

EXHIBIT R

KNOWN PRE-EXISTING HAZARDOUS SUBSTANCES

The table below identifies the Known Pre-Existing Hazardous Substances located within or directly adjacent to the I-66 Express Lanes Project. Reference the Hazardous Materials Technical Memorandum in addition to the other references provided.

Summary	Description	Location
Naturally Occurring Asbestos Soils	<p>Naturally occurring asbestos (NOA) is found in bedrock formations in Fairfax County as well as in previously disturbed soils within the bedrock formations. There are approximately 49 acres of NOA soils within existing right of way (ROW) and 153.1 acres of NOA soils within 500 feet of the current ROW limits.</p> <p>References: <i>Natural Asbestos Occurrences in the Eastern United States</i>. Bradley S. Van Gosen. http://pubs.usgs.gov/of/2005/1189/ <i>2006 Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Natural Asbestos Occurrences in the Eastern United States</i>. Bradley S. Van Gosen. http://pubs.usgs.gov/of/2005/1189/ <i>2008 Naturally Occurring Asbestos: Approaches for Reducing Exposure</i>. http://www.epa.gov/superfund/health/contaminants/asbestos/pdfs/nea_factsheet.pdf</p>	Within and 500 feet beyond the existing between the US 50 and Route 123 interchanges. Redeposited disturbed soils within interchange of US 50 and I-66.
Former landfill	<p>Opened in 1962 and closed in 1982. Former I-66 Landfill is approximately 110 acres with total waste accepted of 5 million tons. Ground water monitoring and methane extraction wells are located around the perimeter of the closed landfill. Approximately 700 cubic feet per minute of landfill gas is generated.</p> <p>Reference: http://www.fairfaxcounty.gov/dpwes/trash/dispsites.htm</p>	4618 West Ox Rd. Fairfax, VA

Summary	Description	Location
Type B Structures & Asbestos Containing Material	<p>A determination on the classification (Type A or Type B) of protective coating of all metal on existing structures within the project limits is required. In absence of any characterization, all structures are presumed to be Type B until paint tests conclude otherwise. In addition, bridge inspection for asbestos containing material should be conducted on all bridge structures within the project corridor prior to construction activities or demolition of bridges.</p> <p>References: 2007 Road and Bridge Specs; VDOT Memo - Asbestos Containing Materials on Bridges - 2009</p>	All Existing Bridges and Structures Within Preferred Build Alternative
Undetermined environmental concern due to UST located on property	Recorded underground storage tank(s) located on property.	8000 Iliff Drive, Dunn Loring, VA
Unknown environmental concern due to petroleum spill	Recorded petroleum spill on property.	8107 Cottage St., Dunn Loring, VA
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	8121 Cottage St., Dunn Loring
Undetermined environmental concern for chemical(s) hazardous	Hazardous chemical(s) used or stored on property subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 312, Tier 2 reporting.	2700 Gallows Rd, Dunn Loring
Potential environmental concern due to LUST	Potential soil and groundwater contamination due to leaking tank(s) on property.	2800 Gallows Rd, Dunn Loring

Summary	Description	Location
Unknown environmental concern due to AST	Recorded above ground storage tank(s) located on property. EPA ID # 10038455481	2675 Prosperity Ave, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	2677 Prosperity Ave, Fairfax
Undetermined potential environmental concern	Property is a RCRA Conditionally Exempt Small Quantity Generator, EPA ID VA000125666	2730 A-3 Prosperity Ave, Fairfax
Potential environmental concern due to LUST	Potential soil and groundwater contamination due to leaking tank(s) on property.	2700 Dorr Ave, Fairfax
Potential environmental concern due to UST; Potential environmental concern due to dry cleaning facility	Former UST, potential soil and groundwater contamination unknown; former dry cleaner facility previously located on property.	2701 Dorr Ave, Fairfax
Undetermined environmental concern	Property is a RCRA Small Quantity Generator, EPA ID# 110005256579	2704 Dorr Ave, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	2729 Dorr Ave, Fairfax
Undetermined potential environmental concern	Property is no longer RCRA regulated, EPA ID# VAD038798831	2711 Prosperity Ave, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	2731 Prosperity Ave, Fairfax

