

Phase I ESA
Former Davis Pipe Property
250 Birch Street
Blountville, Tennessee

H&H Project No. DPC-001

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**Phase I ESA
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1.0 Findings, Opinions, and Conclusions

Hart & Hickman, PC (H&H) conducted a Phase I Environmental Site Assessment (ESA) of property located at 250 Birch Street in Blountville, Tennessee. It is intended that this report be used in conjunction with a previous Phase I ESA (Appendix A) conducted at the site in November 2004 by Soils and Materials Engineering (S&ME). This report documents changes in site conditions since the previous 2004 Phase I ESA and to reveal previously undiscovered or new information, if any, regarding environmental conditions on the subject site. Information provided in both the previous ESA report and this report should be reviewed to evaluate existing environmental conditions on the subject site. This ESA was conducted in general conformance with the scope and limitations of ASTM-E 1527-05. Any exceptions to, or deletions from, this practice are described in this report.

The November 2004 Phase I ESA identified the recognized environmental conditions (RECs) noted in connection with the subject property. H&H's 2007 observations are also noted where applicable.

- Historical use of the site as an industrial facility including the utilization, storage, and disposal of hazardous material/waste. The regulatory file data reviewed documented a pattern of improper disposal and/or handling of hazardous waste (i.e. pickling liquids) including documented soil and ground water contamination. Based on the history of site usage, the historical industrial use of the site is considered an REC.

- Oily staining was observed on floors in the majority of the site buildings (Buildings 2, 3, 5, 6, 7, 8, and 9) and in some of the temporary structures (T3, T6, T7 and T8). The oily

staining was observed on concrete floor slabs, in gravel pits or openings in the floor slab, and in some cases in direct contact with the soil. Due to the extent and location of staining on-site, the presence of oily staining is considered an REC.

- Pooled liquids were observed on the floors in several locations within site buildings (Buildings 2, 8 and 9) including pooled liquids in areas where the floor slab has been removed. The liquids appeared to be a combination of substances including oils, lubricants, petroleum-contaminated rainwater, and rainwater. Due to the extent and locations, the presence of pooled liquids is considered an REC.
- Presence of a RCRA solid waste management unit (SWMU #48, former pickling pit now capped with asphalt, Appendix A Photo #7) currently being regulated by the Tennessee Department of Environment and Conservation (TDEC) under a Post Closure Permit. A review of the TDEC records document that hazardous waste material is covered by an asphalt cap. This waste material has been closed-in-place at the subject site and ground water contamination has been documented at the site. The presence of SWMU #48 serves as a potential source of contamination to the ground water and/or soil. Consequently, the presence of this SWMU is considered an REC.
- Presence of debris and other waste material scattered in developed and undeveloped portions of the property. The debris includes paper items, metal pieces, used tires, pallets, used rubber gloves, rubber parts, and other miscellaneous garbage.

Based on S&ME's description of the scattered debris areas, H&H does not consider these areas to be RECs because the discarded solid wastes that were identified are not hazardous materials or wastes. Scattered debris should be removed and properly disposed as a matter of proper housekeeping.

However, the presence of used tires and other metal parts in the vicinity of the Fabrication/Maintenance Shop (Building 3) suggests that vehicle maintenance activities

were conducted in this building; thus this area is considered an PEC (potential environmental concern).

- Presence of open floor drains, subsurface piping, and openings in concrete floor in several buildings (Buildings 2, 3, 6, 7 and 9). Staining was observed in the vicinity of these potential conduits indicating that liquids of an oily nature were likely discharged into these openings. Based on the limited assessment data available and site observations, the presence of these floor drains, subsurface piping and other floor openings is considered an REC.
- Storage of numerous drums with various contents was observed in multiple locations on the interior and exterior of the site. Some drums were labeled, others were not. One temporary structure (T7) appears to have been constructed as a drum containment area. Approximately fifty drums were stacked in the Old Warehouse (Building 7). Based on the quantity and site observations, the presence of numerous drums is considered an REC.
- Presence of several small-volume chemical containers with various contents. Some of the containers were not labeled. Other containers were labeled as containing oils, lubricants, solvents, paint thinners, and acids. The physical condition of the containers varied with some damaged, unsealed or tipped containers observed. The presence of these containers of chemicals is considered an REC.

Based on S&ME's description of the various containers, H&H does not consider all of the occurrences to be RECs and limits the REC designation to damaged or leaking drums and drums of unknown contents.

