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LIST OF ABBREVIATIONS

AST	Aboveground Storage Tank
CERCLIS	Comprehensive Environmental Response Compensation and Liability Information System
DEIS	Draft Environmental Impact Statement
DEQ	Department of Environmental Quality
DMME	Department of Mines, Minerals and Energy
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
FHWA	Federal Highway Administration
HEF	Hazardous Equipment or Facilities
ISTEA	Intermodal Surface Transportation Efficiency Act
LAST	Leaking Aboveground Storage Tank
LUST	Leaking Underground Storage Tank
MSL	Mean Sea Level
NEPA	National Environmental Policy Act of 1969
NPL	National Priority List –Superfund Sites
PREP/PC	Pollution Complaint
RCRIS	Resource Conservation and Recovery Information System
UST	Underground Storage Tank
VDOT	Virginia Department of Transportation
VRP	Virginia Voluntary Remediation Program

1. INTRODUCTION

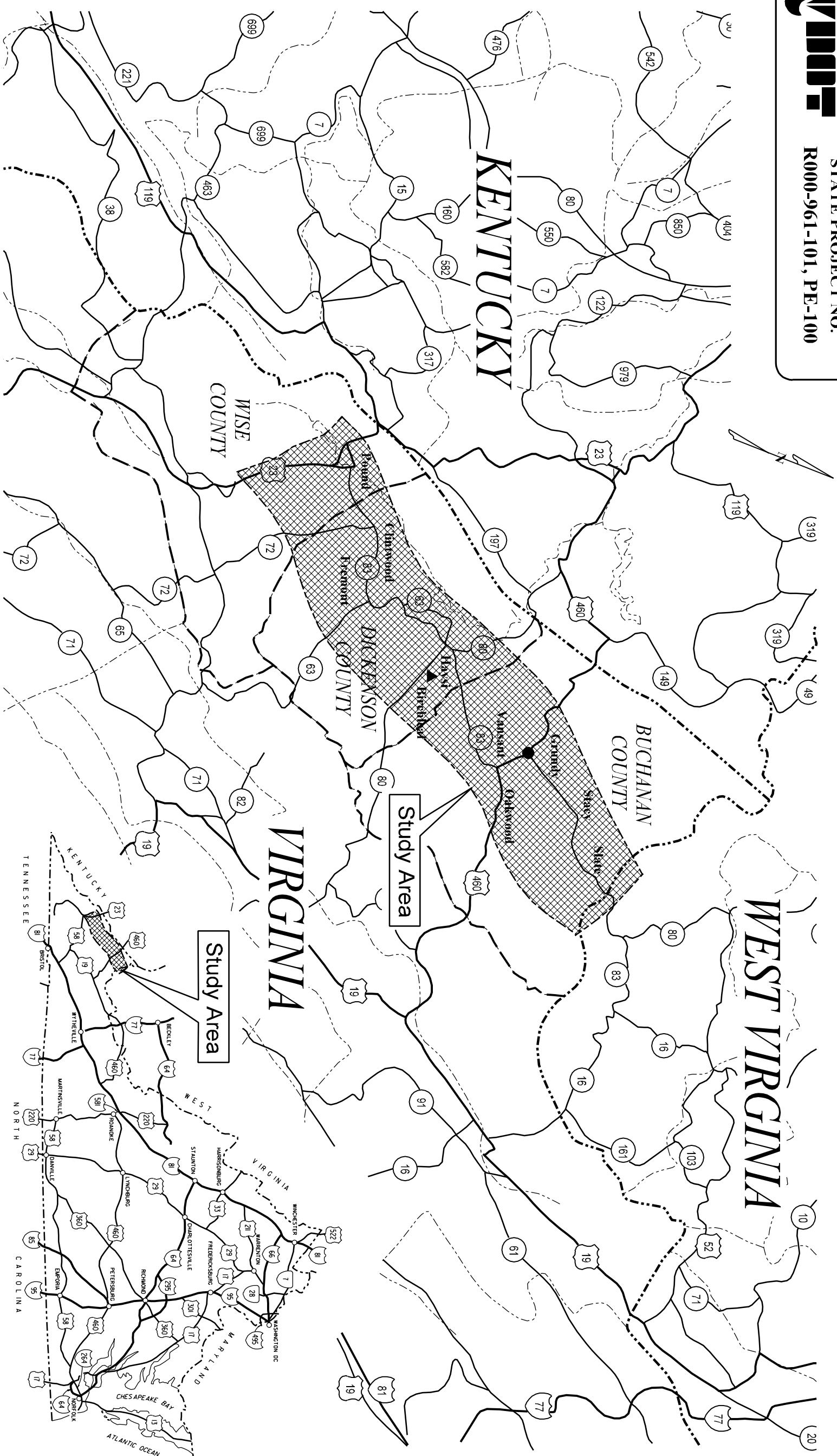
The purpose of this technical report is to document the contamination screening undertaken as part of the Draft Environmental Impact Statement (DEIS) for the proposed Coalfields Expressway Location Study in southwest Virginia.

