

**DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**  
Interim Final 2/5/99  
**RCRA Corrective Action**  
**Environmental Indicator (EI) RCRIS code (CA725)**  
**Current Human Exposures Under Control**

**Facility Name:** Dulles International Airport  
**Facility Address:** Chantilly, VA  
**Facility EPA ID #:** VA6690500909

1. Has all available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

  X   If yes - check here and continue with #2 below.  
If no - re-evaluate existing data, or  
If data are not available skip to #6 and enter "IN" (more information needed) status code.

**BACKGROUND**

**Definition of Environmental Indicators (for the RCRA Corrective Action)**

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

**Definition of "Current Human Exposures Under Control" EI**

A positive "Current Human Exposures under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

**Relationship of EI to Final Remedies**

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

**Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be “contaminated”<sup>1</sup> above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale / Key Contaminants</u>
Groundwater	x			See comments below.
Air (indoors) <sup>2</sup>		x		See comments below.
Surface Soil (e.g., <2 ft)			?	See comments below.
Surface Water	x			See comments below.
Sediment			?	See comments below.
Subsurf. Soil (e.g., >2 ft)	x			See comments below.
Air (outdoors)		x		

If no (for all media) - skip to #6, and enter “YE,” status code after providing or citing appropriate “levels,” and referencing sufficient supporting documentation demonstrating that these “levels” are not exceeded.

If yes (for any media) - continue after identifying key contaminants in each “contaminated” medium, citing appropriate “levels” (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

If unknown (for any media) - skip to #6 and enter “IN” status code.

**Rationale and Reference(s):**

**Current Contamination in Groundwater:**

The only location where EPA is aware of potential current groundwater contamination is at the location of Well APM 21D. 140,000 ug/l of acetone was detected in the well during sampling in September 2007. 4200 ug/l of acetone was detected in the well in October 2007. Neither result was validated. The Region III risk based concentration for acetone in drinking water is 5,500 ug/l and the acceptable level for dermal contact and incidental exposure to acetone for construction workers in a trench in Virginia is 66,000 ug/l for GW and 920,000 mg/kg for soil. There is no MCL promulgated for Acetone. (See <http://www.deq.state.va.us/vrprisk/tables.html>). Further investigation of the concentration of acetone in groundwater in well APM21D is planned.

A 1996 evaluation of property leased by NOAA identified a 300,000 square foot area where waste was placed in potholes (the trench landfill area). A 1995 investigation of the area identified levels of barium, beryllium, chromium and lead greater than MCLs in groundwater. Further sampling was implemented in the early 2000's. Dulles has verbally stated that the area was remediated. The final report on this remediation has been requested.

It is unknown whether groundwater is contaminated as a result of former shop operations, former paint waste management, or a release of waste oil by Shop 1, and whether historic releases have impacted deep groundwater. Groundwater investigations are planned for Drum Storage Area 2 (SWMU 16), and the Shop 1 and Shop 2 Maintenance Complex Areas. (See Workplan Addendum 1, November 29, 2007). Investigation of the deep groundwater will be requested. Evaluation of groundwater by the release of waste oil by Shop 1 will be addressed by the VADEQ LUST program.

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**Current Contamination in Indoor Air (indoors)**

EPA is not aware of any current impact to indoor air.

The potential for acetone in Well APM21D to impact indoor air was evaluated. The location of Well APM21D is remote from any current buildings and volatilization of acetone will not impact any current indoor air. (See Figure 7 of August 2, 2007 Dulles Report on Results of Investigation Phase I Environmental Indicator Information Needs)

The location of Well APM21D is proximate to the location of a tunnel that may be constructed in the near future. (See "Subsurface Exploration Location Plan" Figure of Dulles Binder submission.). The following information supports that indoor air in the tunnel will not be impacted: tunnel stations will be under positive pressure (See 9/22/06 e-mail from Dulles); tunnel vehicles will be under positive pressure (See 9/27/06 e-mail to Bob Greaves documenting 9/27/06 conversation w/ Dulles RPM, Tom Beatty); and there will be no employee areas in the tunnels (See 9/20/06 Summary of Conversation with Dulles RPM, Tom Beatty; and 9/22/06 e-mail from Dulles RPM, Tom Beatty).