- Presence of sumps containing liquids in Buildings 2, 3 and 9. The sumps were constructed of concrete, clay or gravel. The liquids observed in the sumps appeared to be black to brown and oily in nature. The presence of these sumps is considered an REC.

H&H did not identify additional RECs that were not already identified in the previous 2004 Phase I ESA, with the exception that the four SWMUs identified by USEPA and TDEC to require further Phase I RCRA Facility Investigation (RFI) and the Post-Closure Permit violation were not previously listed as RECs and are considered by H&H to be RECs.

- The SWMUs identified by EPA and TDEC as requiring a Phase I RFI are:
 - SWMU #11 (Diked storage area, see Appendix A Photo #8);
 - SWMU #12 (Drum storage area #1);
 - SWMU #45 (Former acid disposal / pickling pit); and
 - SWMU #47 (Roll-off container storage area).

A Phase I RFI Work Plan dated December 14, 1998 was prepared for DP Holding Inc. by Koester Environmental Services, Inc. No documentation was identified during the file review that indicated the proposed Phase I RFI Work Plan was ever implemented.

- In addition, TDEC's files indicate Davis Pipe is currently in violation of certain terms of the Post Closure Permit including: 1) failure to conduct ground water monitoring; 2) failure to maintain the asphalt cap; 3) failure to maintain financial assurance; 4) failure to renew the Post Closure Permit; and 5) non-payment of permit fees.

H&H also identified several potential environmental concerns (PECs) that are listed below.

- Within the x-ray development room of the x-ray/hydro testing building (Building #4), fixer and developer chemicals are present along the northern wall and in the northeast corner. Additionally, a silver recovery unit and associated used filters are located along the eastern wall of the room. Fluids were identified in the chemical containers and the silver recovery unit, but no floor staining or leaking fluids were observed in these areas.

Given the potentially hazardous substances stored in the x-ray development room, H&H considers this area to be a potential environmental concern (PEC).

- Reportedly, the primary production building (Building #2) utilized a septic tank prior to 1991, and the main office (Building #1) and x-ray/hydro testing building (Building #4) are currently connected to septic tanks. The exact locations of these septic tanks are not known. Given the historical use of hazardous and/or petroleum substances in these buildings and because septic tanks and associated drain fields provide a potential pathway for contaminant transport to the subsurface soils and ground water, H&H considers the septic systems to be potential environmental concerns (PECs).
- The presence of used tires and other metal parts in the vicinity of the Fabrication/Maintenance Shop (Building 3) suggests that vehicle maintenance activities were conducted in this building; thus this area is considered an PEC (potential environmental concern).

Recommendations

H&H recommends that Phase II sampling and analysis be conducted to address the REC and PEC areas outlined above. The Phase I RFI Work Plan, DP Holding, Inc. dated December 14, 1998 may be useful in developing a site sampling and analysis plan to address the SWMUs identified by USEPA and TDEC to require further assessment.

2.0 Introduction

Hart & Hickman, PC (H&H) conducted a Phase I Environmental Site Assessment (ESA) of property located at 250 Birch Street in Blountville, Tennessee. It is intended that this report be used in conjunction with a previous Phase I ESA (Appendix A) conducted at the site in November 2004 by Soils and Materials Engineering (S&ME). The purpose of this report is to document changes in site conditions since the previous 2004 Phase I ESA and to reveal previously undiscovered or new information, if any, regarding environmental conditions on the subject site. Information provided in both the previous ESA report and this report should be reviewed to evaluate existing environmental conditions on the subject site.

The scope of the Phase I ESA included review of the previous Phase I ESA report, attainment and review of an updated environmental database search, reconnaissance of the site and surrounding area, review of regulatory files, and interviews with individuals familiar with the subject site. This Phase I ESA is intended to meet the requirements of the United States Environmental Protection Agency (EPA) Sullivan County Tennessee Brownfield Assessment Grant associated with the subject property.

Site Description

The subject property consists of approximately 60 acres of land and improvements owned by NII Real Estate Holding Corporation. The site contains nine permanent industrial buildings and eight temporary structures. Open areas are surfaced by grass, gravel, asphalt, and concrete or are wooded. A site location map is included as Figure 1, and a site map is included as Figure 2.