Screening the project study area for potential contamination is done to avoid costly construction delays due to encountering unexpected soil or groundwater contamination. Identification of potential problem areas early in the process also allows remediation responsibilities to be assigned, and costs to be borne, during right of way acquisition prior to construction. This report is prepared in accordance with the Federal Highway Administration's (FHWA) Technical Advisory 6640.8A, the National Environmental Policy Act of 1969 (NEPA), and NEPA's implementing regulations.








This report identifies areas of known or potential contamination in the study area whose presence may affect project right of way acquisition and construction. The report includes a description of the project, project setting and land use in the study area. It also provides a description of each site of potential concern as well as a discussion of methodologies used to identify these sites.

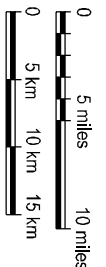
1.1 PROJECT SETTING

The study area is located in Wise, Dickenson, and Buchanan counties in Southwest Virginia (see Exhibit 1). The study area comprises a portion of the Cumberland Mountain section of the Appalachian Plateau physiographic region, which is characterized by steep slopes, V-shaped valleys, and narrow floodplains. Compared to other mountainous areas of Virginia, elevations in the study area are relatively low. Elevation varies from 295 meters (966 feet) above mean sea level (MSL) near Harmon Junction to 750 meters (2460 feet) above MSL near the West Virginia State line.



LEGEND

-  Project Study Area
-  State Line
-  County Line
-  US Highway
-  State Road
-  Proposed Haysi Dam Location
-  Proposed Grundy Flood Control Project



**Coalfields Expressway
 Location Study**

Exhibit 1

Project Vicinity

2. BUILD ALTERNATIVES

Over the course of the project, nine project alternatives were established for consideration. The No-Build Alternative and five Build Alternatives have been retained for further study. For purposes of this report, only the build alternatives (the only alternatives involving significant construction) require discussion.

This section describes the five proposed build alternatives, shown on Exhibit 2. As the study progresses and more information is obtained, portions of different alternatives may be combined to form the final alternative.

Alternative A – Begins at Pound in Wise County with its connection to Route 23 near Horse Gap. It travels east along the northern town limits of Pound to Route 83. It then follows the Route 83 alignment to the vicinity of Route 621 in Dickenson County. Alternative A parallels Route 621 for approximately one mile and heads east north of Clintwood. Traveling along Big Ridge in a northeasterly direction, it passes north of Haysi and crosses the Russell Fork just south of its connection with the Pound River. From there, it travels east to Bull Gap in Buchanan County. From Bull Gap, Alternative A travels in a southeasterly direction and passes close to the Grundy Airport and crosses Route 460 south of Grundy. It continues to the east along the ridge top, paralleling Route 83 approximately one mile to the south, until it ties to Route 83 at the West Virginia State line near Paynesville.

Alternative B – Begins at Pound in Wise County with its connection to Route 23 near Horse Gap. It travels east, paralleling Route 83 an average of one half mile to the north, to Route 621 in Dickenson County. From there, it continues eastward to the north of Clintwood. Traveling along Big Ridge in a northeasterly direction, it passes just to the north of Haysi and crosses the Russell Fork approximately one half-mile north of the Haysi town limits. From there, it travels along Barts Lick Creek, to a point just south of Bull Gap and parallels the Route 609 alignment in Buchanan County. From near the Route 609/Route 460 intersection, Alternative B parallels Route 460 until they cross in the vicinity of Route 460/Route 656 intersection. It then continues eastward, parallel to Looney Creek. For the remainder, it travels along the

ridge top, paralleling Route 83 an average of one and one-half miles to the north, until it ties to Route 83 at the West Virginia State line near Paynesville.

