Supplement to the 2006 Supplemental EA/FONSI for Five-Year Capital Improvement Program

St. Mary's County Regional Airport (2W6)
Leonardtown, Maryland

FINAL
October 2023

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1. Introduction/Background

This document provides a Supplement to the 2006 Environmental Assessment (EA)/ Finding of No Significant Impact (FONSI) for "Five-Year Capital Improvement Program" at the St. Mary's County Regional Airport (2W6) in Leonardtown, Maryland. This Supplemental document has been prepared in accordance with Federal Aviation Administration (FAA) Order 1050.1F, Paragraph 9-3.

The St. Mary's County Regional Airport (2W6), previously referred to as the Captain Walter Francis Duke Regional Airport, is a general aviation airport in Leonardtown, Maryland which is owned and operated by the Commissioners of St. Mary's County. There is one runway at the Airport, Runway 11-29, which is 4,150 feet long and 75 feet wide and is in the process of being extended to 5,350 feet per the recommendation of the 2002 Airport Master Plan Update (MPU) and the 2006 EA/FONSI (see Attachment A).

The 2006 EA/FONSI includes the following projects, which are depicted conceptually in Figure 1:

- Remove obstructions for Runway 11/29
- Acquire approximately three acres of land and approximately 54 acres of avigation easement for obstruction removal, road relocation, and Runway Protection Zone (RPZ)
- Overlay and strengthen Runway 11/29 pavement to 30,000 pounds single wheel
- Extend Runway 11/29 by 1,200 feet to the west
- Relocate parallel Taxiway A 240 feet to the south and extend to the east
- Relocate Lawrence Hayden Road approximately 700 feet to the west
- Realign Airport Drive approximately 30 feet to the south
- Install Localizer/Distance Measuring Equipment (DME) antenna at the Runway 29 end
- Construct airport access road
- Construct west apron and connecting taxiway
- Construct T-hangars, conventional hangars, auto parking and apron
- Upgrade rotating beacon
- Install perimeter/security fence

Since the FONSI was issued, the County has completed the land acquisition and obstruction removal necessary to accommodate the runway extension.

The construction project to Extend Runway 11/29, Extend and Relocate Taxiway A, and Construct the west apron was divided into three phases. A Design Engineering Report was developed in 2018 for the complete design of the entire three-phase program. The project components included in each of the phases are outlined below:

Table 1: 2W6 Runway Program Phases

PHASE	COMPONENTS	COMPLETION DATE
Phase 1	•Relocate central portion of TW A •Construct west apron •Construct electrical vault	2020
Phase 2	•Runway 11 Obstruction Clearing •Earthwork grading for rw extension •Drainage pipes and basins •Erosion and Sediment Control	Ongoing
Phase 3	•Extend Runway 11-29 Pavement •Extend Taxiway A Pavement •Relocate final 1,000' of TW A •Install MITLs/signage along TW A •Construct 4-box PAPIs •Relocate REILS at new RW 11 end •Install stormwater management swales and ditches	2024 (Anticipated)

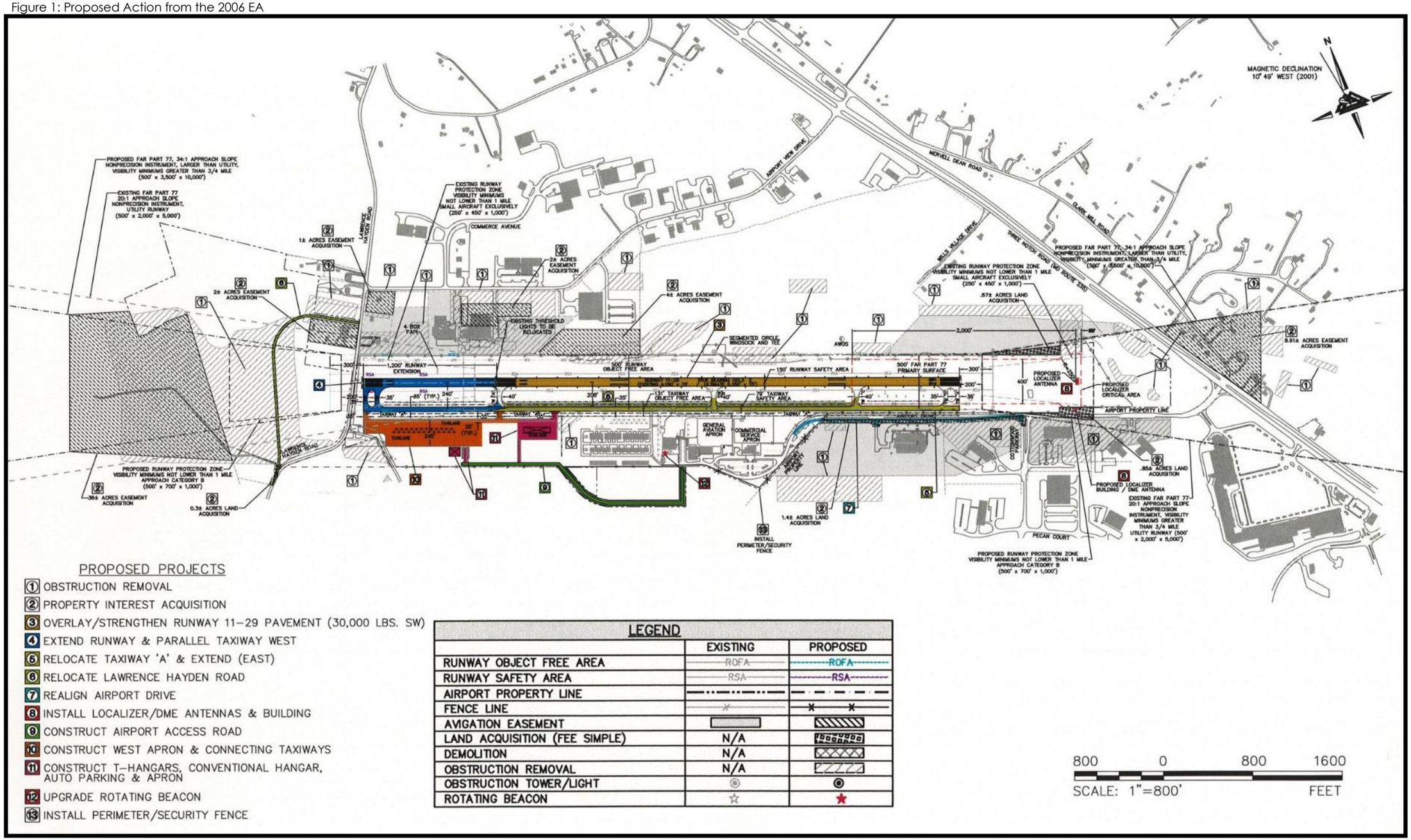
Source: Delta Airport Consultants, Inc.
Notes: TW = taxiway; RW = runway; MITL = Medium Intensity Taxiway Lighting; PAPI = Precision Approach Path Indicator; REIL = Runway End Identifier Light

In summer 2021, during Phase 2 construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree stumps, bricks, trash, and dark-stained soil.

The removal, transport, and disposal of the unearthed debris is considered by FAA to be a substantial change to the proposed action that is relevant to environmental concerns, and therefore, in accordance with the guidance in FAA Order 1050.1F, a Supplemental EA is required. This 2023 Supplemental EA is to focus on the analysis and conclusions specifically in the previous trash deposit location and will not revisit other environmental impact categories in detail.

The removal, transport, and disposal of the unearthed debris is referred to as the '2023 Proposed Action' in this document.

Figure 1: Proposed Action from the 2006 EA



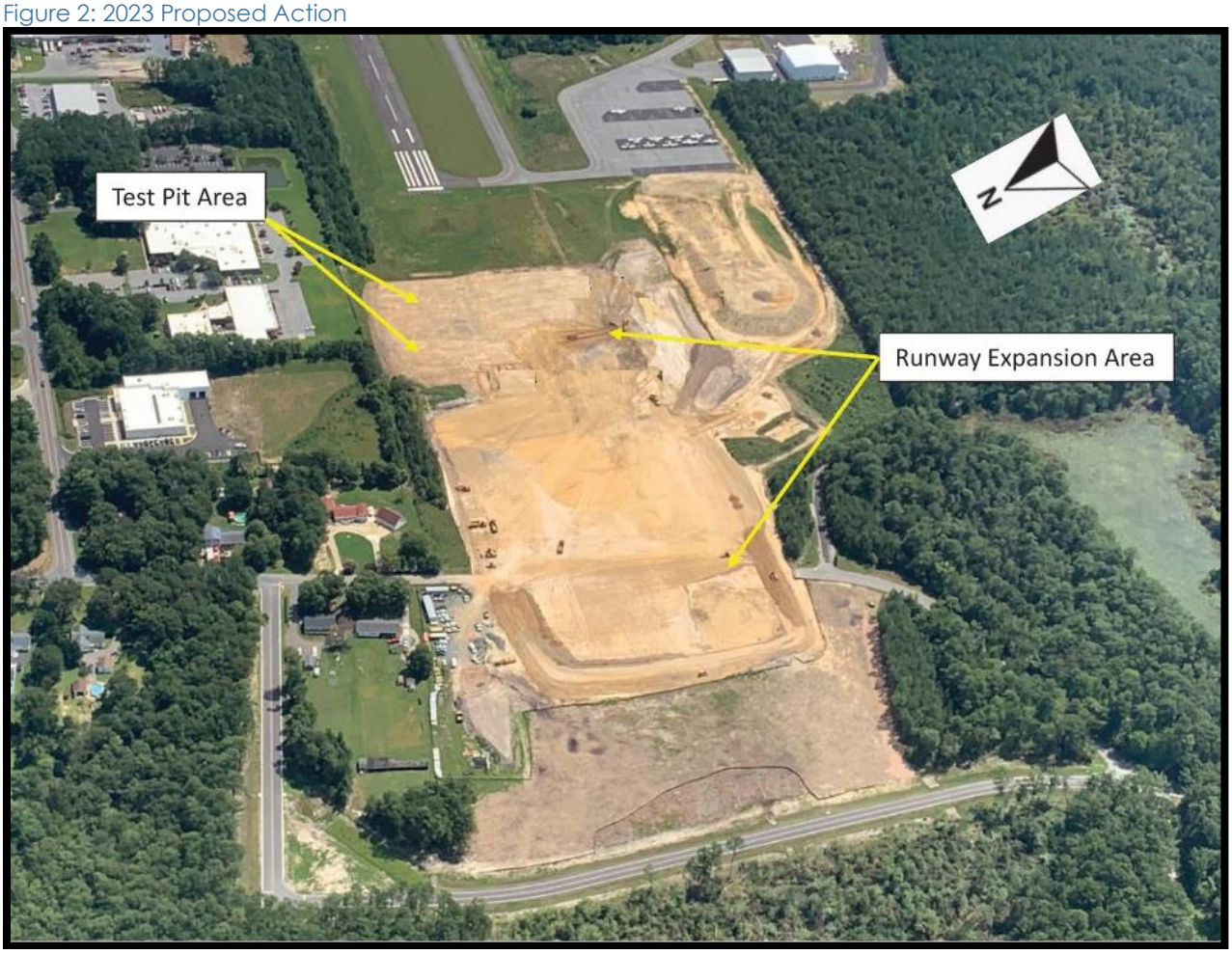
Source: Delta Airport Consultants, Inc. exhibit

2. Proposed Action

The Proposed Action analyzed in this 2023 Supplemental EA is the removal, transport, and disposal of the unearthed debris which was discovered during construction of the proposed runway extension at the St. Mary's County Regional Airport. The expanse of the area of debris to be removed is in the northeastern area of the runway expansion area (see Figure 2) and is estimated to encompass five acres.

The debris is to be unearthed by a permitted contractor and transported to the King George County landfill in Virginia, which is approximately 55 miles west of the airport.

Figure 2: 2023 Proposed Action



Source: Delta Airport Consultants, Inc. exhibit

3. Purpose and Need

The 2023 Proposed Action is associated with the greater, Five-Year Capital Improvement Program at 2W6 which was environmentally reviewed in 2006. The full Purpose and Need discussion from the 2006 EA is included in Attachment A.

The need for the 2023 Proposed Action is the existence of unearthed debris in the area where construction of a runway extension is ongoing. The purpose of the action is to remove, transfer, and dispose of the unearthed debris so that the runway construction project can continue.

4. Alternatives

This section compares the No Action and the Build/Proposed Action alternatives.

4.1 No Action

The No Action alternative serves as a basis for comparing environmental consequences of other potential alternatives. Under the No Action alternative, the unearthed debris would not be removed, transported, and disposed of in a proper facility. This would inhibit the continuance of the runway expansion effort, which would prevent the airport from achieving the stated Purpose and Need outlined previously. This alternative would also prevent the County from achieving the initial (2006) stated Purpose and Need of fulfilling the existing and projected aviation demand of the St. Mary's County Regional Airport. Because this alternative does not meet the stated Purpose and Need, it was not considered further.

4.2 Build/Proposed Action

The Proposed Action assumes that the proposed removal, transport, and disposal of the unearthed debris discovered during the construction effort would take place. This would allow the County to complete the runway expansion effort and achieve a runway length of 5,350 feet per the recommendation of the 2002 Airport Master Plan Update (MPU) and the 2006 EA/FONSI. Because the Build alternative enables the County to move forward with the project, therefore supporting the stated Purpose and Need, it has been selected as the Preferred Alternative.

5. Affected Environment

St. Mary's County Regional Airport is a general aviation facility located in St. Mary's County, approximately four miles northeast of Leonardtown, Maryland. The airport is owned and operated by St. Mary's County and serves the aviation needs of St. Mary's County and the surrounding communities.

The Airport's single runway (Runway 11−29) is currently 4,150 feet long and 75 feet wide. The runway is supported by partial parallel Taxiway A for approximately three quarters of the runway length. According to the FAA 5010-1 Master Record, the airport hosts 200 based aircraft and over 40,000 annual operations.

The airport property is bordered by industrial uses, especially to the north, and forested open space (see Figure 3). The municipal boundaries of Wildewood, Maryland are immediately south of airport property (depicted in yellow in Figure 3).

Figure 3: Affected Environment

Source: EPA 'NEPAssist'

This section is to include a description of each of the environmental impact categories as listed in FAA Order 1050.1F to establish a baseline from which to assess potential impacts.

5.1 Air Quality

Pursuant to the Clean Air Act (CAA), the Environmental Protection Agency (EPA) establishes, enforces, and periodically reviews the National Ambient Air Quality Standards (NAAQS). NAAQS have been established for six common air pollutants, referred to as criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter with a diameter of 10 micrometers or less (PM_{10}), particulate matter (PM) with a diameter of 2.5 micrometers or less ($PM_{2.5}$), and sulfur dioxide (SO_2). The EPA designates areas as either meeting (attainment) or not meeting (nonattainment) the NAAQS. Once the measured pollutant concentrations in a nonattainment area meet the NAAQS and the additional re-designation requirements in the CAA, the EPA will designate the area as a maintenance area.