The site was formerly occupied by Davis Pipe (a.k.a. Davis Pipe and Metal Fabricators, DP Holdings, Premier Pipe and Tube Group) who utilized the facility for fabrication of welded stainless steel and alloy pipe and fittings. Davis Pipe reportedly began site operations in 1978 and conducted activities including fabrication of metal piping, pipe cutting, annealing, pickling, welding, storage of raw production materials and finished product, and shipment of finished

product and waste material. Regulatory inspection records document the use of methyl ethyl ketone, hydrofluoric acid, nitric acid, caustic soda, naphtha, equipment oil, and lubricants.

The subject site is currently vacant. Heavy metal fabrication machinery, a heat-treating furnace, acid vats, water treatment equipment, wastewater treatment tanks, office supplies, office furniture, storage containers (i.e., roll-off boxes and drums), unused chemicals, and general debris still remain throughout the facility.

The surrounding area in the vicinity of the subject site contains mixed use development including industrial, commercial, and residential properties. Surrounding properties identified during the 2004 Phase I ESA are similar to the present. Utilities provided to the site and surrounding properties include water, sewer, natural gas and electricity. Based upon an interview with a former site employee, some of the site buildings may have historically been, or currently are, connected to septic treatment systems.

3.0 Scope, Limitations and Reliance

3.1 Purpose

The purpose of this assessment was to identify, to the extent feasible pursuant to the processes prescribed herein, recognized environmental conditions in connection with the property. Such environmental conditions include the presence or likely presence of hazardous substances or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products in structures on the property, or into the ground, ground water, or surface water on the property.

3.2 Methodology Used

This Phase I ESA was performed in general conformance with ASTM procedure E 1527-05, Standard Practice for ESAs: Phase I Environmental Site Assessment Process. The assessment process consisted of four tasks:

- records review;
- interviews with the current owner/occupants of the property and with local government officials regarding the property (as appropriate);
- site reconnaissance; and
- evaluation and report preparation.

3.3 Limitations and Exceptions of Assessment

The following items were beyond the scope of this assessment and thus were not addressed in this report:

- cultural, historical, and archaeological sites survey;
- radon testing;
- responsibilities of the User of this Phase I ESA to meet all appropriate inquiry as defined in ASTM E1597-05 (the User Questionnaire is provided in Appendix D);
- asbestos or lead-based paint survey;

- drinking water testing;
- rare and endangered species survey; and
- wetlands verification/delineation.

3.4 Special Terms and Conditions

The conclusions presented in this report are professional opinions, based solely upon visual observations of the site and vicinity and our interpretation of the available historical information, documents reviewed, and analytical results as described in this report. They are intended exclusively for the purpose outlined herein and at the site location and the project indicated.

This report is intended for the sole use of Sullivan County Economic Development. The report may not be relied upon by other parties without the express written consent of Sullivan County Economic Development and H&H. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or re-use of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user. It should be recognized that this study was not intended to be a definitive investigation of contamination at the subject property. It is possible that currently unrecognized contamination may exist at the site. Opinions and recommendations presented herein apply to site conditions existing at the time of our investigation and those reasonably foreseeable. They necessarily cannot apply to site changes of which H&H is unaware and has not had the opportunity to evaluate.

4.0 Previous Phase I ESA

4.1 RECs Identified by the 2004 Phase I ESA

The RECs and PECs identified in the November 2004 Phase I ESA in connection with the subject property are presented in Section 1.0.

4.2 2004 Phase I ESA File Review Findings

S&ME reviewed records on file with the TDEC at the Johnson City Environmental Assistance Center. The TDEC files documented a history of environmental complaints, violations and concerns related to the Davis Pipe site from 1978 to the present. Records dating back to 1983 allege that pipes from two acid tanks drain discharged into Evans Creek. The records further indicate that spent pickling liquid (RCRA hazardous waste K062) was utilized at the Davis Pipe facility as a dust suppressant, dumped into Evans Creek, or dumped into on-site sumps.

Records indicated that in 1984, Davis Pipe began taking steps in coordination with TDEC to cease operation on the old pickling building and cease disposal of pickling liquids in the floor pit. According to TDEC records, the pickling building was demolished and the area including the pit was sealed with asphalt. In 1989, pickling operations were moved to the new pickling building (Building 9). Records document that an assessment of the site was conducted as a part of the closure of the old pickling building.

TDEC classified the old pickling area closed in September 1992 and issued a Post Closure Permit #21 on September 30, 1993. The permit required Davis Pipe to maintain the asphalt cap and monitoring system, and to conduct semi-annual ground water monitoring for arsenic, cadmium, chromium, nickel and lead.