Alternative C – Begins at Pound in Wise County with its connection to Route 23 near Horse Gap. It travels east along the northern town limits of Pound to Route 83. It follows the Route 83 alignment to the vicinity of Route 621 in Dickenson County. From there, the alignment parallels Route 72 to the south for a short distance, then turns east, traveling on the ridge top along the southern town limits of Clintwood. Alternative C turns and travels in a northeasterly direction close to the Dickenson County Technology Park, until it follows the same alignment as Alternatives A and B. From this point, it travels across Cranes Nest River and along Big Ridge in a northeasterly direction and passes north of Haysi, along the town limits. Continuing east, it travels near Poplar Gap and parallels Routes 614 and 615 in Buchanan County and crosses Route 460 in Grundy in the vicinity of Route 615. Alternative C travels east through Grundy along the ridge top and parallels Route 83 approximately one mile to the south until it ties to Route 83 at the West Virginia State line near Paynesville.

Alternative D – Begins just south of the Pound town limits in Wise County, with its connection to Route 23. It travels in a northeasterly direction along the town limits until it meets Route 83 and continues to the east along the Route 83 alignment to the vicinity of Route 621 in Dickenson County. From there, the alignment parallels Route 72 to the south for a short distance, then turns east, traveling on the ridge top along the southern town limits of Clintwood. At the southeastern corner of Clintwood, Alternative D realigns with Route 83 and either follows the alignment or parallels the alignment south of the McClure River to the southern town limits of Haysi. From there, it crosses Routes 80/83, traveling east along the ridge top, to a point near Poplar Gap in Buchanan County. From Poplar Gap, it travels in a southeasterly direction and passes close to the Grundy Airport. It continues east along the ridge top, paralleling Route 83 approximately one mile to the south. From there, it parallels Compton Mountain and Route 639 to the West Virginia State line with a connection to Route 635 in West Virginia.

Alternative E – Begins just south of the Pound town limits in Wise County, with its connection to Route 23. It travels in a northeasterly direction along the town limits, crosses Route 83, and parallels Route 83 one-half mile to the north until it realigns with Route 83 in Dickenson County west of Clintwood. It continues along Route 83 and then turns and parallels Route 72 to the south for a short distance, then turns east, traveling along the southern limits of Clintwood. At

the southeastern corner of Clintwood, Alternative E parallels Route 83 south of the McClure River to the southern town limits of Haysi. From there, it crosses Routes 80/83, traveling east to a point near Poplar Gap in Buchanan County. At this point, the alignment turns in a northeasterly direction until it turns east paralleling Route 460. Alternative E crosses Route 460 near its intersection with Route 656. It continues to the east, paralleling Looney Creek and then Route 83 approximately one and one-half miles to the north along the ridge top until it ties to Route 83 at the West Virginia State line near Paynesville.

3. METHODOLOGY

Preparing this report involved using several methods of locating potential contamination sites. Database searches, aerial reviews, and field surveys for each of the corridors was performed. Once this information was gathered and cross-referenced, 22 potential contamination sites were determined within the corridors of the five alternatives. Specific site information such as property owners, property boundaries, and agency file information was located if available.

3.1 DATABASE SEARCH

United States Environmental Protection Agency (EPA) and Virginia Department of Environmental Quality (DEQ) databases were searched for potential contamination sites. This involved performing corridor searches for each of the five alternates. Databases searched include:

DEQ

- VA WASTE (Solid Waste Sites)
- UST (Underground Storage Tank-registered)
- LUST/LAST (Leaking Underground Storage Tank)
- VRP SITES (Virginia Voluntary Remediation Program)
- PREP (Pollution Complaints)

EPA

- NPL (National Priority List-Superfund Sites)
 - CERCLIS (Comprehensive Environmental Response Compensation and Liability Information System-Potential Superfund Sites)
 - RCRIS (Resource Conservation and Recovery Information System)
 - ERNS (Emergency Response Notification System)
-

The database searches identified a relatively small number of sites for a project of this scale. There were 212 potential sites identified within the study area, but only 19 could be mapped. The low number of mappable sites was mostly due to the limited address information for the project area. Counties in the study area have not developed Enhanced 911 systems and therefore do not have an addressing system that allows for physical location of a site based on street name and number. (The counties primarily use post office box numbers and rural route numbers for addresses.) Also, database information for unmapped sites did not include latitude and longitude. Typically, database information for potential contamination sites in more urban or developed areas have coordinates assigned to them. Only five of the 19 mapped sites were located within the corridors established for each proposed segment.

