement of the office building. This AST is used for heating the office area and machine shops. Five ASTs are located in the bulk oil storage area in the eastern part of the former stable. Four of the ASTs are 1,000-gallon tanks filled with fuel oil and motor oil. The sixth AST is a 2,000-gallon tank used for waste oil storage. All ASTs in the bulk oil storage area are sitting on the ground and do not have spill protection. There are also large quantities of waste oil and hydraulic fluid stored in 55-gallon drums in the ASTs area. Two 55-gallon drums of antifreeze and a large number of 5-gallon pails with lubricants, paints, and waste oil are stored in a vicinity of the ASTs. According to the owner, the waste oil AST is checked on a regular basis, and pumped out when necessary by an outside contractor. Some staining was noted around the ASTs.

Also, a number of 55-gallon drums and 5-gallon pails with paint, waste oil and greased metal parts and bolts were noted throughout the equipment supplies and equipment storage area of the stable and its vicinity. Several 55-gallon drums, also filled with waste machine oil, were noted outside the machine shop. One 55-gallon drum with biodegradable soap, used for parts and trucks cleaning, was noted inside the welding shop area. A few nitrogen and compressed gas cylinders were noted outside the welding shop.

In conclusion, the historic use of the subject property as paint and machine shops, and the use and storage of significant quantities of petroleum-based products at the site are recognized environmental conditions as defined by ASTM E-1527-00. The historic use of the property as a machine shop creates a potential for soil and groundwater contamination in the vicinity of the parts cleaning area of the site. In addition, the storage of petroleum compounds throughout the site creates a potential for soil and groundwater contamination due to the cumulative effects of leaks and spills from the various storage containers and aboveground storage tanks.

6.0 ENVIRONMENTAL ASSESSMENT AND SUMMARY

Tetra Tech conducted a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E-1527-00 of the George and Lynch, Inc. property located in Dover, Kent County, Delaware. This assessment revealed the following recognized environmental conditions, as defined in ASTM E-1527-00, in connection with the property:

- The long-term historic use of the subject property for vehicle and construction equipment maintenance, the presence of a machine shop, and the use and storage of significant quantities petroleum-based products at the site are recognized environmental conditions. The historic use of the property as a paint and machine shop creates a potential for soil and groundwater contamination from cleaning solvents and metals in the vicinity of the parts cleaning area of the site. In addition, the storage of petroleum compounds and the staging of construction equipment throughout the site create a potential for soil and groundwater contamination due to the cumulative effects of leaks and spills from the various storage containers and construction equipment.
- Six ASTs are present at the property. Four of the USTs are located in the bulk oil storage area and, according to Mr. Paige Lynch, are filled with machine oil. One 2,000-gallon aboveground storage tank located next to oil tanks is filled with waste oil. The sixth AST is located in the basement of the office building. No spill protection was noted in the ASTs area of the property. There is a potential for releases due to spilling during filling operations or small leaks in the ASTs.
- Due to the age of the office building and one of the machine shops on site, asbestos-containing materials are presumed to be present. The interior of those structures was not reviewed. Other structures were either made of wood, or built about 10 years ago. Prior to demolition or remodeling activities, National Emissions Standard for Hazardous Air Pollutants (NESHAP) requires bulk samples to be collected in impacted areas of buildings and analyzed for asbestos content.

Recommendations

Based on the findings of the environmental assessment, Tetra Tech recommends the following:

- Perform a Phase II Environmental Investigation at the site to determine if soils and groundwater at the site have been contaminated as a result of the historical commercial use of the property.
- Collect bulk samples of the office building, as well as the machine shop, materials for analysis of asbestos content and lead paint. This would allow DeIDOT to incorporate the proper specifications and health and safety measures during any future building demolition activities.

7.0 REFERENCES

- Federal Emergency Management Agency (FEMA), 2000. Flood Insurance Rate Map of New Castle County, Delaware and Incorporated Areas. Map No. 10003C0155 G, Panel 155 of 450. Map revised October 6, 2000.
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