Numerous monitoring wells have been installed and sampled at the facility beginning in 1989. The exact number of wells currently remaining at the site is not known, as many have been

damaged or removed by soil excavation activities. Monitoring data documents the presence of soil and ground water contamination in the vicinity of the old pickling building.

TDEC records document that there were 48 SWMUs identified on the subject site. After further reevaluation and confirmatory sampling, TDEC determined that four of the 48 SWMUS would require further assessment in the form of a Phase I RCRA Facility Investigation (RFI). In general, contaminants within the SWMUs were either petroleum hydrocarbons or metals typically found in near surface soils. Refer to Section 6.2 for further discussion of SWMU-related activities.

Based upon the file review conducted at the time of the 2004 Phase I ESA, the site was in violation of TDEC requirements relating to the site's Post Closure Permit. Refer to Section 6.1 for the current status.

5.0 Environmental Database Search

H&H utilized Environmental Data Resources (EDR), an environmental database search service, for an updated review of Federal and State environmental database files regarding regulated facilities within ASTM search radii. A copy of the January 31, 2007 EDR database report is included in Appendix B.

Subject Property

The subject site is identified by EDR on the following databases: Facility Index System (FINDS), Resource Conservation and Recovery Act Registered Large or Small Quantity Hazardous Waste Generators (RCRA-LQG), RCRA Corrective Action (CORRACTS), and RCRA non-CORRACTS Permitted Transportation, Storage, and Disposal Facility (RCRA-TSDF). The EDR report for the 2004 Phase I ESA identified the site on the above databases and, in addition, the Toxic Release Inventory System (TRIS) database.

Off-Site Database Listings

Carr Brothers Construction Company, located approximately 1,300 ft west and topographically upgradient of the subject site at 136 Birch Street, is identified by EDR as a Fund Eligible Leaking Underground Storage Tank Site (LUST) and was discussed in the 2004 Phase I ESA. Due to the separation distance, and topographic gradient, the potential for impact to the subject property from this site appears to be low. The other off-site facilities listed in the database report that are located in the vicinity of the subject property are judged to have a low potential for impact to the subject property due to separation distance, the topographic relation of the listed facility to the subject site, and/or the lack of a reported incident.

Unmappable Sites

H&H reviewed a list of unmappable sites included with the EDR database report. Unmappable sites do not contain sufficient address information in the environmental databases to plot them on a map. H&H reviewed the area near the subject property for these unmappable sites and found the *Service America Corporation* facility (identified by EDR as a LUST site) located

approximately 660 ft west and topographically upgradient of the subject property. Additional information concerning the *Service America Corporation* site was presented in the 2004 Phase I ESA. TDEC required an assessment of soil and ground water, which did not document the presence of soil or ground water contamination at the *Service America Corporation* site. TDEC, subsequently, required four quarterly monitoring events be conducted to confirm the assessment data. Based on a review of the available data, TDEC issued a no further action letter to *Service America Corporation* in December 1994. Based on this information, the potential for impact to the subject property from this neighboring site is judged to be low. None of the remaining EDR unmappable sites were identified near the subject property.

6.0 File Review

6.1 Updated File Information

H&H conducted an updated file review at the TDEC Johnson City Environmental Assistance Center on January 24, 2007. Additionally, Ms. Jocelyn Bates with TDEC Division of Solid Waste Management (DSWM) in Nashville, TN also provided H&H with recent semi-annual groundwater sampling results. A summary of the historical TDEC files was presented in the 2004 Phase I ESA. H&H noted the following updates in the regulatory documents:

2006 Ground Water Monitoring Data

The TDEC Department of Solid Waste Management (DSWM) authorized Quantum Environmental & Engineering Services, LLC (QE²) to conduct post-closure maintenance and ground water sampling activities at the site for a two-year period beginning in June 2005. The approved activities include semi-annual groundwater sampling activities in 2005 and annual ground water sampling in 2006. Site monitoring wells BG-7, MW-5, MW-109 and MW-125 were targeted for sample collection for select metals. A summary of the most recent 2006 well sample analytical data is provided below, with concentrations exceeding TDEC ground water standards shown in bold text.