Summary	Description	Location
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	Hilltop Rd & Cedar Lane, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	9848 Sweet Mint Dr, Fairfax
Undetermined environmental concern for hazardous chemical(s)	Property subject to regulated hazardous material licensing.	2846-A Nutley St, Fairfax
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tanks on property.	10401 White Granite Dr, Oakton
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	10003 Five Oaks Dr, Fairfax
Undetermined environmental concern due to UST located on property	Recorded underground storage tank(s) located on property.	10560 Arrowhead Rd, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	10298 Antietam Ave, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	3315 Willow Crescent Dr, Oakton

Summary	Description	Location
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tank(s) on property.	10619 Elmont Ct, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	10714 Oak Pl, Fairfax
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	10717 Oak Pl, Fairfax
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	11301 Valley Rd, Oakton
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	3520 Jermantown Rd, Fairfax
Potential environmental concern due to Leaking Tanks and petroleum spill	Potential soil and groundwater contamination due to leaking tank(s) and/or spill(s) on property.	3601 Jermantown Rd, Fairfax
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tank(s) on property.	10807 Norman Ave, Fairfax
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tank(s) on property.	10809 Norman Ave, Fairfax

Summary	Description	Location
Undetermined environmental concern for hazardous chemical(s)	Property subject to regulated hazardous materials registration. EPA registration #110010720103	10917 Marilata Ct, Fairfax
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tank(s) on property; RCRA small quantity generator; CERC-NFRAP site. EPA ID# 110005230026	3609 Jermantown Rd, Fairfax
Potential environmental concern for hazardous chemical(s)	Hazardous chemical(s) used or stored on property, EPA ID# 110018935331	3701 Pender Dr, Fairfax
Potential environmental concern due to dry cleaning facility	RCRA small quantity generator. EPA ID#110005259460	11250 Waples Mill Rd, Fairfax
Undetermined environmental concern for hazardous chemical(s)	RCRA conditionally exempt small quantity generator. EPA ID# 11000817676	11244 H-2 Waples Mill Rd, Fairfax
Undetermined environmental concern for hazardous chemical(s)	RCRA conditionally exempt small quantity generator. EPA ID VAR000522938	11937 Fair Oaks Mall, Fairfax
Potential environmental concern due to Leaking Tanks and UST	Potential soil and groundwater contamination due to leaking tank(s) on property. RCRA conditionally exempt small quantity generator. EPA ID# 110005257765	12015 Lee Jackson Hwy, Fairfax
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	12255 Fair Lakes Promenade Dr, Fairfax

Summary	Description	Location
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	11400 Random Hills Rd, Fairfax
Undetermined environmental concern for hazardous chemical(s)	RCRA conditionally exempt small quantity generator. EPA ID# VAR000513564	4463 Market Commons Dr, Fairfax
Undetermined environmental concern for dry cleaning solvents	Property potential dry cleaners site.	4469 Market Commons Dr, Fairfax
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	12601 Fair Lakes Dr, Fairfax
Undetermined environmental concern	Property monitored for air pollution discharges, EPA ID# 11000892293	4500 West Ox Road
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	Fair Lakes Parkway & I-66
Potential environmental concern	Property registered for hazardous chemicals, EPA ID # 1100224532807	13059 Fair Lakes Pkwy
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site	4923 Sammey Joe Dr, Fairfax

Summary	Description	Location
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	5120 Veronica Rd, Fairfax
Undetermined environmental concern for dry cleaning solvents	Property potential dry cleaners site.	5123 Travis Edward Way, Centreville
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	5602 Gresham Ln, Centreville
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	5674 Cabells Mill Ct. Centreville
Potential environmental concern due to UST	UST on property.	5545 Mount Gilead Rd, Centreville
Potential environmental concern due to Leaking Tanks and UST	Potential soil and groundwater contamination due to leaking tank(s) on property.	5611 Mount Gilead Rd, Centreville
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	14500 Lee Hwy, Centreville
Undetermined environmental concern due to petroleum spill	Recorded petroleum spill on property.	14518 Lee Hwy, Fairfax