The Airport is in St. Mary's County, Maryland. St. Mary's County is in attainment for NAAQS.

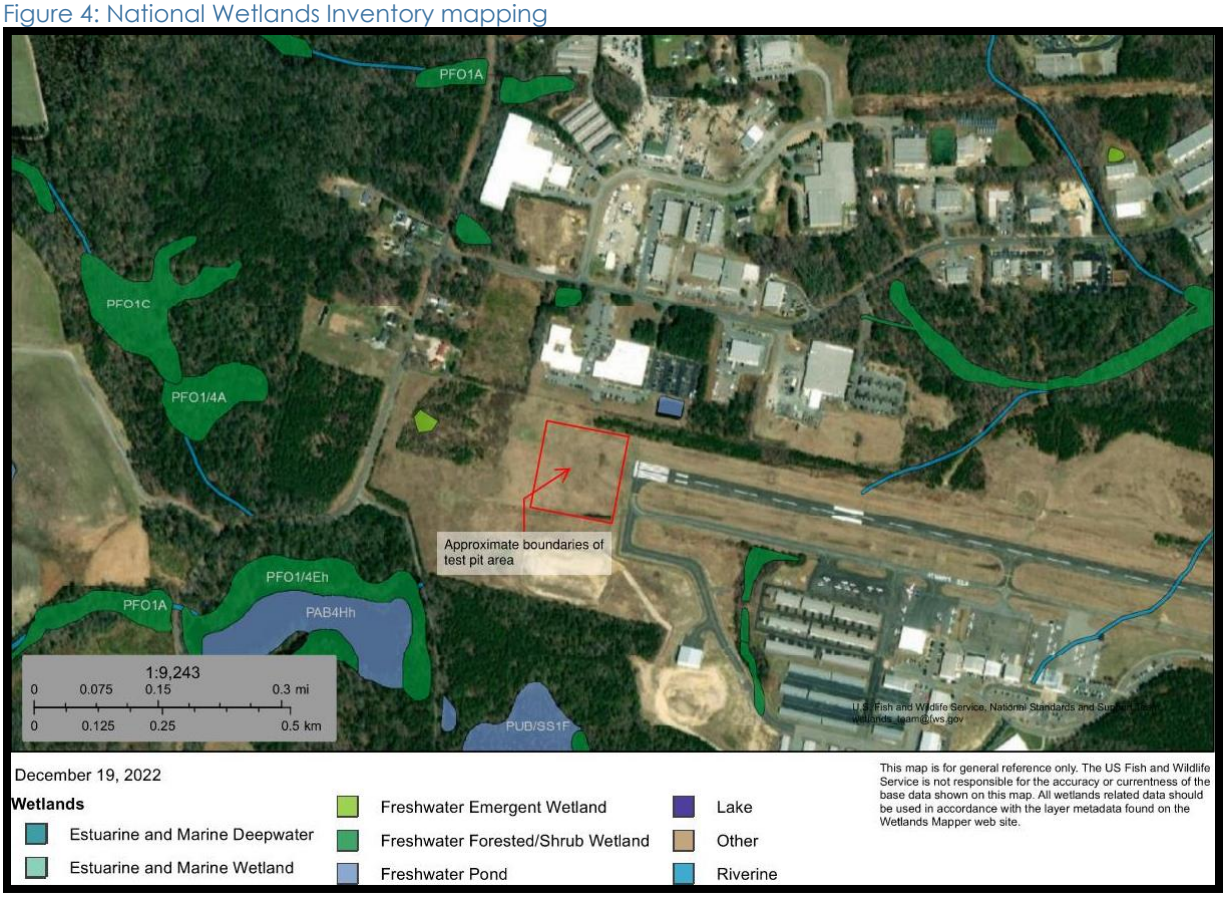
5.2 Biological Resources

Biological resources include various types of flora (plants) and fauna (fish, birds, reptiles, amphibians, etc.) as well as lakes, rivers, wetlands, forests, and upland habitats. The project area is an ongoing construction site on the airfield, which has been graded. The project area within airport property is bordered to the north by industrial uses, to the west by Lawrence Hayden Road, and to the south by dense forest and Huckleberry Way.

The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database identified one federally endangered species, the Dwarf wedgemussel, and one candidate species, the Monarch butterfly, which could be found on or near the project area. There are no critical habitats, wildlife refuges, or fish hatcheries within the full project area (see Attachment B).

Based on USFWS National Wetlands Inventory (NWI) data, there are no wetlands within the project area (see Figure 4).

Figure 4: National Wetlands Inventory mapping



Source: USFWS National Wetlands Inventory

5.3 Climate

Greenhouse gas (GHG) is a category of pollutants for which there is global and national concern. The majority of GHG emissions from transportation are CO_2 emissions resulting from the combustion of petroleum-based products, like gasoline, in internal combustion engines. GHG emissions have not been regulated under the CAA as air pollutants. Currently, there are no federal standards for GHG emissions applicable to aviation.

5.4 Coastal Resources

Coastal resources can include islands, transitional, and intertidal areas, salt marshes, wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as fish and wildlife and their respective habitats within these areas. Federal activities involving or affecting coastal resources are governed by the Coastal Barrier Resources Act (CBRA), the Coastal Zone Management Act (CZMA), and Environmental Order (EO) 13089, *Coral Reef Protection*.

St. Mary's County is located within the Maryland Coastal Zone.

5.5 Department of Transportation (DOT) Act, Section 4(f)

Section 4(f) of the U.S. DOT Act of 1966 protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. The Proposed Action would occur on dedicated airport property. The 2006 EA/FONSI noted that there are no known publicly owned parks or other protected Section 4(f) resources on or near the proposed projects.

5.6 Farmlands

Farmlands are agricultural areas considered important and protected by federal, state, and local regulations. The Farmland Protection Policy Act (FPPA) regulates federal actions with the potential to convert farmland to non-agricultural uses. Specifically, the Act regulates farmland as prime, unique, or of statewide or local importance.

According to FAA Order 1050.1F Desk Reference, direct impacts to farmlands typically involve the conversion of farmlands to non-agricultural use. The 2023 Proposed Action would occur on dedicated airport property which is previously disturbed.

5.7 Hazardous Materials, Solid Waste, and Pollution Prevention

Hazardous materials, solid waste, and pollution prevention are impact categories that include an evaluation of potential waste streams, potential hazardous materials either used during construction/operation or encountered at a contaminated site, and potential to interfere with ongoing remediation of a contaminated site.

The 2006 Proposed Action included a discussion of solid waste disposal which cited a "Site Assessment Report" which was prepared as part of the EA effort to research the history of waste disposal at 2W6. The report noted, "Solid waste was reportedly burned or disposed in trenches on the airport property before it was developed as an airport," including in the area planned for the western runway extension. The report included the results of a landfill assessment conducted by Jordan, Jones & Goulding, Inc., which included a site visit, review of aerial photographs, interviews with County and State staff, review of MDE files, and a review of previous planning reports prepared for 2W6. The report noted that a four-acre county dump west of Hollywood, Maryland known as the "Old Hollywood Landfill" is noted to be on the initial 208± acres acquired for the St. Mary's Airport, but that it was believed that landfill activity was contained to the eastern (Runway 29) end of the airport property, and concluded that waste is not anticipated to be found in the areas planned for construction for the Runway 11 extension.

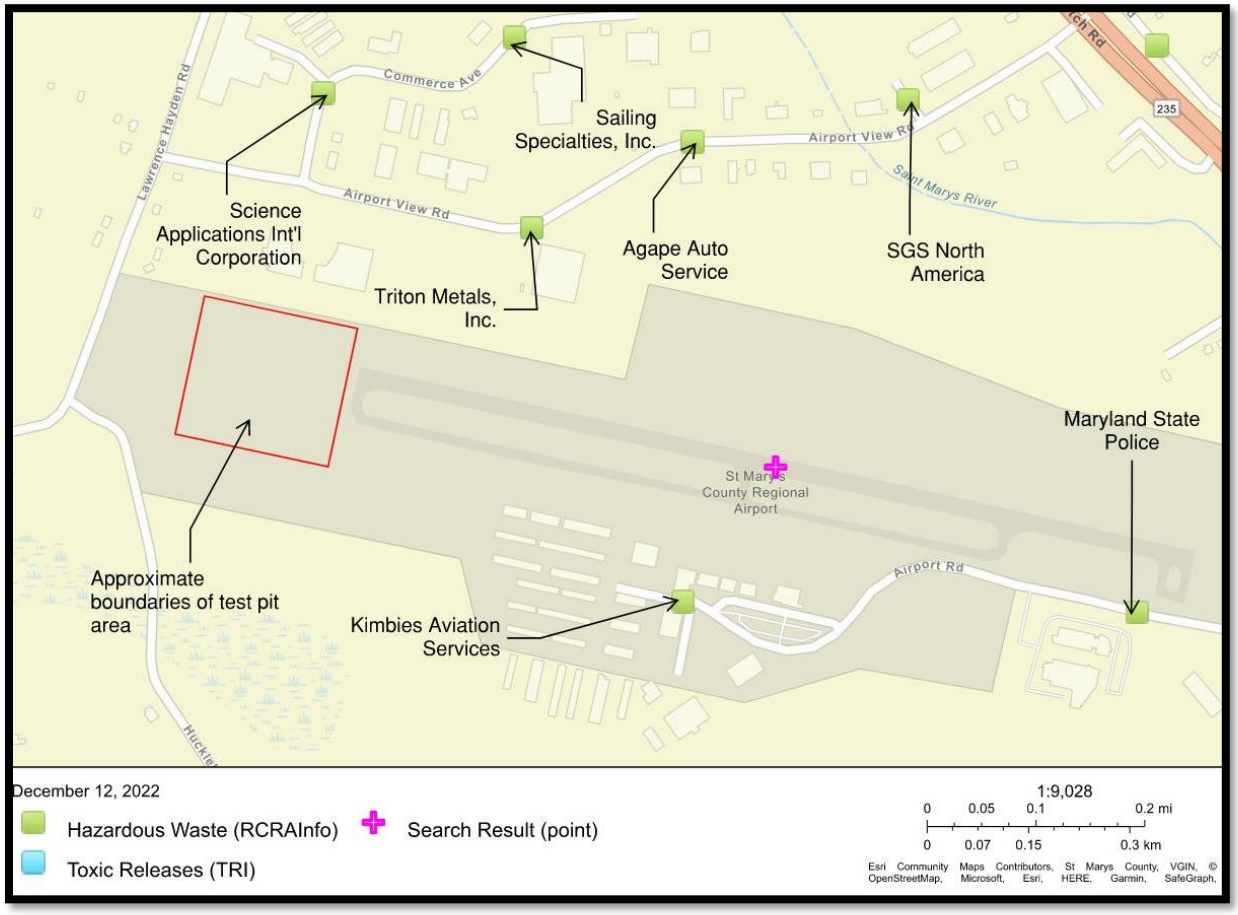
Based in part on the results of the "Site Assessment Report," the 2006 EA/FONSI concluded that there would be no significant solid waste impacts and did not recommend mitigation measures.

The 2006 EA also included a discussion of hazardous wastes which noted that based on the nature of the project proposed, no hazardous waste is likely to be generated, and that there would be no use of hazardous materials during construction with the exception of fuel.

Since that time, as previously noted, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded.

The EPA NEPAssist databases does not identify a hazardous site in the vicinity of the proposed debris removal, which would occur on the eastern runway end, although several companies in the airport vicinity which report to EPA are identified (see Figure 5).

Figure 5: EPA 'NEPAssist' Search for Hazardous Sites



Source: EPA 'NEPAssist'

5.8 Historical, Architectural, Archaeological, and Cultural Resources

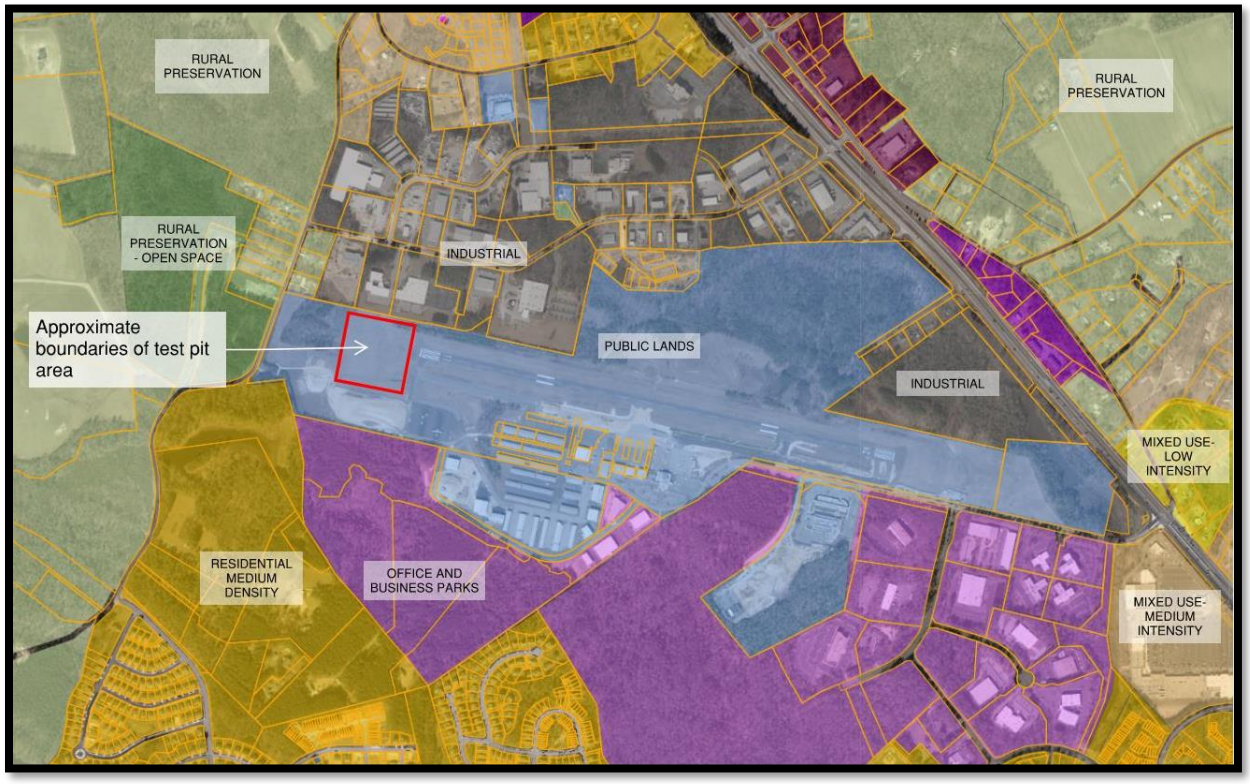
Historical, architectural, archaeological, and cultural resources encompass a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions.