The potential for the release of waste oil by the Shop 1 Area to impact indoor air will be assessed by the VADEQ LUST Program. The VADEQ UST Program will evaluate and address any vapor intrusion concerns associated with the release. (2/28/08 e-mail from R. Doucette)

Additional investigation of groundwater by facility shops is planned. If contamination is discovered by the facility shops, indoor air spaces in surrounding buildings (shops and terminals) are sufficiently large and open such that any contamination is unlikely to exceed a threshold level that could impact human exposure.

**Current Contamination in Surface Soil:**

EPA is not aware of any current release to exposed surface soil.

Investigations are planned to evaluate whether surface soil is impacted at the location of AOC 2/Former Contaminated Soil Piles (See Addendum 1 to the Workplan)

Investigations may be required to evaluate whether surface soil is impacted from the former operation of AOC1 /Former Large Fire Training Pit.

**Current Contamination in Surface Water:**

Releases to surface water are addressed in a VPDES permit. DEQ's Guidance recommends that chemical specific water quality-based limits not be placed on storm water Outfalls at this time because the methodology for developing limits and the proper method of sampling is under review by EPA. The permit includes a discharge limit for TPH at one location (Outfall 020). The permit requires monitoring of the surface water interior of the facility and discharged from the facility for fuel, glycols, deicing anti-icing activity, dissolved oxygen, biological oxygen demand, chemical oxygen demand, total suspended solids, and pH for the purpose of minimizing offsite discharges. The permit requires the airport to notify Fairfax County Water Authority of some deicing events and prohibits the use of ethylene glycol for deicing at the facility. The permit includes requirements to reduce pollutant sources, minimize pollutant discharges, and improve recovery of discharges. (See Facility Permit and portions of VPDES Annual Reports contained in the 4/6/06 Large Binder Submittal; and VPDES monitoring data in Dulles 9/26/06 e-mail submission to EPA.)

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While significant reductions in offsite discharges have been achieved through the facility's implementation of a deicing fluid management plan, releases of propylene glycol (in compliance with the permit) have been detected during deicing events in recent years. Up to 7,000 ppm propylene glycol at new Outfall 001, and up to 12,000 ppm propylene glycol at new Outfall 003 were reported in the 2003 to 2004 Annual Report. Data submitted along with a 9/26/06 e-mail from Dulles stated that on December 9, 2005, 10,000 ppm of propylene glycol was detected in Outfall 007 (an unnamed tributary to Horsepen Run), and 4100 ppm propylene glycol was detected in Outfall 003 (an unnamed tributary to Stallion Branch); and on February 23, 2006, 3300 ppm propylene glycol was detected at outfall 002 (an unnamed tributary to Stallion Branch). The fact sheet to the permit includes a monitoring endpoint for glycol at 100 ppm.

**Current Contamination in Sediment:**

EPA is not aware of any current release to sediment.

Investigations will be requested to evaluate whether sediment is impacted from former shop waste discharges to Cub Run/Dulles Lake and from former discharges to and from AOC 1/Former Large Fire Training Pit.

**Current Contamination in Subsurface Soil:**

The only location where EPA is aware that subsurface soil potentially may be contaminated is in the area of the release of waste oil by the Shop 1 Area. The release is being addressed by the VADEQ LUST Program. (See November 29, 2007 Workplan Addendum 1).

Investigations will be requested to evaluate whether subsurface soil is impacted from the former operation of the AOC 1/Former Fire Training Pit (See RFA)

Investigations will be requested to evaluate whether subsurface soil is impacted from the former management of a large quantity of paint wastes at Former Drum Storage Area 2 (SWMU 16). (See RFA)

**Current Contamination in Air (Outdoors):**

Releases from three permitted units (two boilers and an incinerator) are regulated by VADEQ in an air permit.