3.2 PAST LAND USE RESEARCH

Historic aerial photos were reviewed to help determine potential contamination site locations. These aerials, reviewed at the VDOT Central Office, were from the years 1969 (Dickenson County), 1971 (Buchanan County) and 1977 (Wise County). The scale of the aerials did not allow for the determination of most types of commercial or industrial land uses. However, the historic aerials did allow for comparison with recent aerials (1997) to locate areas that may have been previously developed but are now vegetated. These comparisons did not reveal any of these types of sites.

3.3 FIELD SURVEY

Field reviews provided business names, land uses, and site characteristics of properties located within the corridors of the five build alternatives. Special attention was given to businesses that might handle hazardous materials or petroleum products, generate hazardous waste, or may have handled these materials in the past. These businesses may include gas stations, landfills, refineries, chemical plants, coal purification plants, battery recycling facilities,

mining operations, dry cleaning firms, motor vehicle repair and maintenance operations, printing, and warehousing. Of the 22 total potential contamination sites, 17 of the sites were located during the field survey. The five sites found from the database searches were also reviewed during the field survey.

4. POTENTIAL IMPACTS

The following section discusses each of the 22 sites identified by the database searches and field survey. It also discusses Hazardous Equipment and Facility (HEF) sites provided by the Virginia Department of Mines, Minerals and Energy (DMME).

4.1 DATABASE SEARCH AND FIELD SURVEY

Table 1 references all properties by site name and a corresponding number. Most of these facilities are automobile repair shops, gas stations with USTs, and abandoned storage tanks.

Approximate construction limits have been determined for the five alternatives. Table 1 also indicates whether or not the site falls within the construction limits for a proposed segment, and which alternatives the segment helps make up. The following paragraphs contain information about each site, and Exhibit 3 shows approximate site locations.

Table 1
Potential Contamination Sites

Site Number	Name/Description	Alternates	Construction Limits
106A	5 ASTs	A, C, D	No
106B	Engine Repair Shop	A, C, D	No
106C	Body Shop	A, C, D	No
106D	Storage Tanks/Misc. Equipment	A, C, D	No
106E	Storage Tanks	A, C, D	No
108A	Saylor's Texaco	C, D, E	Yes
108B	Air Conditioning and Heating Company	C, D, E	Yes
109A	Auto Repair/Garage	D	No
109B	Gas Station	D	Yes
109C	83 Gas and Grocery	D	Yes

Table 1 Continued
Potential Contamination Sites

Site Number	Name/Description	Alternates	Construction Limits
109D	Auto Repair/Auto Sales	D	Yes
154A	Transformers	A, B, C	Yes
156A	Dumping Site	B	Yes
156B	Auto Body Repair	B	No
158A	IceKimo Wholesale Company	A, C, D, E	No
209A	Landfill – Buchanan County	C	Waste Cells-No
237A	McClanahan’s Body Shop	E	Yes
238A	Wheel Alignment	B, E	Yes
238B	Auto Parts	B, E	Yes
302A	Abandoned Garage	B, E	No
336A	Gas Station	C	Yes
336B	Body Shop	C	No

Site #: 106A

Site Description: 5 ASTs

Location: Route 83, North of Pound

Photo #: 1

This site contains five aboveground storage tanks (ASTs). Also, soil is being stored under tarps at this facility. (Specific tank information such as size, content and age is unknown.) The status of the soil is also unknown. There is no recorded information with environmental agencies.

Site #: 106B

Site Description: Engine Repair Shop

Location: Route 632, Meades Fork Road

Photo #: 2

This facility appeared to be out of business. There were no pumps, venting or other visual signs of USTs and none are recorded with DEQ. This site is not listed on the EPA’s Resource Conservation and Recovery Information System (RCRIS), and therefore, it is not a small quantity generator or treatment, storage and disposal (TSD) facility.