An archaeological and architectural Phase 1 survey was performed during the 2006 EA which identified one architectural resource older than 50 years (ca. 1950 house, located on the east side of Clarks Mill Road) which was ultimately not recommended for listing on the National Register of Historic Places (NRHP). No archeological resources were identified during the survey. The 2006 EA/FONSI concluded that there would be no adverse impacts to historic or cultural resources as a result of the Proposed Action. Two Native American tribes, the Delaware Nation, Oklahoma and the Delaware Tribe of Indians have previously expressed interest in St. Mary's County.

5.9 Land Use

2W6 is an operating, general aviation airport which is nearly built out. St. Mary's County has designated the land use for the airport property as "Public Lands". The land uses surrounding the airport include Industrial to the north, Open Space to the west, Residential Medium Density and Office and Business Parks to the south, and Low and Medium-Intensity Mixed Use to the East (see Figure 6).

Figure 6: Land Use



Source: St. Mary's County GIS

5.10 Natural Resources and Energy Supply

Natural resources and energy supply provide an evaluation of a project's consumption of natural resources (such as water, petroleum for asphalt, stone for aggregate, wood, etc.) and use of energy supplies (such as coal for electricity, natural gas for heating, and fuel for aircraft or other ground vehicles). The Proposed Action involves the removal, transport, and disposal of unearthed debris, which could require construction vehicles likely powered by fuel and water for weighing down construction dust, among other sources of natural resources and energy. The 2006 EA/FONSI concluded that the 2006 Proposed Action would not result in significant impacts to energy supplies and natural resources.

5.11 Noise and Noise-Compatible Land Use

The 2023 project area is contained to airport property which is immediately bordered by industrial uses and densely forested land (see Figure 6).

5.12 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Socioeconomics is an umbrella term used to describe potential impacts on the human environment such as population, employment, housing, and public services, with special attention given to the potential disproportionate impacts of a proposed project to low-income or minority populations, or children. The project would be limited to occurring on an operating airfield. According to the EPA's EJScreen database, the population within ½ mile of the runway reports as 22% people of color, 8% low-income, and 8% under age 5 (see Attachment D).

5.13 Visual Effects

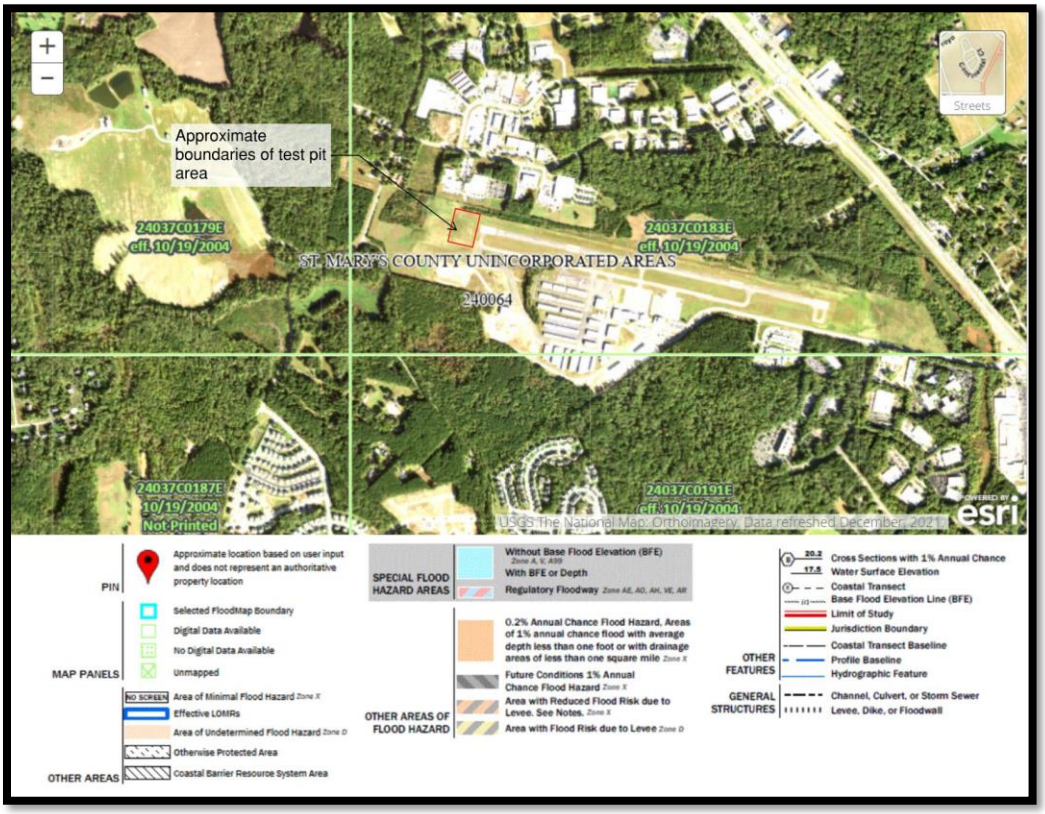
Visual effects are broken into two categories: *Light Emissions* and *Visual Resources and Character.* The Proposed Action would occur on an area of an operating airfield which is bordered by industrial uses and undeveloped, forested land which are generally compatible with airport operations.

5.14 Water Resources

5.14.1 Floodplains

According to current Federal Emergency Management Agency (FEMA) flood maps, the airport property, including the 2023 project area, remains outside of mapped floodplains (see Figure 7).

Figure 7: FEMA Flood Map



Source: FEMA Flood Map Service Center

5.14.2 Groundwater

Groundwater is surface water that is stored between sand, clay, and rock formations, and includes aquifers, geologic layers which store and transmit groundwater to wells, springs, and other water sources. The EPA NEPAssist online mapper does not identify a sole source aquifer on or near the airport property.

While perched water (subsurface water which is trapped at a depth above the water table) was identified in the project area for the runway extension construction at between five and six feet in depth, groundwater was not encountered until a depth of 15 feet. However, because the debris pile is at a higher elevation than the rest of the project, a 15-foot deep boring on that site did not encounter groundwater. The maximum approximate excavation depth to remove the unearthed debris is 15 feet, and the debris pile is at a higher elevation than the rest of the project.

5.14.3 Surface Water

Surface waters include streams, rivers, lakes, ponds, estuaries, and oceans. There are no surface waters on or near the 2023 proposed project area.

5.14.4 Wild and Scenic Rivers

There are no federally designated Wild and Scenic rivers in Maryland. The Patuxent River has been designated "Scenic" by the Maryland General Assembly; this river is approximately three miles northeast of the airport.

5.14.5 Wetlands

According to United States Fish and Wildlife Service NWI data, there are no wetlands on the 2023 project area (see Figure 4).

6. Environmental Consequences

This section examines the environmental categories listed in FAA Order 1050.1F *Environmental Impacts: Policies and Procedures*. The reasonably foreseeable environmental consequences of the Proposed Action and No Action alternatives are discussed.

6.1 Air Quality

The Airport is located in St. Mary's County, Maryland which is an attainment area for NAAQS.

- **No Action**: As it does not involve construction, the No Action alternative would not create adverse impacts to air quality.
- **Build/Proposed Action**: The 2023 Proposed Action is not associated with a change in the frequency of operations at 2W6 or the types of aircraft operating there.

  With the exception of temporary emissions related to construction, no adverse impacts to air quality are anticipated as a result of the 2023 Proposed Action.

6.2 Biological Resources

The USFWS IPaC database has identified the Dwarf wedgemussel and the Monarch butterfly as protected species which could be found in the project area; no critical habitats, wildlife refuges, or fish hatcheries were identified within the project area or in the vicinity.

- **No Action:** As it does not involve construction, the No Action alternative would not create adverse impacts to biological resources.
- **Build/Proposed Action**: Based on the characteristics of the study area (a graded, in-progress construction project on an operating airfield) suitable habitat for either species is likely not present. An online determination key on the IPaC site was used to conclude No Effect to the Dwarf wedgemussel. The review package was submitted to USFWS in March 2023 for documentation (see Attachment B).

In consideration of the above, no adverse impacts to biological resources are anticipated from the 2023 Proposed Action.

6.3 Climate

The majority of GHG emissions from transportation are CO_2 emissions resulting from the combustion of petroleum-based products, like gasoline, in internal combustion engines.

- **No Action**: As it does not involve construction, the No Action alternative would not create climate impacts.
- **Build/Proposed Action**: The proposed removal, transport, and disposal of the unearthed debris is not associated with an increase in aircraft operations or aircraft operational changes. Some GHGs would be released by the trucks and equipment conducting the removal and transport; however, this is not anticipated to be significant.

There would be no measurable increase in greenhouse gases by the 2023 proposed Action and no significant, adverse impacts to climate are anticipated.

6.4 Coastal Resources

St. Mary's County is located within the Maryland Coastal Zone.

- **No Action**: As it does not involve construction, the No Action alternative would not impact coastal resources or require agency coordination.
- **Build/Proposed Action**: Because St. Mary's County is within the coastal zone of Maryland, coordination was conducted with the Maryland Department of the Environment (MDE) and the Maryland DNR to confirm that the project is consistent with the Maryland Coastal Zone Management Program. In June 2023, the MDE confirmed that the project is consistent with the CZMP (see Attachment E).

  No impacts to coastal resources are anticipated as a result of the proposed project.

6.5 Department of Transportation, Section 4(f) Resources

- **No Action**: As it does not involve construction, the No Action alternative would not impact Section 4(f) resources.
- **Build/Proposed Action**: The project would take place within the boundaries of airport property and there are no known Section 4(f) properties on or near the area proposed for the removal of unearthed debris. Historic properties are one type of Section 4(f) resource. MHT was contacted during this 2023 Supplemental effort and has confirmed that no additional impacts to historic properties are anticipated as a result of the 2023 Proposed Action (see Attachment C).

  No impacts to Section 4(f) resources are anticipated as a result of the proposed project.

6.6 Farmlands

The proposed removal of unearthed debris would take place within the boundaries of dedicated airport property.

- **No Action**: As it does not involve construction, land acquisition, or the conversion of farmlands, the No Action alternative would not impact farmlands.
  Build/Proposed Action: The area where the unearthed debris removal is proposed is a disturbed site on an active airfield which is not actively farmed.

  No significant impacts to farmlands are anticipated as a result of the 2023 Proposed Action.

6.7 Hazardous Materials, Solid Waste, and Pollution Prevention

In summer 2021, during Phase 2 construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded.

St. Mary's County informed MDE of the discovery in August 2021 and developed a sampling plan in consultation with MDE that consisted of advancing a series of soil test pits to identify and delineated the

horizontal and vertical extents of the buried debris, screen excavated soil airspace for the presence of total volatile organic compounds (TVOCs), and collect soil samples to chemically profile the material for handling and disposal. The County tasked Maryland Environmental Services (MES) with test pit siting and sampling; ALS Environmental Services was responsible for analyzing the soil samples. The 2021 *Trash Pit Exploration Report* is included as Attachment F.

Of 40 test pit locations depicted within the test pit area depicted in Figure 2, identified elevated TVOC measurements were recorded for four locations in the western portion of the investigation area (PIT-2, PIT-5, P-7, and P-12). Soil samples from these four locations were analyzed by ALS Environmental Services. Cadmium and Toxicity Characteristics Leaching Procedure (TCLP) lead were detected in the samples; however, the concentrations were detected at levels 10 to 300 times lower than the regulatory levels for these constituents. Polychlorinated Biphenyls (PCBs), Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO), and dioxins/furans were also detected in the soil samples. The concentrations of PCBs were found to be at concentrations less than the regulatory levels established by the USEPA and Toxic Substances Control Act (TSCA). TPH-DRO concentrations were found to be below the MDE level for non-residential soil and are several orders of magnitude lower than the average TPH-DRO required for landfill disposal. While concentrations of individual dioxins are lower than various regulatory levels, total dioxin concentrations in the four soil samples exceed the landfill acceptance concentration; therefore, based on dioxin content, the report concludes that this waste cannot be accepted for disposal in a municipal landfill. The County has identified the King George County landfill in Virginia as a suitable disposal site for the materials.

The report was submitted to the MDE's Solid Waste Program (SWP), which agreed with the recommendations of the report on excavation, removal, and filling at the airport runway expansion area (see letter in Attachment F). The mitigation measures listed in the letter are included in Section 7.

- **No Action**: As it does not involve construction, including the removal of unearthed debris, the No Action alternative would not involve or impact hazardous resources or create significant amounts of solid waste or pollution.
- **Build/Proposed Action**: The soil testing conducted in summer 2021 demonstrates that the buried debris is not considered to be hazardous based on consistent EP-toxicity results for the four soil samples; however, the extent of total dioxin concentrations does not permit the waste to be disposed in a municipal landfill.

  Based on the findings of the report and with the understanding that the debris is to be removed by a permitted contractor and disposed of in an appropriate offsite facility, the removal, transport, and disposal of the debris is not anticipated to have significant adverse impacts to this environmental resource category.

6.8 Historical, Architectural, Archaeological and Cultural Resources

MHT was contacted during this 2023 Supplemental EA effort and has confirmed that *no historic properties would be affected by the 2023 Proposed Action* (see Attachment C**).** Two Native American tribes, the Delaware Nation, Oklahoma and the Delaware Tribe of Indians, have previously expressed interest in St. Mary's County. Coordination letters were submitted by FAA to both tribes in March 2023

(see Attachment C); to date, responses from the tribes have not been received. Should responses be received before construction begins, every effort is to be made to accommodate the Tribes' requests.

- **No Action**: As it does not involve construction or ground disturbance, the No Action alternative would not impact historical, architectural, archaeological or cultural resources.
- **Build/Proposed Action**: Based on the coordination with MHT, *no impacts to historical, architectural, archaeological and cultural resources is anticipated as a result of the 2023 Proposed Action.*

6.9 Land Use

The land uses surrounding the airport include Industrial to the north, Open Space to the west, Residential Medium Density and Office and Business Parks to the south, and Low and Medium-Intensity Mixed Use to the East (see Figure 6).

- **No Action**: As it does not involve construction or land acquisition, the No Action alternative would not have land use impacts.
- **Build/Proposed Action**: The proposed removal of unearthed debris would take place on an operating airport surrounded by industrial uses and open space. Transport would occur on public roads, and disposal would occur in a permitted disposal facility.

  No land use impacts are anticipated as a result of the 2023 Proposed Action.

6.10 Natural Resources and Energy Supply

The Proposed Action involves the removal, transport, and disposal of unearthed debris, which could require construction vehicles likely powered by fuel and water for weighing down construction dust, among other sources of natural resources and energy.

- **No Action**: As it does not involve construction, the No Action alternative would not require significant natural resources or energy supply.
- **Build/Proposed Action**: *Similarly, no significant, additional impacts to natural resources or energy supply are anticipated as a result of the 2023 Proposed Action.*

6.11 Noise and Noise-Compatible Land Use

The FAA's *Airport Land Use Compatibility Planning* Advisory Circular notes that airport activities have no noise sensitivity impact on industrial and open spaces, which are the types of land use surrounding the airport.