Well	Arsenic	Cadmium	Chromium	Lead	Nickel
BG-7	0.022	BDL	BDL	0.0066	BDL
MW-5	0.16	0.0068	0.19	0.25	24
MW-109	0.021	BDL	BDL	BDL	BDL
MW-125	0.031	0.016	BDL	0.068	0.046
MCLs	0.05	0.005	0.1	0.015	0.1

Note: All concentrations are in mg/l.

Total metals including arsenic, cadmium, chromium, and lead were detected in MW-5 at concentrations exceeding the EPA maximum concentration limits (MCLs) and nickel levels were elevated. Cadmium and lead levels also exceed the MCLs in MW-125. Excerpts from the ground water monitoring reports are provided in Appendix D.

SWMU #48 (Old Pickling Pit)

From 1977 to 1984, Davis Pipe treated its pickling liquor dragout and rinse water in a limestone-lined pit inside the old pickling building. Powdered lime was added to neutralize the solution. In the spring of 1984, Davis Pipe with approval from TDEC initiated a project to close the pit. The open work shed over the pickling operation was removed. The entire area of the pickling operation was covered and sealed with asphalt. The area was then sealed with Conokote coal tar emulsion sealer. Davis Pipe then constructed an acid-resistant concrete sump to collect dragout and rinse water. The existing open shed was removed and a new building was constructed over the sump area.

The closed-in-place pit (Photo #7, Appendix A) may contain pickling liquor, sludge formed by neutralizing the dragout and rinsewater, limestone, and powdered lime. Spent pickle liquor and the sludge from the pickling operations are classified as a K062 listed hazardous waste. In addition, both may exhibit the EPA characteristic of corrosivity (D002). The exact volume of the waste covered by the asphalt cap is not known; however, a volume was estimated from the dimensions of the pit (4 ft width by 30 ft length by 4 ft depth) to be approximately 18 cubic yards.

Closure of SWMU #48 was completed by September 1992. Post-closure care of SWMU #48 is regulated by Tennessee Hazardous Waste Permit #21, which became effective September 30, 1993. Post-closure care requirements include maintenance of the asphalt cap, maintenance of the ground water monitoring system and ground water monitoring to continue for 30 years after the closure date, and financial assurance that must in an amount at least equal to the post-closure cost estimate.

Based upon the review of an *Operation and Maintenance Inspection Report* prepared by TDEC in July 2005, the Division of Solid Waste Management has assumed the responsibility of post-closure care at the site. An inspection of the facility was conducted by TDEC to evaluate the operation and maintenance of the ground water monitoring system and the sampling and analysis program. The site monitoring wells were found to be locked and in good condition. All wells

targeted for sampling appeared capable of yielding ground water samples. Also, during this inspection, it was noted that two large cracks were present on the asphalt cap in need of repair. A QE2 correspondence dated February 1, 2007 reports that the cracks in the asphalt cap were repaired with sealer/filler.

Davis Pipe is currently in violation of certain terms of the Post Closure Permit including: 1) failure to conduct ground water monitoring; 2) failure to maintain the asphalt cap; 3) failure to maintain financial assurance; 4) failure to renew the Post Closure Permit; and 5) non-payment of permit fees.

6.2 Summary of Historical SWMU-Related Assessment

H&H obtained copies of pertinent RCRA records at TDEC's regional office in Johnson City. The information below provides a synopsis of SWMU-related determinations as H&H has interpreted from these records.

- 48 SWMUs were originally identified during the RFA;
- 35 of the 48 SWMUs were determined by TDEC to not require further action, evidently with no sampling required;
- 12 of the remaining 13 SWMUs underwent Confirmation Sampling;
- 8 of these 12 were designated as requiring no further action;
- 4 of the remaining 5 SWMUs were determined to required an RFI; and
- 1 SWMU (and the last of the 48 SWMUs) was closed in place and is being monitored under a Post-Closure Care Permit.

1988 RFA Synopsis

A RCRA Facility Assessment (RFA) was conducted on the site in 1988 by USEPA and TDEC resulting in the identification of 21 SWMUs having a potential for the release of hazardous waste and/or hazardous constituents. Records indicated that 12 of the 21 SWMUs were being addressed under a RCRA Closure Plan and Post Closure Permit Application. Five SWMUs did

not require further investigation, while four SWMUs did require further investigation to confirm whether a release has occurred. The SWMUs requiring further assessment included: 1) SWMU #12, raw material drum area, southwest of Plaza Trimming Building; 2) SWMU #13, raw materials drum area, southwest of Main Production Building; 3) SWMU #15, drum shipment point at northwestern gate; and 4) SWMU #18, storage yard near northwestern Birch Street gate.