**Other Issue: Deicing/Anti-icing Agents**

Dulles indicates it uses four products for deicing/anti-icing. (See 2/5/07 e-mail)

1. Kilfrost ABC-S which contains monopropylene glycol mixture - a Type IV ("anti-icing") solution applied to aircraft by the airlines to prevent icing
2. DOW UCAR (TM) PG Aircraft Deicing Fluid which contains propylene glycol - a Type I ("deicing") solution applied to aircraft by the airlines to remove ice from the airplanes
3. Cryotech NAAC Deicer which is composed of 96% sodium acetate - a solid material applied by the airport for landside pavements and walkways
4. JAR-GRIP 2000 composed of potassium acetate and water - a water soluble solution applied by the airport to runways and taxiways

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The facility implements a deicing fluid management plan which emphasizes minimization and increased recovery of deicing fluids. Information in the VPDES Annual Reports indicate that the total 100% glycol maximum pollutant loads that have not been recovered, recycled, or treated through the 2004-2005 season have been:

<u>Season</u>	<u>100% Glycol Load</u>
04-05 Season	157,220 gallons
03-04 Season	245,825 gallons
02-03 Season	349,407 gallons
01-02 Season	38,297 gallons
99-00 Season	118,000 gallons
98-99 Season	323,000 gallons
Previous Seasons (Max.)	500,000 gallons

The Annual Reports state that “the entire pollutant load did not leave the airport via storm-water. It is estimated that as much as 25% of the glycol applied to an aircraft remains on the airplane surfaces and is widely distributed to the environment.”

Information on the fate of glycol in the environment indicates it breaks down within a few weeks. However, in 1996, glycol was found at the Dulles airport in gravel drainage channels around subsurface pipes as late as July. ATSDR reports that about half of the compounds that enter the air will breakdown in 24 to 50 hours and that both compounds break down within several days to a week in water and soil. (See ATSDR-ToxFAQs: Ethylene Glycol and Propylene Glycol- information retrieved on 10/27/06). Information from the Hazardous Substance Data Bank, a data base of the National Library of Medicine’s TOXNET system (retrieved on May 25, 2006) indicates that propylene glycol is expected to have a high mobility in soil; volatilization from moist soil surfaces is not expected to be an important fate process; propylene glycol is not expected to volatilize from dry soil surfaces; propylene glycol is not expected to adsorb to suspended solids or sediment; and propylene glycol will be degraded readily in aqueous environments.

The limited available research expresses a greater concern for breakdown products and additives, which the product manufacturers indicate are proprietary. According to the manufacturing literature and information from the manufactures, additives to the material may account for <1% the discharge, in addition to the 100% glycol reported above. A loss of over 1,000,000 gallons of glycol in six reporting seasons amounts to an approximate loss of less than 10,000 gallons of additives. EPA Region III has requested information from the manufacturers to evaluate whether the additives have the potential to pose a risk to human health. Information that has been provided by the manufacturers has been limited. Based on the limited nature of available information, a full evaluation of the potential for risk to human health associated with the release of anti-icing/deicing additives cannot be completed.

The Water Program in EPA HQ is evaluating whether to regulate releases of deicing agents/anti-icing agents. A preliminary data summary was published in 2000. EPA plans to publish a proposed rule within a year.

Footnotes:

<sup>1</sup> “Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based “levels” (for the media, that identify risks within the acceptable risk range).

<sup>2</sup> Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile

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contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

**Summary Exposure Pathway Evaluation Table**

Potential **Human Receptors** (Under Current Conditions)

<b><u>“Contaminated” Media</u></b>	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food <sup>3</sup>
Groundwater	no	no	no	no			no
<del>Air (indoors)</del>							
Soil (surface, e.g., <2 ft)	no	no	no	no	no	no	no
Surface Water	no	no			no	no	no
Sediment	no	no			no	no	no
Soil (subsurface e.g., >2 ft)				no			
<del>Air (outdoors)</del>							

Instructions for **Summary Exposure Pathway Evaluation Table**:

1. Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated” as identified in #2 above.
2. Enter “yes” or “no” for potential “completeness” under each “Contaminated” Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations, some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“\_\_\_”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

If yes (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.

If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code.

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**Rationale and Reference(s):**

<sup>3</sup> Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

**EPA is not aware of any complete pathway of contamination at a level of concern.**

**Groundwater:**

EPA is not aware of any complete pathway of exposure through groundwater. EPA's evaluation is presented below.

The only location where groundwater contamination has been identified is at Well APM21D. The location of Well APM21D is significantly interior of the large airport facility. EPA is not aware of any current groundwater contamination near the facility perimeter. (See Binder from 4/6/6 meeting; August 2, 2007 Dulles Report on Results of Investigation Phase I Environmental Indicator Information Needs; Addendums 1 and 2 to the Report; and the November 29, 2007 Dulles Workplan Addendum 1 Phase I Environmental Indicator Information Needs; as well as limited results provided in March 13, 2007 fax from Chip Whelan of the National Weather Service).