Exhibit 3

Site #: 106C

Site Description: Body Shop

Location: Route 632, Meades Fork Road

Photo #: 3

This facility is located adjacent to Orvis Small Engine. The area surrounding the building was clear of any debris. There were no visible signs of USTs and none are recorded with DEQ. This site is not listed on the EPA database as a RCRIS site.

Site #: 106D

Site Description: Storage Tanks/Misc. Equipment

Location: Route 632, Meades Fork Road

Photo #: 4

This site has ten storage tanks located near several large buildings. The tanks were extremely rusted. Several other pieces of equipment were on the property, including a truck trailer, backhoe, and several other construction type trucks. The owner or nature of this site is unknown. There is no recorded information with environmental agencies for this site.

Site #: 106E

Site Description: Storage Tanks

Location: Between Route 83 and Route 632

Photo #: 5

This site contained three old storage tanks, as well as several tires and miscellaneous automobile parts. The owner or nature of this site is unknown. There is no recorded information with environmental agencies for this site.

Site #: 108A

Site Description: Saylor's Texaco

DEQ Facility ID: 1024513

Location: Route 83

Photo #: 6

This gas station has several pump islands. This site is found on the DEQ registered UST tracking database. The number of USTs at this site is unknown. A Pollution Complaint (PC) was filed with DEQ on 12/21/88 regarding one UST. The gasoline tank was removed and PC# 89-0696 was closed.

Site #: 108B

Site Description: Air Conditioning and Heating Company

Location: Route 72

Photo #: 7

This is a sales, installation and repair business for A/C and heat pumps. This site is not listed on the EPA database as a RCRIS facility.

Site #: 109A

Site Description: Auto Repair/Garage

Location: Route 83

Photo #: 8

This site is an automobile repair/garage facility. There were no visible signs of USTs at this site. There is no recorded information with environmental agencies for this site.

Site #: 109B

Site Description: Gas Station

Location: Route 83

Photo #: 9

This service station has one pump island with four pumps. The number and condition of USTs for this site is unknown. There is no recorded information with the environmental agencies for this site.

Site #: 109C

Site Description: Gas Station

DEQ Facility #: 1027296

Location: Route 83

Photo #: 10

Signs at this site advertised home heating oils 1 and 2, motor oil, and sales of commercial and residential tanks. A Pollution Complaint was filed with DEQ on March 18, 1994 due to a leaking underground storage tank (LUST). Since then, remediation has occurred at this site and PC #94-2972 has been closed. The number of storage tanks at this site is unknown.

Site #: 109D

Site Description: Auto Repair/Auto Sales

Location: Route 83

Photo #: 11

This is a small garage for automobile repair. This site is not listed on the EPA database as a RCRIS facility and there are no USTs recorded with DEQ.

Site #: 154A

Site Description: Transformers

Location: Route 672, northeast of Clintwood

Photo #: 12 & 13

There are approximately 10 pole mounted, electrical transformers being stored on this site. These transformers were cylindrical in shape and approximately 3' high. The owner of this site is unknown. The property mostly consists of forested and pasture lands.

Site #: 156A

Site Description: Dumping Site

Location: Route 624

Photo #: 14

This is a dumping site located on property owned by the Paramount Coal Corporation at the Coal Branch Surface Mine. Debris at this site included old automobiles, barrels, miscellaneous car parts, tires and two old storage tanks. There is no recorded information with the environmental agencies for this site.

Site #: 156B

Site Description: Auto Body Repair

Location: Route 624

Photo #: Not Available

This is a small garage for automobile repair. This site is not listed on the EPA database as a RCRIS facility and there are no USTs recorded with DEQ.

Site #: 158A

Site Description: IceKimo Wholesale Ice Company

EPA #: VA0001017710

Location: Route 83

Photo #: 15

Approximately 25 ice machines were located in front of two buildings that occupy this site. IceKimo trucks, as well as additional ice machines, were also located on the opposite side of Route 83. This site has been listed on the EPA

Facility Index System in the Enforcement Docket Database since March 1995. The Enforcement Docket system tracks civil judicial cases against environmental polluters. The EPA contacted IceKimo in 1995 regarding a complaint of toxic releases of ammonia reported at the Clintwood facility. IceKimo did not respond to the complaint and the EPA assessed penalties. The case was closed in 1997.