1993 RFA Synopsis

Records indicate a second RFA was conducted at the facility by TDEC in July 1993 and 48 SWMUs were identified. It is not evident why the second RFA was conducted and the 1993 RFA appears to make no reference to the 1988 RFA. Some of the 48 SWMUs identified in the 1993 RFA are similar to some of the 21 SWMUs identified in the 1988 RFA and some are different SWMUs altogether. All of the 1993 SWMU numbers are different than the 1983 SWMU numbers.

Consistent with the bulleted synopsis above, this 1993 RFA report specifies that 12 of 48 identified SWMUs be further addressed by confirmatory sampling. This work was conducted under a Confirmatory Sampling Work Plan (CSWP) approved by TDEC in September 1997. The approved CSWP was implemented by Koester Environmental Services, Inc. in February 1998. Each SWMU was assessed by soil sampling and analysis.

Consistent with the bulleted synopsis above, records indicate that USEPA and TDEC reviewed a June 1998 Revised Confirmatory Sampling Report concluding that four SWMUs required further action in the form of a Phase I RCRA Facility Investigation (RFI) (one of these four also was designated for limited soil removal), and eight SWMUs (#s 10, 13, 25, 30, 36, 37, 43 and 46) required no further action.

The four SWMUs requiring a Phase I RFI are:

- SWMU #11 (Diked storage area with limited soil removal);
- SWMU #12 (Drum storage area #1);
- SWMU #45 (Former acid disposal / pickling pit); and

SWMU #47 (Roll-off container storage area).

A Phase I RFI Work Plan dated December 14, 1998 was prepared by KES. No documentation was identified during the file review that indicated the proposed Phase I RFI Work Plan was ever implemented.

6.3 Historical Ground Water Sampling and Analysis

A total of approximately 35 monitoring wells have been installed at the site. Several of these wells have since been destroyed by city utility work or removed due to soil excavation activities. Site ground water monitoring began in the vicinity of the old pickling pit in February 1987 resulting in the detection of elevated levels of fluoride, lead, nitrate, nickel and chromium. Additional monitoring wells were installed in this area to delineate the extent of contamination. Two deeper wells were installed in the shale bedrock. Sampling and analysis of ground water from the deeper wells did not indicate vertical movement of the contaminants. Historical ground water data have shown a steady decline in analyte concentrations following the capping of the old pickling pit and/or cessation of site manufacturing operations.

Currently, site ground water sampling and analysis is conducted by TDEC or its contractor. Four monitoring wells are sampled including BG-7 (background well), MW-5, MW-109 and MW-125. Recent analytical data (see Section 6.1 and Appendix D) has shown that total metals including arsenic, cadmium, chromium, and lead were detected in MW-5 at concentrations exceeding the EPA maximum concentration limits (MCLs) and nickel levels were elevated above the EPA secondary MCLs. Cadmium and lead levels also exceed the MCLs in MW-125.

7.0 Interviews

Property Owner, Site Manager, and Occupant Interviews

The representative of the current property owner (NII Real Estate Holding Corporation) is deceased. Consequently, H&H was not able to conduct an interview with the property owner who potentially may have possessed invaluable historical knowledge of the subject property.

H&H interviewed Mr. Jonathan Williams, a former Davis Pipe employee, on February 7, 2007 to discuss potential environmental concerns on the subject property. A Telephone/Interview Discussion Log is included as Appendix E. Mr. Williams indicated he was the Environmental Manager for Davis Pipe from approximately 1988 to 2003. Mr. Williams stated that during his employment at the facility, solvents, hydraulic oils, and acids were utilized at the facility, and used oil and wastewater were generated at the facility. Mr. Williams indicated that used oil was placed in the drum storage shed (temporary structure T7) prior to recycle/disposal by a local recycler, and parts washer solvents were maintained by Safety Clean. Additionally, Mr. Williams stated that wastewater was treated on-site with lime prior to entry into the public sewer system, and/or was taken off-site for proper disposal.

Mr. Williams stated that to the best of his knowledge there were no aboveground storage tanks, underground storage tanks, or water supply wells on the subject property. He indicated that the concrete saddle observed near the primary production building (Building #2) previously held a compressed gas cylinder for welding purposes. Mr. Williams believes the piping observed near the concrete saddles are former supply lines associated with the former compressed gas cylinder.