While groundwater is not used as a drinking water source at the facility, groundwater is used at the facility for other uses and potentially contaminated groundwater may be contacted during facility construction activities such as construction of a tunnel expansion (described in figures from 4/6/06 meeting).

Exposure to potentially contaminated groundwater has been assessed. With respect to general maintenance that is implemented by Dulles, Dulles has two engineers who ensure adequate safety protection is provided for their general maintenance workers. With respect to work that is completed by contractors, such as construction projects, if there is an area that Dulles suspects from a historical release may contain contamination, Dulles will disclose that information to the contractor, and it is the contractor's responsibility to address the potential contamination in the contractor's Health & Safety requirements. Dulles states that it is not responsible for the Health & Safety of contractors, but that it is responsible to notify contractors of potential hazards and does notify contractors of past clean-ups in an area. Each year, Dulles contractors and tenants attend annual awareness training that includes a review of what to do if contamination is encountered. (See February 12, 2008 Memo on "Telephone Conversation with Tom Beatty, Dulles Airport, Regarding February 11, 2008 Information Request".)

Deep groundwater is extracted from property at the airport that is leased by NOAA. NOAA uses the groundwater for irrigation, and formerly used the water for potable water. The distance of the NOAA wells from the operating area of the airport (a mile) makes it unlikely that there has been exposure at the wells. A representative of NOAA indicates that there was no visual indication of contamination in the wells. Access to the NOAA wells is being discontinued due to the construction of a new runway. NOAA's potable water source is now from Loudoun County. (See March 23, 2007 Conversation w/ Bob Green of NOAA and March 26, 2007 e-mail to Bob Greaves)

Deep groundwater may be exposed at local quarries. Quarries are present immediately south and northeast of the facility. The volatility of acetone, the large volume of water in the quarries, and the distance of the quarries from operating areas of the airport and the location of APM 21 (a mile), makes it unlikely that there will be an exposure at the quarries.

Some residential and public wells use deep groundwater. There are 725 registered residential drinking wells in Loudoun County and 111 registered residential drinking wells in Fairfax County at a variety of depths within three miles of the airport property. Dulles maintains that the construction of public water distribution systems surrounding the airport and recent major development of the surrounding area makes it unlikely that there is continued use of groundwater as a drinking water source. Even if the groundwater is used, Dulles maintains that groundwater from the airport is unlikely to reach the wells because the airport was constructed with a large buffer

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zone to prevent offsite (noise) impacts. However, portions of operations are within ½ mile of some residences in Fairfax County, continued use of the groundwater is indicated by real estate listings of proximate homes with wells; and an experience realtor in the area stated that proximate homes that continue to have wells are homes on large lots which were built before 1980. Use of wells immediately east of the airport where operations are close to the facility perimeter is not indicated. Representatives of Loudoun and Fairfax Counties report that they have received no complaints of contamination in residential wells, and that if there was a concern about contamination, residents would report their concern to the County. Wells that are used for a public use are evaluated regularly by the state. State evaluations have not identified any contaminated groundwater in public wells proximate to the facility.

**Soil:**

Exposure to potentially contaminated soil during construction activities was evaluated.

For the waste oil contamination being remediated by Shop 1, Dulles' contractor recommends construction worker exposure be addressed by a Health and Safety Plan. In the report on the contamination that is included as an attachment to the November 29, 2007 Addendum 1 to the Work plan, Dulles' contractor states that

*Limited exposure could occur for construction workers installing underground utilities in the area around the tank or the existing conduits and manholes. This risk can be mitigated by use of engineering and institutional controls during construction. Contractors working in the area should be informed of the potential for petroleum contamination and a health and safety plan should be prepared prior to the start of work. If petroleum contamination is encountered, the health and safety plan should contain a monitoring plan to ensure worker safety. This process has been used successfully on numerous other Airport projects.*

Dulles employs two engineers to oversee the health and safety of all activities of its maintenance employees. For work that is contracted out, Dulles notifies the contractors of potentially contaminated material that may be encountered and it is the contractors' responsibility to implement a health and safety plan to protect its employees. (See February 12, 2008 Memo on "Telephone Conversation with Tom Beatty, Dulles Airport, Regarding February 11, 2008 Information Request".)