- **No Action**: As it does not involve construction, the No Action alternative would not have noise impacts.
- **Build/Proposed Action**: *No noise impacts other than those temporary noise events associated with the removal, transport, and disposal of the unearthed debris are anticipated as a result of the 2023 Proposed Action.*

6.12 Socioeconomics, Environmental Justice (EJ), and Children's Health and Safety Risks

According to the EPA's EJScreen database, the population within ½ mile of the runway reports as 22% people of color, 8% low-income, and 8% under age 5 (see Attachment D), suggesting that environmental impacts resulting from the 2023 Proposed Action (the removal, transfer, and disposal of the unearthed debris) would not disproportionately impact minority and low-income communities or children. The EPA NEPAssist mapper does not identify schools on or near the project area.

- **No Action**: As it does not involve construction, the No Action alternative would not have socioeconomic impacts.
  Build/Proposed Action*: The removal, transport, and disposal of the unearthed debris would not have significant impacts (relocation of residents, significant environmental impacts that would be disproportionately borne by children, low-income residents, or EJ communities) to this environmental impact category.*

6.13 Visual Effects

The 2023 Proposed Action involves the removal, transfer, and disposal of unearthed debris and is not anticipated to involve significant adverse visual impacts. The project would occur as part of an ongoing construction project to extend Runway 11-29 at 2W6. The 2023 project site is immediately bordered by industrial uses and forested areas.

- **No Action**: As it does not involve construction/development, the No Action alternative would not cause visual impacts.
- **Build/Proposed Action**: The 2023 Proposed Action would take place on an operating airfield and adjacent to industrial uses. *There are no additional, significant visual impacts anticipated from the 2023 Proposed Action.*

6.14 Water Resources

6.14.1 Wetlands

National Wetlands Inventory (NWI) data does not identify wetlands where the unearthed debris is proposed to be removed (see Figure 4). Therefore there are no anticipated impacts from either the No Action or the 2023 Build/Action alternative.

6.14.2 Floodplains

FEMA flood data does not identify floodplains, including the 500-year flood zone, where the unearthed debris is proposed to be removed (see Figure 7). Therefore there are no anticipated impacts from either the No Action or the 2023 Build/Action alternative.

6.14.3 Surface Waters

There are no surface waters on or near the 2023 proposed project area.

- **No Action**: As it does not involve construction, the No Action alternative would not impact surface waters.

- **Build/Proposed Action**: There are no surface waters present in the vicinity of the projects. Sediment and erosion control facilities are to be in place during excavation to mitigate any seepage of chemicals or debris into downstream networks. *No significant adverse impacts to surface water are anticipated as a result of the 2023 Proposed Action.*

6.14.4 Groundwater

To achieve the 2023 Proposed Action, the maximum approximate excavation depth to remove the unearthed debris is 15 feet. Borings were conducted within the area where construction of the runway extension is occurring, and groundwater was encountered at a depth of 15 feet. However, the debris pile is at a higher elevation than the rest of the project and groundwater was not encountered by a 15 foot deep boring at the site where debris is proposed to be removed. There is no expectation to reach the water table during the excavation effort. Sediment and erosion control methods (such as silt fence) are to be in place during excavation to mitigate the seepage of chemicals or debris into downstream networks.

- **No Action**: As it does not involve construction, the No Action alternative would not impact groundwater.
- **Build/Proposed Action**: Based on the elevation of the site and the proposed erosion and sediment control measures, *no significant impacts to groundwater are anticipated as a result of the 2023 Proposed Action.*

6.14.5 Wild and Scenic Rivers

There are no federally designated Wild and Scenic rivers in Maryland nor state-designated rivers in the vicinity of the project area. *No adverse impacts to Wild and Scenic rivers are anticipated as a result of the No Action alternative or of the Build/Proposed Action alternative.*

6.14.6 Cumulative Impacts

Cumulative impacts are those impacts which result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable actions. In the past three years, the County has focused on the runway extension project, undergoing Phase II construction (during which the unearthed debris was discovered); see Table 1. The County also acquired an easement over an adjacent parcel with no plans to develop or remove trees (2021). The phased runway construction was environmentally reviewed under the 2006 EA/FONSI, and a Categorical Exclusion (Cat-Ex) was issued by FAA for the easement acquisition.

Anticipated projects in the next several years include the third and final phase of runway construction, a rehabilitation of the full runway pavement, and potential hangar development, depending on funding and tenant needs. The runway project was environmentally reviewed under the 2006 EA/FONSI. Based on FAA guidance, the rehabilitation and hangar projects would typically qualify for a Categorical Exclusion, although the appropriate level of NEPA would be determined as the projects are ready to move forward.

Because there are no significant environmental impacts anticipated as a result of the 2023 Proposed Action, it would not result in incremental environmental impacts when compared with other recent and anticipated projects.

7. Mitigation

Related to Historic, Architectural, Archaeological, and Cultural Resources, the following mitigation measures are proposed if a post-review discovery is made:

7.1 Cultural Resources

The FAA shall follow the procedures in 36 CFR 800.13 for post-review discoveries if potential historic properties are discovered or if unanticipated effects on known historic properties are found after the agency has completed Section 106 consultation for the undertaking.

If a post review discovery is made during implementation of an undertaking conducted under this Agreement, all activities within a 100- foot-radius of the discovery will cease, and the airport Sponsor shall take steps to protect the discovery, and promptly report the discovery to the FAA, SHPO/THPO, and Tribes that have expressed an interest in this area.

If the FAA has approved the undertaking and construction has commenced, determine actions that the agency official can take to resolve adverse effects, and notify the SHPO/THPO, any Indian Tribe that might attach religious and cultural significance to the affected property, and the Advisory Council on Historic Preservation (the Council) within 48 hours of the discovery. The notification shall describe the agency official's assessment of National Register eligibility of the property and proposed actions to resolve the adverse effects. The SHPO/THPO, the Indian tribe and the Council shall respond within 48 hours of the notification. The agency official shall take into account their recommendations regarding National Register eligibility and proposed actions, and then carry out appropriate actions. The agency official shall provide the SHPO/THPO, the Indian Tribe and the Council a report of the actions when they are completed.

7.2 Human Remains

If human remains and associated cultural items, as defined by the NAGPRA, are encountered, the airport Sponsor will immediately notify the FAA and follow the regulations at 43 CFR § 10. A NAGPRA plan of action will be implemented.

If human remains, funerary objects, sacred ceremonial objects or objects of national or tribal patrimony are discovered on state, county, municipal, or private lands, either through archaeological excavation or during construction, and no Burial Agreement is in place the Airport Sponsor shall require the person in charge to immediately cease within a 100- foot radius of the discovery, take steps to protect the discovery, and immediately notify the FAA, SHPO/THPO and the Tribes that have expressed an interest in this area.

7.3 Hazardous Materials

The MDE's August 2023 letter agreeing with the recommendations of the Test Pit Exploration Report noted the following mitigation measures:

- Material that has already been flagged as non-conforming to the non-residential cleanup standards and from the documented burn area should be excavated and disposed of off-site at

an appropriate facility. MDE/SWP requires the County to stockpile and analyze the excavated material prior to approval for burial at the site. Stockpiled materials should be free of metal/debris and dioxin impacted soil.

- Excavated material utilized for fill shall contain a de minimis amount of glass and plastic but there is no compliant screening size as long as the material can be compared to design standards. The material should be analyzed for the following contaminants to compare to the non-residential standards:
    - Priority pollutant metals
    - Mercury
    - Chromium, Hexavalent
    - VOCs and Semi-Volatile Organic Compounds (SVOCs)
    - Organochlorine Pesticides
    - Chlorinated Herbicides
    - PCBs Aroclors
    - TPH-Gasoline Range Organics (GRO) and TPH-DRO
    - pH
- Should the stockpile exceed 50,000 cubic yards, more than four composite samples may be warranted.
- The County shall provide analytical results from the composite samples to MDE/SWP for approval prior to utilizing the material as fill.
- Once filling operations are complete the County shall provide MDE/SWP documentation of fill material utilization.

8. List of Preparers

St. Mary's County
Gary Whipple, Deputy Director, St. Mary's County Department of Public Works and Transportation

Delta Airport Consultants, Inc.
Mary Ashburn Pearson, AICP: Responsible for overall document preparation
Delta Airport Consultants, Inc.: Technical Support

9. List of Agencies and Persons Consulted, and Agency Review Response

FAA
MHT
USFWS
MDE
Delaware Nation, Oklahoma
Delaware Tribe of Indians
Maryland Department of Transportation (DOT)

Maryland Department of Natural Resources (DNR)
Maryland Department of Planning (MDP)

The draft document was made available to the public for a 30-day review and comment period, from September 1, 2023 through October 1, 2023, and to various review agencies via the MDP State Clearinghouse. No public comments were received. The agency review comments are included in Attachment G and summarized below.

- The Maryland DOT, DNR, and MDP, including the MHT found the project to be consistent with their plans, programs and objectives, with the MHT reconfirming its "no effect" determination.
- The MDE found the project to be generally consistent with their plans, programs, and objectives, and listed several qualifying comments which are included in Attachment G.
- The MDE Water and Science Administration noted that the project is within a Tier II watershed which requires an Antidegradation Review; this was conducted in 2021 during the design effort and the MDE approval letter was provided to MDE to "close the loop" on this comment. See Attachment G.

The final document and environmental finding, upon issuance by FAA, are to be made available for a second 30-day public review period.

Attachment A- 2006 FONSI and Purpose and Need

U. S. Department
of Transportation

**Federal Aviation
Administration**

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Land, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370

June 28, 2006

Mr. George Erichsen
St. Mary's County
Department of Public Works & Transportation
P.O. Box 508
44825 St. Andrew Church Road
California, MD 20169

Re: Finding of No Significant Impact – Captain Walter Francis Duke Regional Airport

Dear Mr. Erichsen:

Enclosed is one copy of the Finding of No Significant Impact (FONSI), for the proposed improvement projects at Captain Walter Francis Duke Regional Airport for your information and files. We wish to thank you for your efforts in completing this action.

In accordance with FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, you are required to publish a notice of availability of the FONSI in the local newspaper. We have included a sample public notice that you may use. We would suggest that the public notice be published two times. Please forward a proof of publication of the notice to this office for our files.

If you have any questions, please contact me at 703-661-1362.

Sincerely,

Jennifer Mendelsohn
Environmental Protection Specialist

cc: Maria Stanco, FAA Environmental Team Lead
Colleen Angstadt, Delta Airport Consultants, Inc.

S A M P L E

NOTICE OF FINDING OF NO SIGNIFICANT IMPACT

The Federal Aviation Administration has announced that a "Finding of No Significant Impact" (FONSI) has been approved based upon results of a Final Environmental Assessment prepared in June 2006. The proposed project is the Airport's Five Year Capital Improvement Program at Captain Walter Francis Duke Regional Airport, California, Maryland.

The following projects are addressed by the FONSI:

- Remove obstructions for Runway 11/29.
- Acquire approximately three acres of fee-simple land and approximately 54 acres of avigation easement for obstruction removal, road relocation and Runway Protection Zone (RPZ) control.
- Overlay and strengthen Runway 11/29 pavement to 30,000 pounds SWL.
- Extend Runway 11/29 by 1,200 feet to the west.
- Relocate parallel Taxiway A 240 feet to the south and extend to the east.
- Relocate Lawrence Hayden Road approximately 700 feet to the west.
- Realign Airport Drive approximately 30 feet to the south.
- Install Localizer/DME antenna at the Runway 29 end.
- Construct airport access road.
- Construct west apron and connecting taxiway.
- Construct t-hangars, conventional hangars, auto parking and apron.
- Upgrade rotating beacon.
- Install perimeter/security fence.

The FONSI indicates that the proposed action is consistent with existing environmental policies and objectives as set forth in the National Environmental Policy Act of 1969 in that it will not significantly affect the quality of the human environment.

Copies of the FONSI are available for public inspection at the following locations:

Federal Aviation Administration
Washington Airports District Office
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166

St. Mary's County
Department of Public Works & Transportation
44825 St. Andrew Church Road
California, MD 20169

Local libraries where the Draft/Final EA was placed for public review

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT

Captain Walter Francis Duke Regional Airport
California, St. Mary's County, Maryland

Airport's Five Year Capital Improvement Program

1. **Introduction.** This document is a Finding of No Significant Impact on the environment as a result of a development proposal by St. Mary's County, owner and operator of Captain Walter Francis Duke Regional Airport (2W6). St. Mary's County's proposed actions are obstruction removal, land acquisition, overlay/strengthen Runway 11/29 pavement, extend Runway 11/29 and parallel taxiway west, relocate and extend parallel Taxiway A, relocate Lawrence Hayden Road, realign Airport Drive, install localizer/distance measuring equipment (DME) antennas and building, construct airport access road, construct west apron and connecting taxiway, construct hangars, upgrade rotating beacon and install perimeter fence. The Federal Aviation Administration (FAA) must comply with the National Environmental Policy Act of 1969 (NEPA) before being able to take the federal action of further processing of an application for Federal assistance in funding various airport development and for approval of the Airport Layout Plan (ALP) that depicts the proposed airport development projects. Approval of the ALP is authorized by the Airport and Airway Improvement Act of 1982, as amended (Public Laws 97-248 and 100-223).

2. **Project Purpose and Need.** The purpose of the proposed improvements is to meet FAA design standards and accommodate the existing and projected aviation demand of the Captain Walter Francis Duke Regional Airport. The existing Airport Reference Code (ARC) is B-II (small) and future ARC is B-II (large) based on aviation demand identified in the 2002 Master Plan Update. Runway 11/29 is 75 feet wide and 4,150 feet long with a pavement strength of 20,000 pounds Single Wheel Loading (SWL). To allow the airport to accommodate a wider variety of B-II aircraft, the proposed Runway 11/29 would need to be strengthened and extended. The installation of a localizer and DME antennas will provide more precise lateral guidance to aircraft during the approach to the runway and allow aircraft to more accurately determine their position along the final approach course during Instrument Meteorological Conditions. This project is part of the National Plan of Integrated Airport Systems (NPIAS), which is planned to provide public airport facilities conforming to minimum design standards.

   Obstruction removal includes the grading of terrain, removal of existing trees and similar natural growth objects, as well as buildings within the protected airspace for Runway 11/29 and the elimination of obstructions to the Federal Aviation Regulation (FAR) Part 77, *Objects Affecting Navigable Airspace* surfaces. Property interest acquisition is necessary to gain controlling interest of the RPZs and aid in the removal of obstructions.

3. **Proposed Project.** The following is a listing of the various components of the proposed project:

   - Remove obstructions for Runway 11/29.
   - Acquire approximately three acres of fee-simple land and approximately 54 acres of avigation easement for obstruction removal, road relocation and Runway Protection Zone (RPZ) control.
   - Overlay and strengthen Runway 11/29 pavement to 30,000 pounds SWL.
   - Extend Runway 11/29 by 1,200 feet to the west.
   - Relocate parallel Taxiway A 240 feet to the south and extend to the east.
   - Relocate Lawrence Hayden Road approximately 700 feet to the west.
   - Realign Airport Drive approximately 30 feet to the south.
   - Install Localizer/DME antenna at the Runway 29 end.
   - Construct airport access road.
   - Construct west apron and connecting taxiway.
   - Construct t-hangars, conventional hangars, auto parking and apron.
   - Upgrade rotating beacon.
   - Install perimeter/security fence.