Mr. Williams also stated that the primary production building (Building #2) utilized a septic tank prior to 1991, and the main office (Building #1) and the x-ray/hydro testing building (Building #4) are currently connected to septic tanks. He did not know where the septic tanks are located.

The facility is currently inactive and vacant; therefore, there are no occupants available for an interview.

User Questionnaire

A Phase I ESA User Questionnaire was completed by Mr. Jack Lawson of Sullivan County Economic Development (Appendix E). The questionnaire indicates that the User is aware of the site's regulatory history yet is not aware of any environmental cleanup liens, property use limitations, or low market values because of contamination, spills, or environmental cleanup in connection with the property.

H&H interviewed Mr. Andy Shivas with Tennessee Department of Environmental Control RCRA Program and was informed that the subject property is encumbered by permit restrictions including an engineering control (i.e. asphalt cap over the former pickling pit) and limitations of ground water usage, and that financial assurance exists for correction action for SWMU #48 (the former pickling pit now capped by asphalt).

8.0 Site and Area Reconnaissance

A visual reconnaissance of the site was conducted by Mr. Stephen Libbey of H&H on January 24 and 25, 2007. Mr. Jack Lawson with Sullivan County Economic Development provided Mr. Libbey access to the site and a brief tour of the facility. Following Mr. Lawson's departure, Mr. Libbey conducted a reconnaissance of the open areas of the property and each on-site building. Site photographs documenting the observed conditions discussed below are included in Appendix C. The site was vacant and similar conditions were observed by H&H as were described in the November 2004 Phase I ESA with the following exceptions:

- Within the x-ray development room of the x-ray/hydro testing building (Building #4), fixer and developer chemicals are present along the northern wall and in the northeast corner. Additionally, a silver recovery unit and associated used filters are located along the eastern wall of the room. Fluids were identified in the chemical containers and the silver recovery unit, but no floor staining or leaking fluids were observed in these areas. H&H considers these areas to be potential environmental concerns (PECs).
- Three semi-tractors, several flat-bed trailers and several roll-off boxes containing construction debris were observed in the parking areas adjacent to the primary production building (Building #2). No staining was observed in the vicinity of the trucks, trailers, or solid waste containers. Mr. Lawson indicated the trucks, trailers and roll-off boxes are being stored on-site by an adjacent property owner who received approval from the subject site owner. H&H does not consider these areas to be PECs.
- Two inactive petroleum fuel dispensers were observed on a concrete pad beneath the covered porch of the primary production building (Building #2). The dispensers were not connected to any piping and were likely placed on-site after the November 2004 Phase I ESA site visit. No staining or leaking fluids were observed around the dispensers. H&H does not consider the fuel dispensers or underlying concrete to be a PEC.

- Several monitoring wells not shown on the previous Phase I ESA figure were observed in the approximate location of SWMU #45. The approximate locations of these wells are depicted on Figure 2.
- The previously identified pad-mounted transformer #2 was not observed by H&H and appears to have been removed since the November 2004 Phase I ESA site visit.

9.0 Summary

General Findings

The subject property consists of approximately 60 acres of land and improvements owned by NII Real Estate Holding Corporation. The site contains nine permanent industrial buildings and eight temporary structures.

The site was formerly occupied by Davis Pipe (a.k.a. Davis Pipe and Metal Fabricators, DP Holdings, Premier Pipe and Tube Group) who utilized the facility for fabrication of welded stainless steel and alloy pipe and fittings. Regulatory inspection records document the use of methyl ethyl ketone, hydrofluoric acid, nitric acid, caustic soda, naphtha, equipment oil, and lubricants.

The subject site is identified by EDR on the following databases: Facility Index System (FINDS), Resource Conservation and Recovery Act Registered Large or Small Quantity Hazardous Waste Generators (RCRA-LQG), RCRA Corrective Action (CORRACTS), and RCRA non-CORRACTS Permitted Transportation, Storage, and Disposal Facility (RCRA-TSDF). The EDR report for the 2004 Phase I ESA identified the site on the above databases and, in addition, the Toxic Release Inventory System (TRIS) database.

The site contains a RCRA-permitted closed-in-place pit (SWMU #48) that contains spent pickling liquor and sludge from the pickling operations that are classified as a K062 listed hazardous waste. The entire area of the pickling operation was covered and sealed with asphalt. Post-closure care of SWMU #48 is regulated by Tennessee Hazardous Waste Permit #21, which became effective September 30, 1993.