Summary	Description	Location
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tank(s) on property. Hazardous chemical(s) used or stored on property subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 312 Tier 2 reporting. EPA ID# 110017764579	15011 Compton Rd, Centreville
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property.	14985 Walter Robinson Ln, Haymarket
Potential environmental concern due to Leaking Tanks	Potential soil and groundwater contamination due to leaking tank(s) on property. Property potential gas/filling/service station site	14850 Jordan Ln, Haymarket
Undetermined environmental concern for hazardous chemicals	RCRA small quantity generator. EPA ID 110006458706	6897 Gateway Ct, Manassas
Potential environmental concern for petroleum spill	Recorded petroleum spill on property. RCRA conditionally exempt small quantity generator and property subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 312 Tier 2 reporting. EPA ID # VAR000508440	7000 Gateway Ct/I-66, Manassas
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	7012 Tech Cir, Manassas
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	7060 Tech Cir, Manassas
Undetermined environmental concern due to UST	UST(s) on property; property subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 312 Tier 2 reporting.	7777 Infantry Ridge Rd, Manassas

Summary	Description	Location
Potential environmental concern due to AST and UST and petroleum spills	AST(s) and UST(s) located on property; petroleum spill(s) recorded on property. RCRA conditionally exempt small quantity generator and subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 312 Tier 2 reporting. EPA ID# 10007320130	10201 Balls Ford Rd, Manassas
Potential environmental concern due to AST, UST and petroleum spills	Petroleum spill(s) recorded on property. AST located on property. Property subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 312 Tier 2 reporting.	7400 Infantry Ridge Rd, Manassas
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking UST(s) on property; RCRA no longer requires reporting. Property potential gas/filling/service station site.	7025 Sudley Rd, Prince William
Potential environmental concern due to AST and UST and petroleum spills	AST(s) and UST(s) located on property. Recorded petroleum spill on property. RCRA Large Quantity Generator. EPA ID# 110012195846	10315 Balls Ford Rd, Manassas
Potential environmental concern due to Leaking Tanks and UST	Potential soil and groundwater contamination due to leaking tanks on property. 2020 Corrective Action Program List. RCRA Small Quantity Generator and RCRA Treatment, Storage & Disposal facility. Property potential gas/filling/service station site. EPA ID # VAD048565279.	10335 Balls Ford Rd, Manassas
Undetermined environmental concerns	Property monitored for air pollution discharges, EPA ID# 110007326170	10349 Balls Ford Rd, Manassas
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	10365 Balls Ford Rd, Manassas

Summary	Description	Location
Undetermined environmental concern for petroleum contamination	RCRA Small Quantity Generator; Property potential gas/filling/service station site.	10369 Balls Ford Rd, Manassas
Undetermined environmental concern for dry cleaning solvents	Property potential dry cleaners site.	7200 S. Hill Dr, Manassas
Potential environmental concern for petroleum spill	Recorded petroleum spill on property.	10953 Lute Ct, Manassas
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	7220 Nathan Ct, Manassas
Undetermined environmental concern for petroleum contamination	Property potential gas/filling/service station site.	7222 Nathan Ct, Manassas
Undetermined environmental concern for petroleum contamination	Recorded petroleum spill on property.	I66/US 29 (Gainesville) Interchange
Undetermined environmental concern due to AST	AST located on property.	7243 Gabe Ct, Gainesville

Summary	Description	Location
Potential environmental concern due to Leaking Tanks, LUST & AST	Potential soil and groundwater contamination due to leaking tanks on property. RCRA Small Quantity Generator. EPA ID 110006454354	10660 Automotive Dr, Manassas
Potential environmental concern due to Leaking Tanks, LUST and AST	Potential soil and groundwater contamination due to leaking tanks on property. AST(s) on property. RCRA No Longer Requires reporting.	7110 Sudley Rd, Prince William
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tanks on property. Property potential gas/filling/service station site. RCRA Small Quantity Generator. EPA ID# 1100178616	7111 Sudley Rd, Prince William
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tanks on property. Property potential gas/filling/service station site. RCRA No Longer Requires reporting. EPA ID# 110008193276	7113 Sudley Rd, Prince William
Potential environmental concern for petroleum spill	Recorded petroleum spill on property; VA Voluntary Remediation Program.	US 29 and Wellington Rd intersection
Potential environmental concern due to Leaking Tanks and LUST	Potential soil and groundwater contamination due to leaking tanks on property.	13709 Old Lee Hwy, Prince William
Undetermined environmental concern for petroleum spill	Recorded petroleum spill on property.	12801 Randolph Ridge Rd, Manassas
Undetermined environmental concern	RCRA Conditionally Exempt Small Quantity Generator, EPA ID # VAR000521369	12775 Randolph Ridge Ln, Manassas