4. **Reasonable Alternatives Considered.** As described in Chapter 2 of the Final Environmental Assessment (EA), the alternative courses of action evaluated include: (1) No Action, (2) Maintain ARC B-II (small) which includes those projects that will bring the airport into compliance with FAA design standards and improve safety including obstruction removal, land acquisition, relocation and extension of Taxiway A, realignment of Airport Drive, upgrading the rotating beacon and installation of a perimeter fence and (3) Proposed Project – develop and serve ARC B-II (large) which includes all the projects listed in Section 3 of this FONSI.

5. **Assessment.** The potential environmental impacts and possible adverse effects were identified and evaluated in a Final EA prepared in June 2006. The Final EA examined the following environmental impact categories: Noise; Compatible Land Use; Social Impacts; Induced Socioeconomic Impacts; Air and Water Quality; U.S. Department of Transportation Act Section 4(f) Land; Historic, Architectural, Archaeological and Cultural Resources; Biotic Communities; Endangered and Threatened Species of Flora and Fauna; Wetlands; Floodplains; Coastal Zone Management; Coastal Barriers; Wild and Scenic Rivers; Farmland; Energy Supply and Natural Resources; Light Emissions; Solid Waste Impacts; Construction Impacts; Hazardous Materials and Cumulative Impacts.

   Section A of the Final EA states that the 65 DNL noise contour extends beyond airport property north of Runway 29. No residential or noise sensitive facilities are located in the 65 DNL noise contour for the proposed project.

   Section B and C of the Final EA discloses impacts to six commercial/industrial properties for RPZ control and road relocation. The acquisition would not require the relocation of any businesses. The proposed project would also require an avigation easement acquisition over eight commercial/industrial and five residential properties to eliminate incompatible land uses and/or potential obstructions in the future. None of the properties to be acquired or eased would affect minority or low-income populations.

   Section I of the Final EA describes the proposed impacts to Biotic Communities. The proposed project would require obstruction removal which includes cutting of existing trees and grading of terrain on approximately 106 acres beneath the protected airspace for Runway 11/29 to eliminate obstructions to the FAR Part 77 surfaces. Obstruction (tree) removal to achieve compliance with FAR Part 77 is exempt from the Forest Conservation Act per Section 5-1602(b)(11). The Maryland Department of Natural Resources recommended not disturbing or removal forest habitat during the April-August breeding period to minimize impacts to native wildlife.

   As described in Section K of the Final EA the proposed project will impact approximately 12.64 acres of wetlands. Obstruction removal and grading limits for the relocation and extension of Taxiway A, apron construction, runway extension and road relocations would impact wetlands. Mitigation will include a 1:1 replacement for affected emergent wetlands and a 2:1 ratio for affected scrub-shrub or forested wetlands to comply with Maryland Department of Environment (MDE) regulations. A Joint Permit Application has been filed with the MDE and U.S. Army Corps of Engineers for approval.

6. **Mitigation Measures.** The FAA will require that St. Mary's County implement the following conservation measures, if they decide to pursue the proposed project:

1. Obstruction (tree) removal to achieve compliance with Federal Aviation Regulation Part 77, *Objects Affecting Navigable Airspace* is exempt from the Forest Conservation Act per Section 5-1602(b)(11). Due to this exemption, federal funding for tree removal mitigation may be limited.

2. Approximately 12.64 acres of wetlands would be impacted by obstruction removal and grading limits for the relocation and extension of Taxiway A, apron construction, runway extension and road relocations. Mitigation will include a 1:1 replacement for affected emergent wetlands and a 2:1 ratio for affected scrub-shrub or forested wetlands to comply with Maryland Department of Environment (MDE) regulations. A Joint Permit Application has been filed with the MDE and U.S. Army Corps of Engineers for review and approval.

3. St. Mary's County shall prepare an erosion and sedimentation control plan to meet Maryland's Erosion and Sediment Control Guidelines for State and Federal Projects, pursuant to the Environmental Article, Title 4, Subtitle 1, Annotated Code of Maryland and COMAR 26.17.01.

4. The implementation of Best Management Practices will minimize construction impacts associated with the proposed project.

The EA has been reviewed by the FAA and found to be adequate for the purpose of the proposed Federal action. The FAA has determined that the EA for the proposed project adequately describes the potential impacts of the proposed actions. No new issues surfaced as a result of the public participation process.

7. **Public Participation.** Efforts were made to encourage public participation through the public meeting process as is documented in the Final EA (Appendix M). St. Mary's County, as owner and operator of 2W6 held two public meetings. These meetings were held on May 24, 2004 and May 22, 2006. Notices announcing these public meetings were published in the local newspapers. The sign-in sheets, project summaries and comments received are included in the EA (Appendix M). The Draft EA was made available to the public from May 10, 2006 to June 12, 2006. Two comments in support of the proposed project were received.

8. **Inter-Agency Coordination.** In accordance with 49 USC 47101(h), FAA has determined that no further coordination with the U.S. Department of Interior or the U.S. Environmental Protection Agency is necessary because the proposed project does not involve construction of a new airport, new runway or major runway extension that has a significant impact on natural resources including fish and wildlife; natural, scenic, and recreational assets; water and air quality; or another factor affecting the environment.

9. **Reasons for the Determination that the Proposed Project will have No Significant Impacts.** The attached Final EA examines each of the various environmental impact categories. The removing obstructions, acquiring land, overlay/strengthening Runway 11/29 pavement, extending Runway 11/29 and parallel taxiway, relocating and extending parallel Taxiway A, relocating Lawrence Hayden Road, realigning Airport Drive, installing localizer/DME antennas and building, constructing airport access road, constructing west apron and connecting taxiway, constructing hangars, upgrading rotating beacon and installing perimeter fence would not exceed the threshold of significance as defined in FAA Order 1050.1E. Based on the information contained in the Final EA, the FAA has determined the proposed project (Alternative 3), is most feasible and prudent alternative. FAA has decided to implement the proposed project as described in the attached Final EA.

10. Finding of No Significant Impact

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information I find that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969 (NEPA). I also find the proposed Federal Action, with the required mitigation referenced above will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to section 102 (2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

APPROVED:

Terry J. Page, Manager
Washington Airports District Office

6/28/06
Date

DISAPPROVED:

Terry J. Page, Manager
Washington Airports District Office

Date

The Master Plan Update determined facility requirements based upon existing and forecasted aviation demand. The requirements are needed to satisfy the increasing short-term and long-term aviation needs of the community. Facility requirements were used to present several alternative development layouts for the airport. Following the alternative analysis a preferred operational development alternative was chosen to develop the Airport Layout Plan (ALP).

The ALP identifies all development throughout the 20-year planning period. The proposed improvements were then planned over three development phases, Phase I (2000-2005), Phase II (2005-2010), and Phase III (2010-2020).

D. PURPOSE AND NEED FOR THE PROPOSED FEDERAL ACTION

The proposed improvements are intended to meet FAA design standards and fulfill the existing and projected aviation demand of the Captain Walter Francis Duke Regional Airport. This section provides a description of specific needs addressed by each project type included in the sponsor's proposed action.

Obstruction Removal

Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions in navigable airspace; sets forth the requirements for notice to the FAA administrator of certain proposed construction or alteration; provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace; provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and provides for establishing antenna farm areas. Any existing fixed or mobile objects are, and future objects may be, obstructions to air navigation if they are of greater height than any of the heights or surfaces outlined in FAR Part 77.23. The standards apply to all objects, whether manufactured, natural growth, or terrain.

Existing objects within the protected airspace or known penetrations to Part 77 surfaces for Runway 11-29 include both vegetative and man-made structures. Obstructions within the primary and/or transitional surfaces include trees, brush, power/light poles, and buildings. Additionally, both approaches to Runway 11-29 have tree obstructions. This project includes the removal of obstructions to Part 77 surfaces. Because the majority of obstruction removal will occur off existing airport property, the county has proposed to obtain the appropriate property interest needed to remove current or future obstructions.

Property Interest Acquisition

Fee simple land acquisition and avigation easement will be necessary for the airport to adequately control RPZs and approach slopes and to facilitate obstruction removal as noted in Table 1-1.

Overlay/Strengthen Runway 11-29

Runway 11-29 currently has a published pavement strength of 20,000 lbs. single wheel. To allow the airport to accommodate a wider variety of B-II aircraft, existing runway pavement needs to be overlaid and strengthened to accommodate 30,000 lbs. single wheel.

Extend Runway and Parallel Taxiway West

An extension to Runway 11-29 is needed to address the airport's future critical design aircraft, ARC B-II (large), and to assist in achievement of the airport's operational objectives as detailed in the Master Plan Update. The effort is focused on extending Runway 11-29 from the existing length of 4,150 feet to 5,350 feet of usable pavement for aircraft take-off and landing. Also, to service the additional 1,200 feet of runway length, Taxiway 'A' would be extended west.

Relocate Taxiway 'A' and Extend (east)

The project requires the relocation of Taxiway 'A' to meet Group II design standards for separation of parallel taxiway and runway centerlines. The centerline separation is currently 207 feet, whereas FAA design standard separation is 240 feet.

Relocate Lawrence Hayden Road

The relocation of Lawrence Hayden Road is necessary to accommodate the 1,200-foot runway extension and associated runway safety area (RSA). The new road realignment will be located approximately 700 feet to the west of the existing right-of-way and will reconnect to an existing portion of Lawrence Hayden Road near the intersection of Airport View Drive.

Realign Airport Drive

It is necessary to realign Airport Drive to accommodate the relocation of Taxiway 'A' and the associated taxiway object-free area.

Install Localizer/DME Antennas and Building

Currently, there are two published instrument approach procedures for 2W6; VOR or GPS Runway 29 and GPS Runway 11. The approach procedure with the lowest landing minimums is the GPS Runway 11 with a minimum descent altitude (MDA) of 560 feet mean sea level (MSL) and one statute mile visibility. The MDA equates to a height above the runway threshold of 418 feet.

The installation of a localizer and DME will provide more precise lateral guidance to aircraft during the approach to the runway and allow aircraft to more accurately determine their position along the final approach course during Instrument Meteorological Conditions (IMC).

The installation of a localizer with DME is consistent with the FAA's and the Maryland Aviation Administration's (MAA) mission of fostering aviation and improving reliability and safety of air transportation facilities. These improvements are needed to enhance the safety of aircraft using the airport, as well as the usefulness of the facility during adverse weather conditions.

Construct Airport Access Road

It is necessary to construct a road to allow access to and from the general aviation and terminal areas to the proposed hangars, auto parking and public apron along the west side of the airport. The airport access road would also ultimately connect to the existing Airport Drive to Lawrence Hayden Road.

Construct West Apron and Connecting Taxiways

Construction of a new apron along the west side of the airport, south of the Runway 11 extension, is necessary to accommodate future growth as demonstrated in the Master Plan Update. The proposed 23,000-square-yard apron would replace the existing grass tie-downs downs and meet the need for additional tie-downs. Connector taxiways are necessary to allow access from the apron to Taxiway 'A' and the runway.

Construct T-hangars, Conventional hangars, Auto Parking, and Apron

The Master Plan Update indicates that approximately 45 percent of existing based aircraft at 2W6 are stored in T-hangars. The available T-hangar space is full and there is a waiting list for hangar space. It is necessary to construct a 10-unit T-hangar to meet current demand. The T-hangar would be constructed along the west side of the airport on newly constructed apron. The Master Plan Update analysis of based aircraft also indicated additional demand for conventional hangar space at the airport throughout the planning period. An 8,000-square-feet conventional hangar is necessary to meet the current need at the airport. The hangar would be constructed on the west side of the airport. In order to accommodate the tenants of the conventional hangar and T-hangars, a

new automobile parking lot is necessary and would be constructed adjacent to the conventional hangar.

Upgrade Rotating Beacon

The existing rotating beacon (10-inch) is located on top of the county hangar, but is not clearly visible to approaching pilots. In order to improve visibility the beacon needs to be replaced with a new, tower-mounted structure.

Install Perimeter/Security Fence

The airside and landside are separated by a security fence on the south side of the airport. Additional fencing is required to enclose property recently acquired or to be acquired as part of projects assessed in this EA.

E. PROPOSED FEDERAL ACTIONS

The requested federal action includes the following:

- Unconditional approval of the portion of the Airport Layout Plan that depicts the proposed projects.
- Approval of further processing of an application for federal assistance to implement those AIP eligible projects.

Attachment B- USFWS Coordination

Mary Ashburn Pearson

From: Mary Ashburn Pearson <mapearson@deltaairport.com>
Sent: Wednesday, March 15, 2023 5:01 PM
To: CBFO Project Review, FW5
Subject: Project Review Request
Attachments: 23004 2W6 Project Description.pdf; Species List_ Chesapeake Bay Ecological Services Field Office (1).pdf; NE Consistency Letter_ Northeast Endangered Species Determination Key 2023-03-15.pdf

Categories: Filed by Newforma

Hello,

Attached is a self-certification package for "Remove, Transport, and Dispose of Unearthed Debris" project at the St. Mary's County Regional Airport (2W6). The dwarf wedgemussel and monarch butterfly were identified by IPaC as possibly occurring on or near the project area; however, given that this is an in-progress construction site for a runway extension on the airfield, it is unlikely that suitable habitat for either species is present. The consistency letter for the dwarf wedgemussel is also attached.

Thank you,

Mary Ashburn

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
P. 804.955.4556 | WWW.DELTAAIRPORT.COM

PROJECT DESCRIPTION FOR 'REMOVE, TRANSPORT, AND DISPOSE OF UNEARTHED DEBRIS'
ST. MARY'S COUNTY REGIONAL AIRPORT (2W6)
MARCH 2023

PROJECT LOCATION
St. Mary's County Regional Airport (2W6)
44174 Airport Rd, California, MD 20619
St Mary's County Regional-2W6 - Google Maps

PROJECT DESCRIPTION
The Commissioners of St. Mary's County, owner and operator of 2W6 airport, are currently constructing a runway extension on the airport property. The runway extension project and other on-airport development projects were environmentally reviewed under a 2006 Environmental Assessment (EA), and a Finding of No Significant Impact (FONSI) was issued by FAA in June 2006.

Since the FONSI was issued, the County has completed the land acquisition and obstruction removal necessary to accommodate the runway extension. The County has also completed the design of the project and initiated construction.

In summer 2021, during construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree stumps, bricks, trash, and dark-stained soil.

The removal, transport, and disposal of the unearthed debris is considered by FAA to be a substantial change to the proposed action that is relevant to environmental concerns, and therefore, in accordance with the guidance in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures,* Paragraph 9-3, a Supplemental EA is required. This United States Fish and Wildlife Service coordination is being conducted as part of the National Environmental Policy Act (NEPA) review.