Site #: 209A

Site Description: Buchanan County Landfill

Permit #: 000218

FIPS #: 027

Location: Route 615

Photo #: 16 & 17

This site is the former Buchanan County Landfill, sometimes referred to as the Hoot Owl Landfill. This facility opened in 1968 and closed in the spring of 1994. However, a sign at the landfill states that it still accepts brush, stumps and white goods (appliances). Solid waste is presently shipped out of the county for disposal. The 80-acre facility is classified as a sanitary landfill, and is listed on DEQ's Solid Waste database. Although property boundary information was unavailable, it does not appear that a proposed corridor would impact the landfill property. According to mapping provided by the Southwest Regional DEQ Office, the waste cells are not located within a proposed corridor. The facility is likely unlined, and could pose contamination threats due to subsurface migration of hazardous materials. Exhibit 4 depicts waste cell limits.

Site #: 237A

Site Description: McClanahan's Body Shop

EPA #: VA0000447581

Location: Route 604

Photo #: 18

This site is listed on the EPA's RCRIS database as a class C (exempt small quantity) site. This facility was found to be in compliance during a June 27, 1996 inspection by DEQ. DEQ also lists ignitable waste and paint solvents as materials used at this facility. There are no USTs recorded with DEQ for this site.

Site #: 238A

Site Description: Wheel Alignment

Location: Route 460

Photo #: 19

This garage specializes in tire changes, rotations and alignments. This site is not listed on the EPA database as a RCRIS facility.

Site #: 238B

Site Description: Auto Parts

Location: Route 460

Photo #: 20 & 21

This facility is an automobile junkyard consisting of approximately 30 cars and 10 buses. Miscellaneous parts are also scattered over the property. There is no recorded information with environmental agencies for this site.

Site #: 302A

Site Description: Abandoned Garage

Location: Route 83

Photo #: Not Available

This site houses an abandoned repair/garage facility. Contents of the site included cars, tires, and miscellaneous parts. There were no visible signs of USTs; however, the site was covered with debris. A mobile home located on the site appeared to be occupied. There is no recorded information with environmental agencies for this site.

Site #: 336A

Site Description: Gas Station

Location: Route 83/460

Photo #: 22

This gas station had several pump islands. The number of USTs at this site is unknown. There is no recorded information with environmental agencies for this site.

Site #: 336B

Site Description: Body Shop

Location: Route 615

Photo #: 23

This is the site of an automobile repair shop. This site is not listed on the EPA database as a RCRIS facility and there are no USTs recorded with DEQ.

Exhibit 4

4.2 VIRGINIA DEPARTMENT OF MINES, MINERALS AND ENERGY

The Virginia Department of Mines, Minerals and Energy (DMME) maintains mapping of hazardous equipment or facilities (HEF) located within the study area. Approximately 90% of these sites were mapped between 1980 and 1986. According to DMME, HEF sites typically consist of tippels, facilities used to load coal onto trucks or railcars. These tippels can range in size from roughly 10' X 10' to several stories high and often occur at mine openings. Although specific site information is not available for HEF sites, a DMME representative stated that it is possible to find batteries and transformers (used to provide electricity to the mines), and different types of mine equipment stored at these locations. The term hazardous, as used by DMME, has a much broader definition than that of hazardous as discussed in this report. Exhibit 3 shows the locations of the HEF sites.

5. References

Cumberland Planning District Commission and Cumberland Plateau Planning District Commission. *Buchanan County Comprehensive Plan*. 1994.

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Photo 1 – ASTs

Photo 2 – Engine Repair Shop

Photo 3 – Body Shop

Photo 4 – Storage Tanks

Photo 5 – Storage Tanks

Photo 6 – Sayler's Texaco

Photo 7 – Air Conditioning and Heating Company.

Photo 8 – Auto Repair/Garage

Photo 9 – Gas Station

Photo 10 – 83 Gas and Grocery

Photo 11 – Auto Repair/Auto Sales

Photo 12 – Transformers

Photo 13 – Transformers

Photo 14 – Dumping Site

Photo 15 – IceKimo Wholesale Ice Company

Photo 16 – Buchanan County Landfill

Photo 17 – Buchanan County Landfill

Photo 18 – McClanahan's Body Shop

Photo 19 Wheel Alignment

Photo 20 – Auto Parts

Photo 21 – Auto Parts

Photo 22 – Gas Station

Photo 23 – Body Shop