TDEC has assumed the responsibility of post-closure care at the site. An inspection of the facility was conducted by TDEC to evaluate the operation and maintenance of the ground water monitoring system and the sampling and analysis program. The site monitoring wells were found to be locked and in good condition. All wells targeted for sampling appeared capable of

yielding ground water samples. Also, during this inspection, it was noted that two large cracks were present on the asphalt cap in need of repair. A QE2 correspondence dated February 1, 2007 reports that the cracks in the asphalt cap were repaired with sealer/filler.

Davis Pipe is currently in violation of certain terms of the Post Closure Permit including: 1) failure to conduct ground water monitoring; 2) failure to maintain the asphalt cap; 3) failure to maintain financial assurance; 4) failure to renew the Post Closure Permit; and 5) non-payment of permit fees.

Total metals including arsenic, cadmium, chromium, and lead were detected in shallow ground water in the vicinity of SWMU #48 at concentrations exceeding the EPA maximum concentration limits (MCLs) and nickel levels were elevated above EPA Secondary MCLs.

USEPA and TDEC reviewed a June 1998 Revised Confirmatory Sampling Report concluding that four SWMUs required further action in the form of a Phase I RCRA Facility Investigation (RFI). The SWMUs requiring a Phase I RFI are:

- SWMU #11 (Diked storage area with limited soil removal);
- SWMU #12 (Drum storage area #1);
- SWMU #45 (Former pickling pit); and
- SWMU #47 (Roll-off container storage area).

A Phase I RFI Work Plan dated December 14, 1998 was prepared by KES. No documentation was identified during the file review that indicated the proposed Phase I RFI Work Plan was ever implemented.

The Phase I ESA has identified the following RECs in connection with the subject property:

- Historical utilization of the site as an industrial facility including documented soil and ground water contamination.
- Oily staining on floors within the majority of the site buildings.
- Presence of subsurface piping, openings in the concrete floor, and drains in the floors of several site buildings.
- Storage of damaged and leaking drums and containers.
- Pooled liquids on floors in several locations within multiple site buildings.
- Presence of a RCRA solid waste management unit (SWMU #48, former pickling pit now capped with asphalt) currently being regulated by TDEC.
- Presence of sumps containing liquids.
- Four SWMUs identified by USEPA and TDEC to require further Phase I RCRA Facility Investigation (RFI). The SWMUs requiring a Phase I RFI are:
 - SWMU #11 (Diked storage area with limited soil removal)
 - SWMU #12 (Drum storage area #1)
 - SWMU #45 (Former acid disposal / pickling pit)
 - SWMU #47 (Roll-off container storage area)
- Violations of the SWMU #48 Post-Closure Care Permit.

The following PECs were identified:

- Presence of numerous chemical containers with various contents;
- Presence of former and current septic treatment systems; and
- Evidence for former automotive maintenance activities at the Fabrication/Maintenance Shop.

Recommendations

H&H recommends that Phase II sampling and analysis be conducted at the REC and PEC areas outlined above. The Phase I RFI Work Plan, DP Holding, Inc. dated December 14, 1998 may be useful in developing a site sampling and analysis plan to address the SWMUs identified by USEPA and TDEC to require further assessment.

10.0 Signatures of Environmental Professionals

Stephen Libbey, PG declares that to the best of his professional knowledge and belief, that he meets the definition of environmental professional as defined in the Code of Federal Regulations (40 CFR 312.10). H&H has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. H&H has developed and performed the all appropriate inquiries as set forth for the environmental professional in ASTM E1527-05.

Stephen Libbey, PG
Project Geologist

Ed Stephens
Project Manager/Reviewer

11.0 Qualifications of Environmental Professionals Conducting the Phase I ESA

Stephen Libbey, PG, Project Geologist, has over twelve years of experience in conducting environmental site assessments. Mr. Libbey is a Registered Geologist.

Ed Stephens, PG, Project Manager, has over eighteen years of experience conducting site assessments at industrial facilities, commercial sites, RCRA and CERCLA facilities, and underground storage tank sites.

Curriculum vitae for each individual are included in Appendix E.

Appendix A

November 2004 Phase I ESA

Appendix B

EDR Report

Appendix C
Site Photographs

Appendix D
Regulatory Files Excerpts

Appendix E
User Questionnaire
and
Telephone/Interview Discussion Log