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Figure 1: Construction Underway for Runway Extension at 2W6

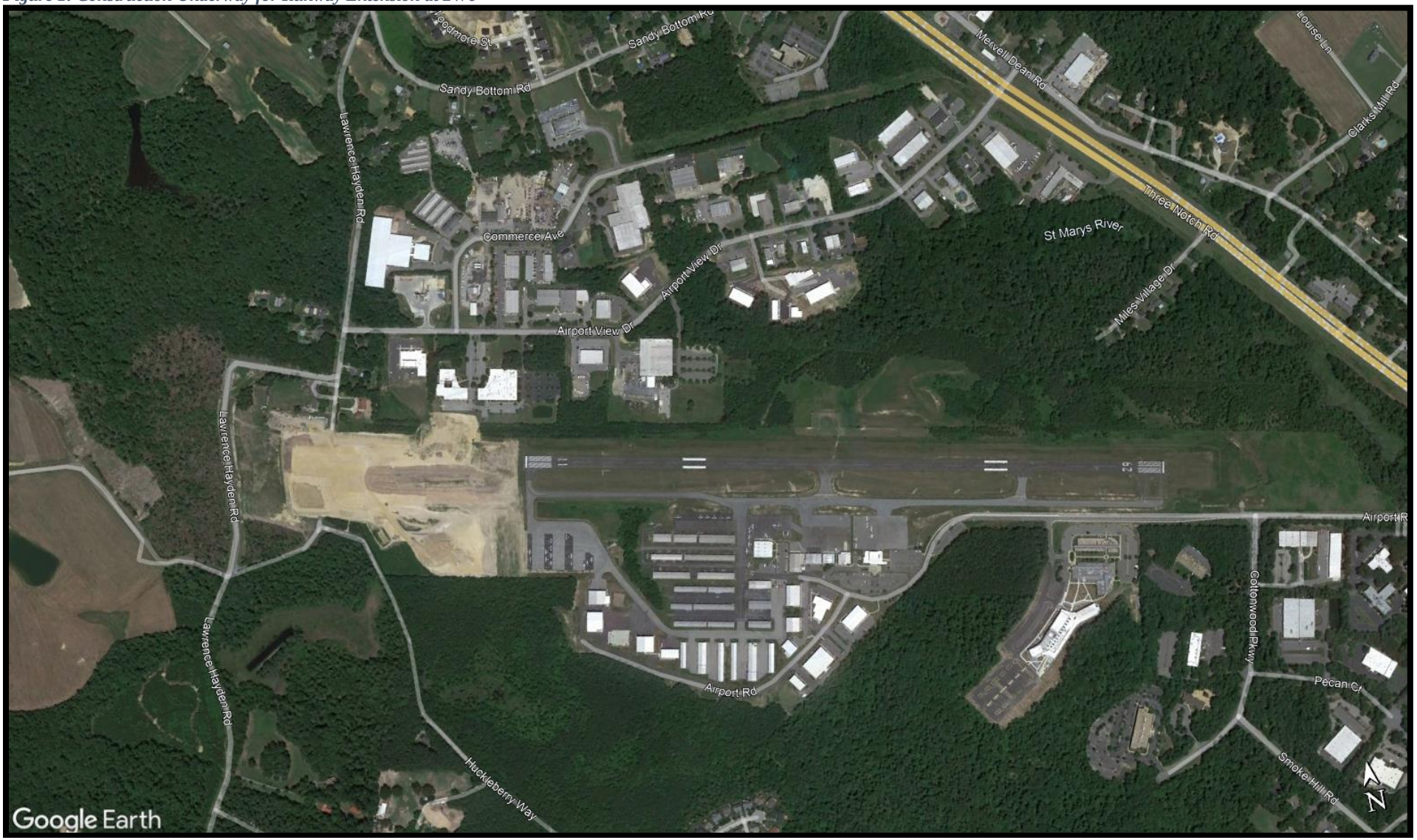


Figure 2: Trash Pit Area within Runway Expansion Area

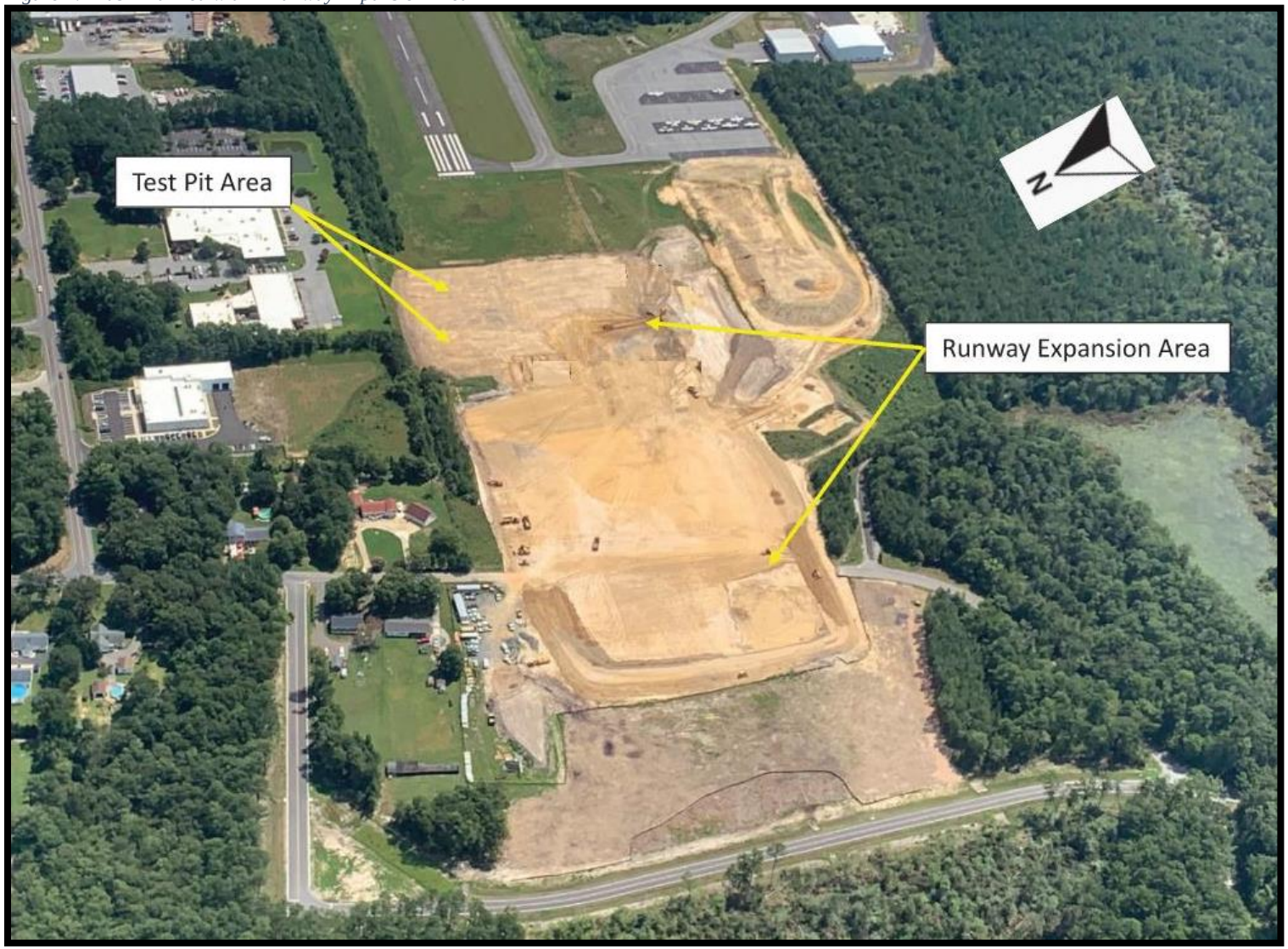
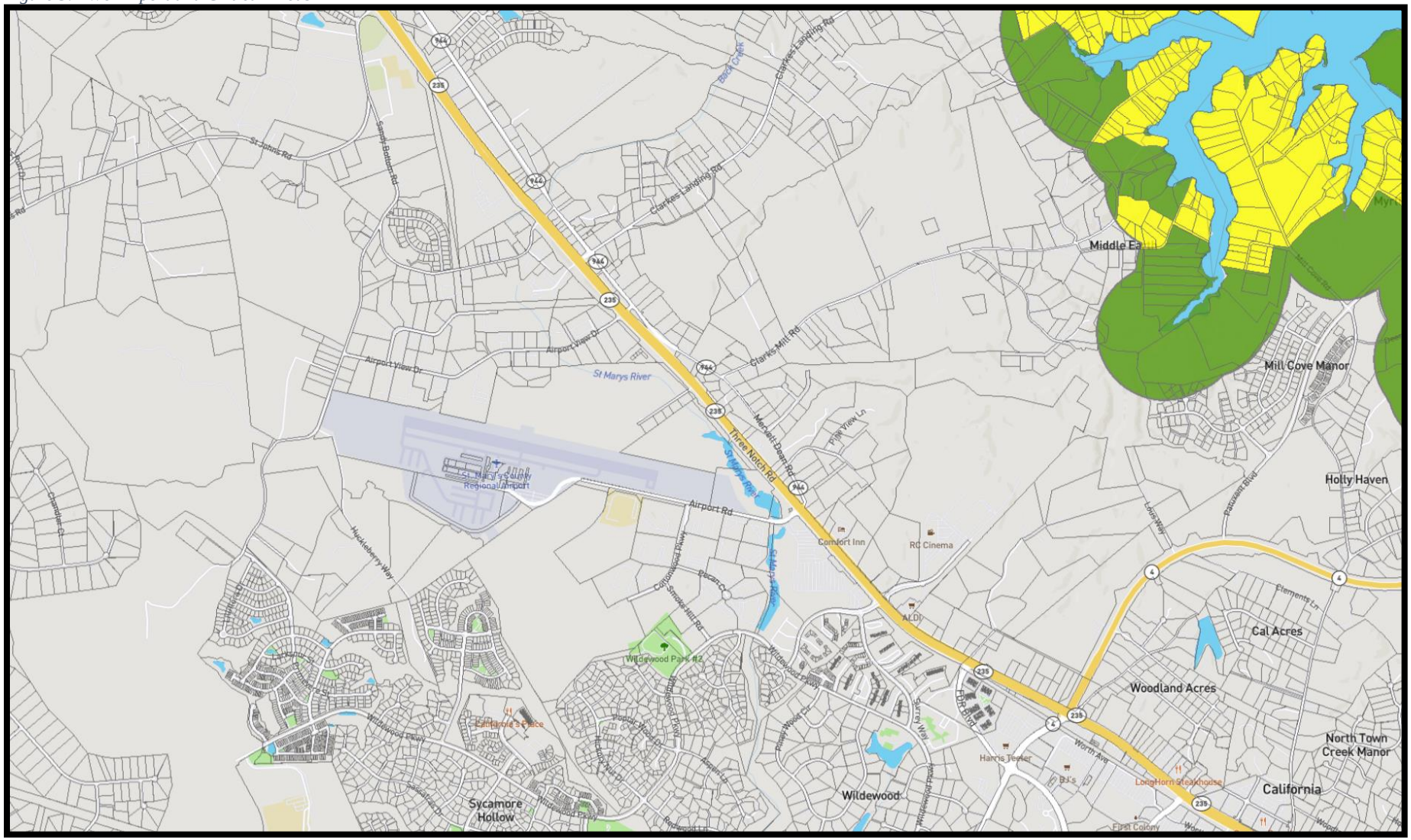
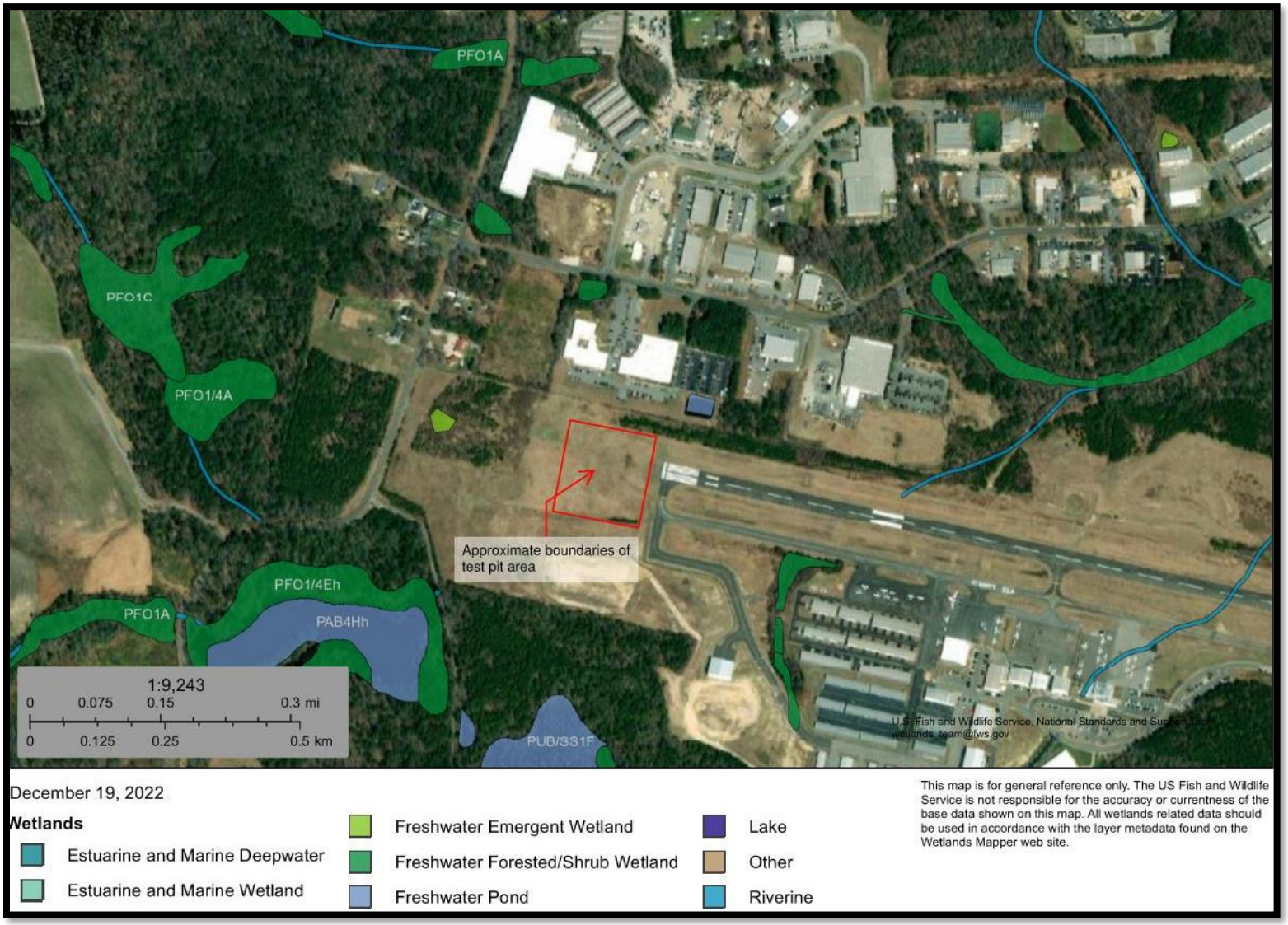