Investigations of soil at the location of Former Drum Storage Area 2 (SWMU 16) and Former Waste Piles (AOC 2) is planned and investigation of soil by the Former Large Training Pit (AOC 1) will be requested. EPA is not aware of any current human exposure at these areas. AOCs 1 and 2 are located at a remote location within the airport that is no longer used. (See Figures for the RFA and Dulles Binder Submittal, and EPA May 16, 2006 Inspection Report, indicating soil piles have been removed.) SWMU 16 (Drum Storage Area 2) is located by the Shop 2 area and is covered with gravel. (See EPA May 16, 2006 Inspection Report, indicating SWMU 16 area is covered with gravel.)

**Surface Water**

Human exposures to contaminants in ongoing discharges to surface water are addressed by the Virginia Pollutant Discharge Elimination System and the Virginia State Water Control Law. Paragraph 13 of the VPDES Permit Program Fact Sheet states that the Tier 1 level of anti-degradation policy applies to all unnamed tributaries that this facility discharges to. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. To attain this level of protection, the facility implements a Spill Prevention Controls & Countermeasures Plan, a Storm Water Pollution Prevention Program, and a storm water management program. In addition, the facility implements a deicing fluid management plan which emphasizes minimization and increased recovery of deicing fluids. (See VPDES Annual Report submittals.)

There are no regulated fishing areas on the airport. (See "Summary of Conversation with Tom Beatty on September 20, 2006, including Follow Up Information.")



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While fishing on airport premises is prohibited, EPA observed evidence of trespasser fishing by a clear area adjacent to a large water body on the northwest portion of the facility (See May 16, 2006 Site Visit). A large upholstered chair and a vehicle were observed, and a facility representative stated that people always fish there.

A river downgradient of the airport, the Occoquan River, is a river that is listed for fishing in the VA Dept. of Gameland and Inland Fisheries.

It is unknown whether there is any contaminant impact to fish, and whether any fish are consumed by persons who fish.

However, an impact from infrequent ingestion of the fish is unlikely.

**Sediment**

EPA is not aware of any pathway of exposure to any potentially contaminated sediment.

EPA is not aware of any current human exposure at the locations where investigations of sediment will be requested. Those locations include:

- The Former Large Fire Training Pit (AOC1), and locations receiving drainage from the pit
- Dulles Lake, which formerly received discharges from Shop 1
- The location in Cub Run which formerly received discharges from Shops 2 and 3

(See February 12, 2008 Memo on "Telephone Conversation with Tom Beatty, Dulles Airport, Regarding February 11, 2008 Information Request".)

**Access to the Property:**

The property is limited to use for only airport purposes through a variety of mechanisms that include an Act of Congress, law of the Commonwealth of Virginia, and a lease between DOT and the MWWA. (See Enclosure 3 to August 21, 1995 submittal to VADEQ from the MWAA, re: Washington Dulles International Airport, Risk Based Closure of Soils and Groundwater).

Trespassers are prevented from entering the facility via a facility fence and site security; however, evidence of trespasser fishing at an onsite water body has been observed. The trespasser fishing may be associated with persons who have legal access to and work at the facility property. (See May 16, 2006 Site Visit)

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**<sup>4</sup> (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

If unknown (for any complete pathway) - skip to #6 and enter “IN” status code.

**Rationale and Reference(s):**

<sup>4</sup> If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

5. Can the “significant” **exposures** (identified in #4) be shown to be within **acceptable** limits?

If yes (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

If no (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.

If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code.

**Rationale and Reference(s):**

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

x YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Washington Dulles International Airport facility, EPA ID # VA6690500909, located in Loudoun and Fairfax Counties in Virginia, under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

NO - "Current Human Exposures" are NOT "Under Control."

IN - More information is needed to make a determination.

Completed by (signature) *Diane Schott*  
(print) Diane Schott  
(title) RCRA Project Manager

Date April 9, 2008

Superv  
isor

(signature) *Robert Greaves*  
(print) Robert Greaves  
(title) Chief, General Operations Branch

Date 4/9/2008

(EPA Region or State) EPA Region III

**Locations where References may be found:**  
EPA Office

**Contact telephone and e-mail numbers:**

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**FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.**