Figure 3: 2W6 Airport and Critical Areas



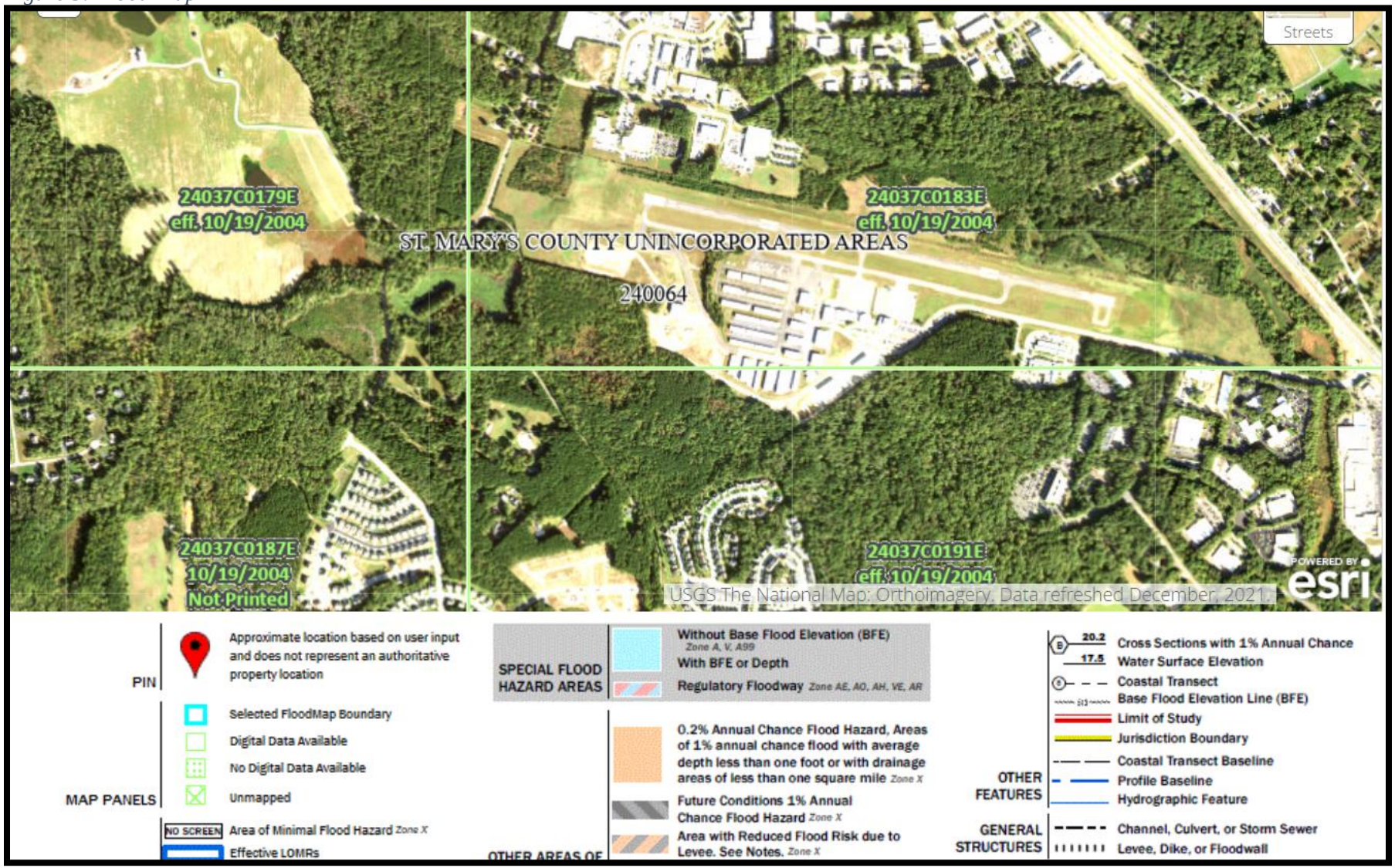
Source: Maryland DNR

Figure 4: National Wetlands Inventory (NWI) data



Source: USFWS

Figure 5: Flood Map



Source: FEMA

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127

In Reply Refer To: March 15, 2023
Project code: 2023-0056425
Project Name: St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris
IPaC Record Locator: 121-123691509

Federal Nexus: yes
Federal Action Agency (if applicable): Department of Transportation

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris'

Dear Mary Pearson:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on March 15, 2023, for “St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris” (here forward, Project). This project has been assigned Project Code 2023-0056425 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species’ determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (DKey), invalidates this letter. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat.

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal

consultation is required (except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	**Listing Status**	**Determination**
Dwarf Wedgemussel (*Alasmidonta heterodon*)	Endangered	No effect

Conclusion If there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Candidate

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or PermitsR5MB@fws.gov, with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the Chesapeake Bay Ecological Services Field Office and reference the Project Code associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris

2. Description

The following description was provided for the project 'St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris':

> Unearthed debris (modern trash) has been found during construction of a runway extension at St. Mary's County Regional Airport (2W6) which needs to be removed, transported, and disposed of.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.316343950000004,-76.55934799159385,14z

QUALIFICATION INTERVIEW

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

   Yes

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

   Note: This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

   No

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project?

   No

5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

   Note: If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

   Yes

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

   No

7. Will the proposed project involve the use of herbicide?

   No

8. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?

   No

9. Does any componentof the project associated with this action include structures that may pose a collision risk to birds or bats (e.g., wind turbines, communication towers, transmission lines, any type of towers with or without guy wires)?

   NoteFor federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   No

10. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

    For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

    No

11. Will the proposed project affect wetlands?

    This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

    No

12. Will the proposed project activities (including upland project activities) occur within 0.5 miles of the water's edge of a stream or tributary of a stream where listed species may be present?

    No

13. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary?

    No

14. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream?

    No

15. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds)?

    No

16. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining?

    No

17. Will the proposed project involve the creation of a new water-borne contaminant source?

    Note New water-borne contaminant sources occur through improper storage, usage, or creation of chemicals. For example: leachate ponds and pits containing chemicals that are not NSF/ANSI 60 compliant have contaminated waterways. Sedimentation will be addressed in a separate question.

    No

18. Will the proposed project involve perennial stream loss that would require an individual permit under 404 of the Clean Water Act?

    No

19. Will the proposed project involve blasting?

    No

20. Will the proposed project include activities that could result in an increase to recreational fishing or potentially affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage)?

    No

21. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream?

    NoteAnswer "Yes" to this question if erosion and sediment control measures will be used to protect the stream.

    No

22. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank?

    No

23. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project? If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

    Yes

24. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?

    Automatically answered
    No

25. [Semantic] Does the project intersect the Indiana bat critical habitat?

    Automatically answered
    No

26. Are federally listed freshwater mussels known or assumed to be present in the action area? If unsure, contact the appropriate Ecological Services Field Office for additional information or answer "NO" and continue through the key.

    No

27. Did a qualified surveyor conduct a survey within the action area with the appropriate level of search effort according to local survey guidance?

    No

28. [Hidden Semantic] Does the project area intersect the AOI of Dwarf Wedgemussel?

    Automatically answered
    Yes

29. [Semantic] Does the project intersect the candy darter critical habitat?

    Automatically answered
    No

30. [Semantic] Does the project intersect the diamond darter critical habitat?

    Automatically answered
    No

31. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?

    Automatically answered
    No

32. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

    Automatically answered
    No

33. Do you have any other documents that you want to include with this submission?

    No

PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?

   0

2. Approximately how many total acres of disturbance are within the disturbance/ construction limits of the proposed project?

   12

3. Briefly describe the habitat within the construction/disturbance limits of the project site.

   A graded, current construction site.

IPAC USER CONTACT INFORMATION

Agency: Delta Airport Consultants, Inc
Name: Mary Pearson
Address: 2700 Polo Parkway
Address Line 2: Delta Airport Consultants, Inc.
City: Richmond
State: VA
Zip: 23113
Email mapearson@deltaairport.com
Phone: 8049554556

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127

In Reply Refer To: March 15, 2023
Project Code: 2023-0056425
Project Name: St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

PROJECT SUMMARY

Project Code: 2023-0056425
Project Name: St. Mary's Airport - Remove, Transport, and Dispose of Unearthed Debris
Project Type: Airport - New Construction
Project Description: Unearthed debris (modern trash) has been found during construction of a runway extension at St. Mary's County Regional Airport (2W6) which needs to be removed, transported, and disposed of.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.316343950000004,-76.55934799159385,14z

Counties: St. Mary's County, Maryland

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

CLAMS

NAME	STATUS
Dwarf Wedgemussel *Alasmidonta heterodon*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/784

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html).

Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPAC USER CONTACT INFORMATION

Agency:	Delta Airport Consultants, Inc
Name:	Mary Pearson
Address:	2700 Polo Parkway
Address Line 2:	Delta Airport Consultants, Inc.
City:	Richmond
State:	VA
Zip:	23113
Email	mapearson@deltaairport.com
Phone:	8049554556

Attachment C- Section 106 and Tribal Coordination

202300838

F/FAA EJC

U.S. Department
of Transportation
Federal Aviation Administration

Washington Airports District Office
13873 Park Center Rd. Ste 490-S
Herndon, VA 20171

T: (703) 487-3980
F: (703) 487-3982

RECEIVED
FEB 27 2023
BY:_____

February 27, 2023

Maryland Historical Trust
Attention: Beth Cole
100 Community Place
Crownsville, MD 21032

Subject: **Project Review for Unearthed Debris Removal, Transport, and Disposal**
St. Mary's County Regional Airport (2W6)
California, Maryland STCo.

Dear Beth:

The St. Mary's County Regional Airport (2W6) is undergoing a Supplemental Environmental Assessment (EA) to the 2006 'Environmental Assessment (EA) for Five-Year Capital Improvement Program', which involved a runway extension, among other development projects. A Finding of No Significant Impact (FONSI) was issued by the Federal Aviation Administration (FAA) in June 2006. However, in summer 2021, during construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree sumps, bricks, trash, and dark-stained soil. The County developed a sampling plan in consultation with the Maryland Department of the Environment (MDE) and soil test pits of between five and six feet deep were advanced within an approximately five-acre area (see figure in the enclosed package).

An archaeological and architectural Phase 1 survey was performed during the 2006 EA which identified one architectural resource older than 50 years (ca. 1950 house, located on the east side of Clarks Mill Road) which was ultimately not recommended for listing on the National Register of Historic Place (NRHP). No archeological resources were identified during the survey. The 2006 EA/FONSI concluded that there would be no adverse impacts to historic or cultural resources as a result of the Proposed Action.

The removal, transport, and disposal of the unearthed debris is considered by FAA to be a substantial change to the proposed action that was reviewed in 2006, and therefore, a Supplemental EA is required. However, the project limits have not changed since the 2006 EA was coordinated with MHT.

Because this project is anticipated to be federally funded, licensed or permitted it is subject to state review to comply with Section 106 of the National Historic Preservation Act of 1966, as amended.

I have enclosed the completed 2023 Project Review Form and project information, including the 2004 Phase 1 survey and previous MHT coordination. This letter is intended to initiate Section 106 consultation and solicit any initial comments you may have on the undertaking as proposed in 2023.

If you have any questions or need further information regarding the project, please contact me (Genevieve.J.Walker@faa.gov).

Sincerely,

Genevieve Walker
Genevieve J. Walker
FAA Environmental Protection Specialist

The Maryland Historical Trust has determined that there are no historic properties affected by this undertaking.

Beth Cole 3/7/23
_____ **Date**_____

#1ABC 3/7/2023

Mary Ashburn Pearson

From: Walker, Genevieve J (FAA) <Genevieve.J.Walker@faa.gov>
Sent: Monday, February 27, 2023 11:17 AM
To: Beth Cole - MHT
Cc: Mary Ashburn Pearson
Subject: Request review of proposed removal of discarded and buried material at St. Marys County Airport
Attachments: 2W6 St. Marys Dump Site MHT Letter.pdf; MHT-St. Mary's Dump Site review form.pdf; 2W6 St. Mary's Dump Site Removal Project Description.pdf; 2W6 St. Mary's Ph1 Cultural Resources.pdf

Categories: Filed by Newforma

Hi Beth- I hope you are well! Attached is a project review form and supplemental information for the above named project. The “dump site” was initially not supposed to intrude on the runway work, but subsequent design decisions moved it closer than originally thought. There doesn’t appear to be much there other than trash and debris- we had a similar area when we bought our house. Makes you kinda wonder about the previous owners…

Anyway, back to this project, there appears to be a DHT tracking number at the bottom of Ms. Tania Tully’s concurrence letter of the Phase 1 Cultural Resource Survey (in front of the actual survey in the attachment “St. Mary’s Ph. 1 Cultural Resources “). Not sure if that helps as I do not have the actual EA in my files (too old). I do have the Finding of No Significant Impact, but it doesn’t help much as it doesn’t say anything about Historic/Cultural Resources.

Anyway- please let me know if you need anything else and I hope you have a lovely week!
Genevieve

Genevieve Walker
Environmental Protection Specialist
Washington ADO
13783 Park Center Road, Suite 490S
Herndon, VA 20171
(703) 487-3979
__!__
---o--(_)--o---

PROJECT REVIEW FORM

Request for Comments from the Maryland Historical Trust/ MDSHPO on State and Federal Undertakings

MHT USE ONLY
Date Received: Log Number:

Project Name	SUPPLEMENTAL EA FOR BURIED DEBRIS REMOVAL , TRANSPORT, AND DISPOSAL	County	St. Mary's

Primary Contact:

Contact Name	MARY A. PEARSON, AICP FOR DELTA AIRPORT CONSU	Company/Agency	DELTA AIRPORT CONSULTANTS, INC.
Mailing Address	2700 POLO PARKWAY		
City	MIDLOTHIAN	State	Virginia
Zip	23113		
Email	MAPEARSON@DELTAAIRPORT.COM	Phone Number	+1 (804) 955-4556
Ext.			

Project Location:

Address	44174 AIRPORT ROAD	City/Vicinity	CALIFORNIA
Coordinates (if known): Latitude	38.3153567	Longitude	-76.5501158
Waterway	N/A		

Project Description:

List federal and state sources of funding, permits, or other assistance (e.g. Bond Bill Loan of 2013, Chapter #; HUD/ CDBG; MDE/COE permit; etc.).	Agency Type	Agency/Program/Permit Name	Project/Permit/Tracking Number (if applicable)
	Federal	FEDERAL AVIATION ADMINISTRATION	
	State	MARYLAND AVIATION ADMINISTRATION	

This project includes (check all applicable): ☒ New Construction ☐ Demolition ☐ Remodeling/Rehabilitation
☐ State or Federal Rehabilitation Tax Credits ☒ Excavation/Ground Disturbance ☐ Shoreline/Waterways/Wetlands
Other\Additional Description:

Known Historic Properties:

This project involves properties (check all applicable): ☐ Listed in the National Register ☐ Subject to an easement held by MHT
☐ Included in the Maryland Inventory of Historic Properties ☐ Designated historic by a local government
☐ Previously subject to archeological investigations
Property\District\Report Name

Attachments:

All attachments are required. Incomplete submittals may result in delays or be returned without comment.

☒ Aerial photograph or USGS Quad Map section with location and boundaries of project clearly marked.
☒ Project Description, Scope of Work, Site Plan, and\or Construction Drawings.
☒ Photographs (print or digital) showing the project site including images of all buildings and structures.
☒ Description of past and present land uses in project area (wooded, mined, developed, agricultural uses, etc).

MHT Determination:

☐ There are **NO HISTORIC PROPERTIES** in the area of potential effect
☐ The project will have **NO EFFECT** on historic properties
☐ The project will have **NO ADVERSE EFFECT** on historic properties
☐ The project will have **NO ADVERSE EFFECT WITH CONDITIONS**
☐ The project will have **ADVERSE EFFECTS** on historic properties
☐ **MHT REQUESTS ADDITIONAL INFORMATION**

MHT Reviewer: Date:

Submit printed copy of form and all attachments by mail to: Beth Cole, MHT, 100 Community Place, Crownsville, MD 21032

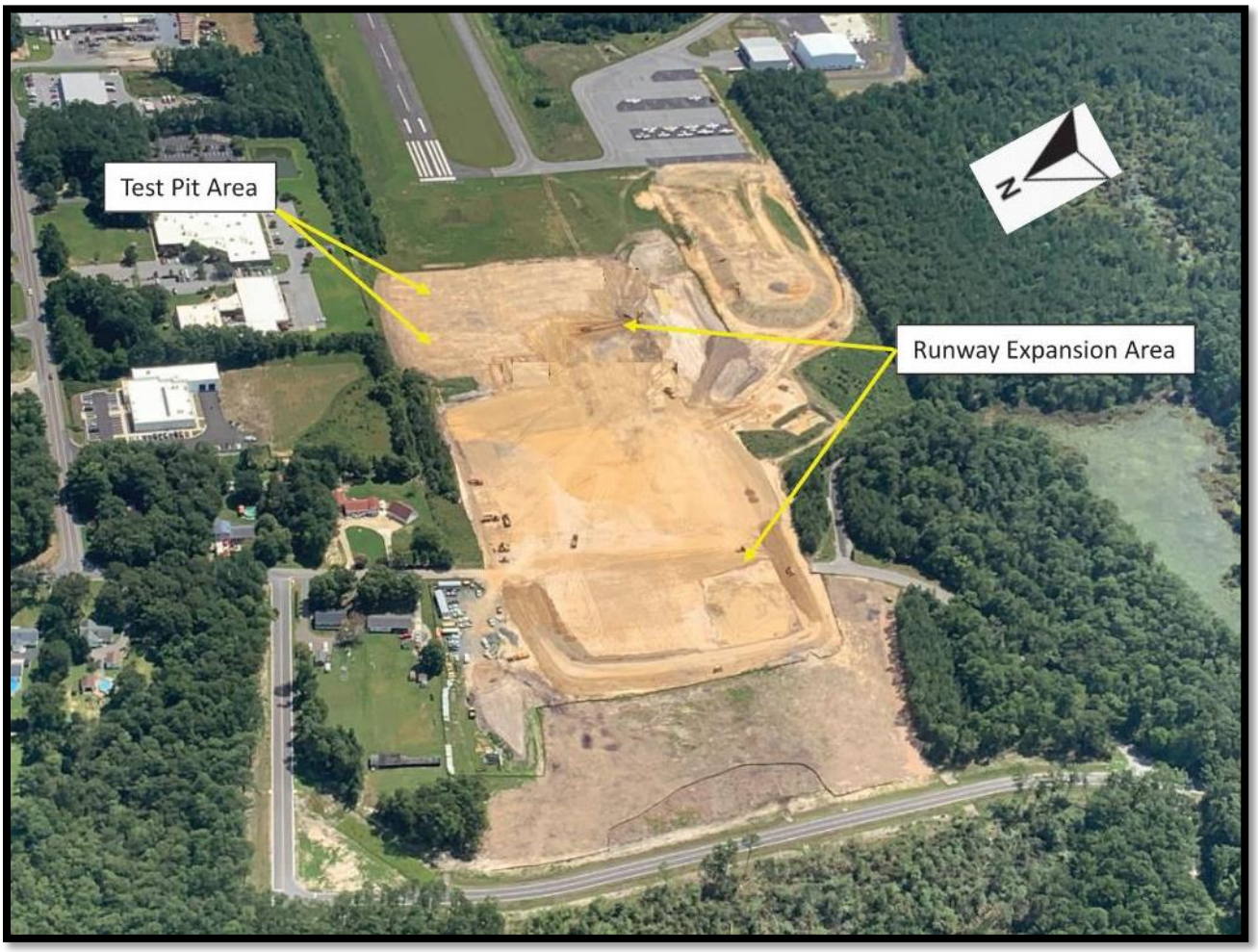
Revised 6/21/2013

Project Description- Supplemental Environmental Assessment (EA) for Unearthed Debris Removal, Transport, and Disposal

The Commissioners of St. Mary's County, Maryland, owner and operator of the St. Mary's County Regional Airport (2W6), are proposing a supplement to the 2006 'Environmental Assessment (EA) for Five-Year Capital Improvement Program', which involved a runway extension, among other development projects. A Finding of No Significant Impact (FONSI) was issued by the Federal Aviation Administration (FAA) in June 2006. In summer 2021, during construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree sumps, bricks, trash, and dark-stained soil. The County developed a sampling plan in consultation with the Maryland Department of the Environment (MDE) and soil test pits of between five and six feet deep were advanced within an approximately five-acre area (see Figure 1).

The removal, transport, and disposal of the unearthed debris is considered by FAA to be a substantial change to the proposed action that was reviewed in 2006, and therefore, a Supplemental EA is required.

Figure 1: Runway Expansion Area at 2W6 and Test Pit Area



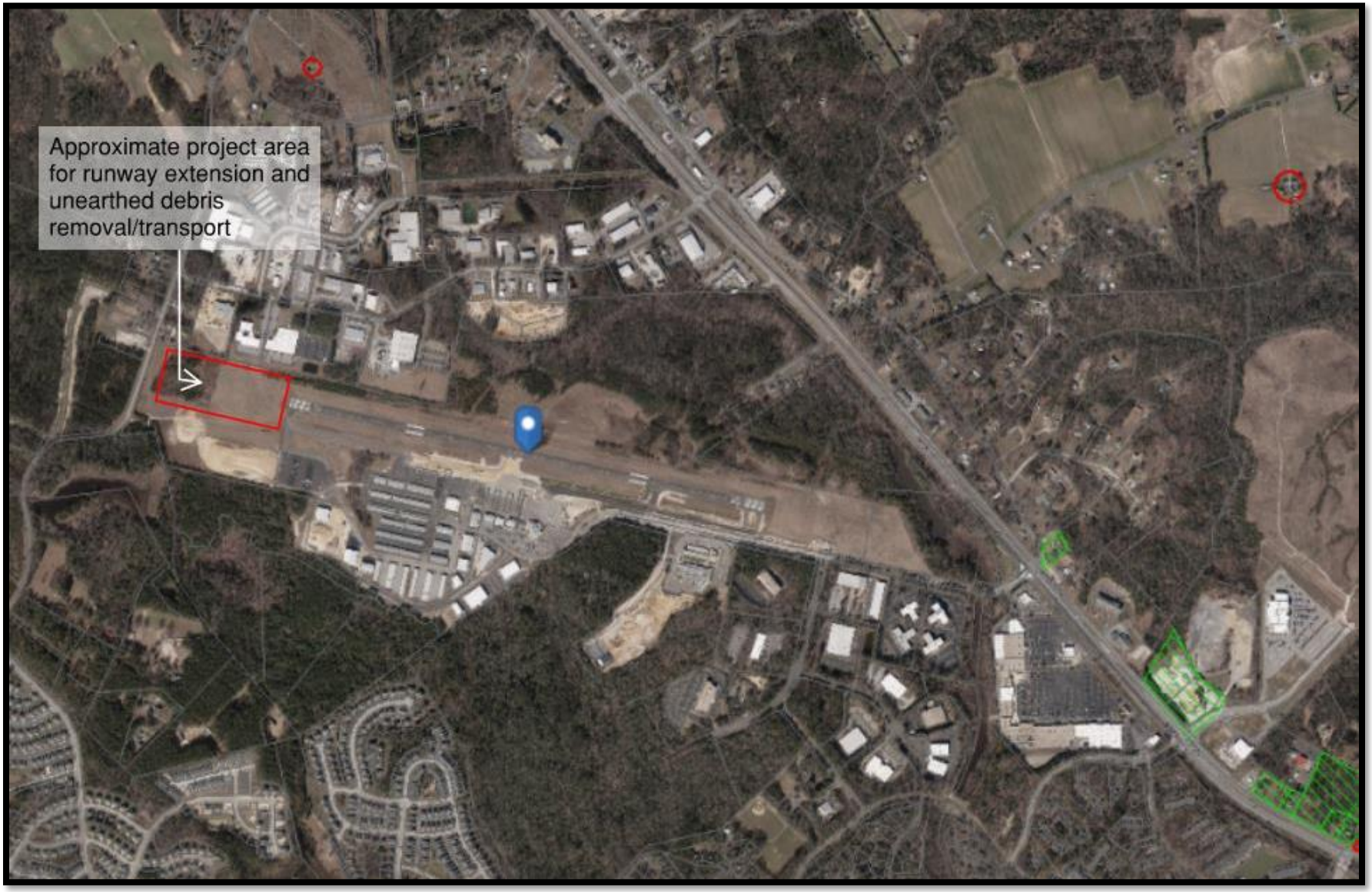
Source: Delta Airport Consultants, Inc.

The Maryland Cultural Resource Information System 'MEDUSA' database does not identify historic or architectural resources on or near the project area (see Figure 2).

An archaeological and architectural Phase 1 survey was performed during the 2006 EA which identified one architectural resource older than 50 years (ca. 1950 house, located on the east side of Clarks Mill Road) which was ultimately not recommended for listing on the National Register of Historic Place (NRHP). No archeological resources were identified during the survey. The 2006 EA/FONSI concluded that there would be no adverse impacts to historic or cultural resources as a result of the Proposed Action.

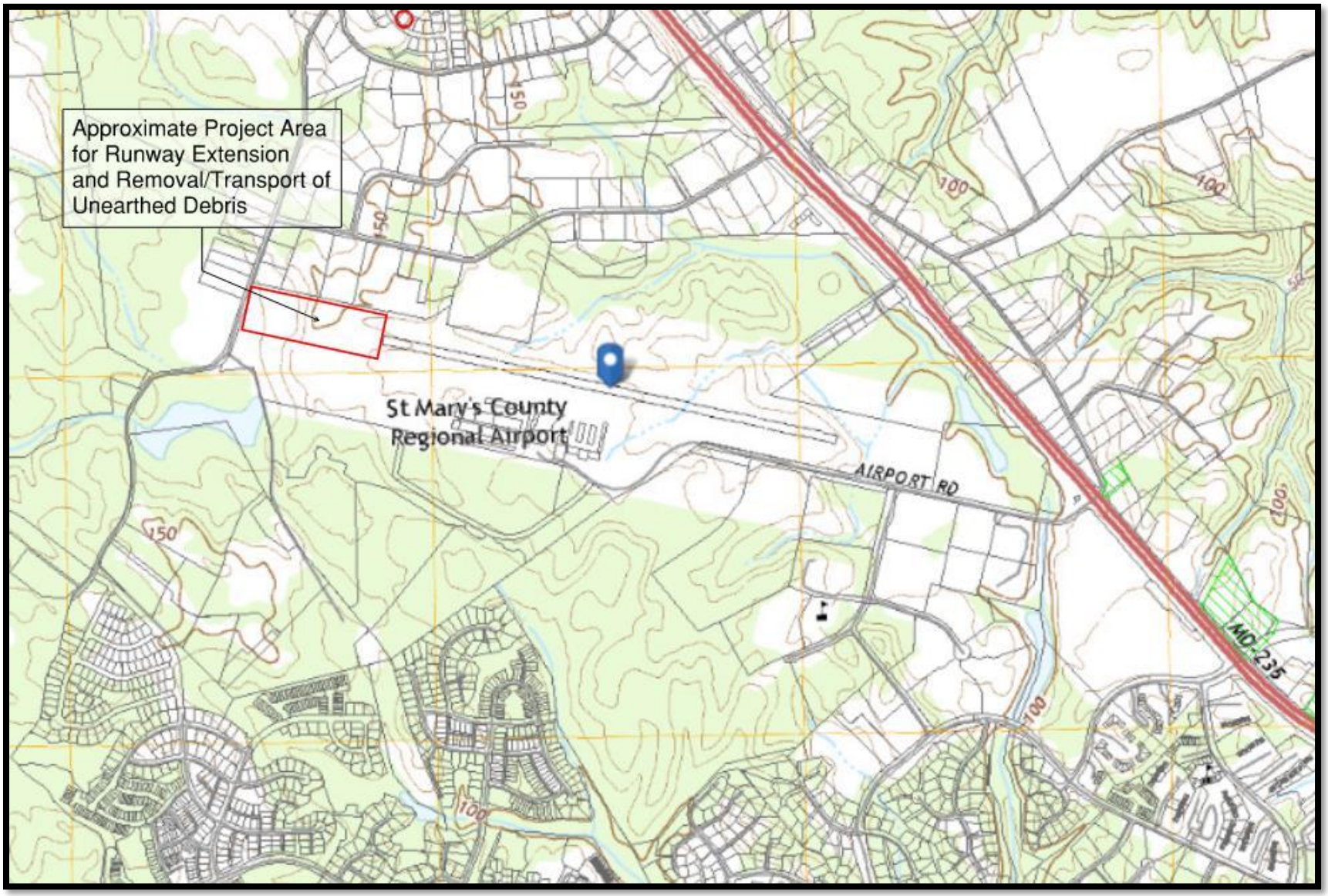
St. Mary's Regional Airport, previously known as Captain Walker Francis Duke Regional Airport, is a general aviation airport located in St. Mary's County four miles northeast of Leonardtown, Maryland. The airport has been operating since 1969.

Figure 2: MEDUSA Search with Approximate Location of Runway Extension Construction/Unearthed Debris Removal/Transport



Source: MERLIN, Delta Airport Consultants, Inc.

Figure 3: MEDUSA View with USGS Background



Source: MERLIN, Delta Airport Consultants, Inc.

U.S. Department
of Transportation
Federal Aviation
Administration

Washington Airports District Office
13873 Park Center Rd. Ste 490-S
Herndon, VA 20171

T: (703) 487-3980
F: (703) 487-3982

March 1, 2023

Kenneth Branham, Chief
Monacan Indian Nation
111 Highview Drive
Madison Heights, VA 24572

Subject: **Project Review for Supplemental Environmental Assessment**
St. Mary's County Regional Airport (2W6)

Dear Chief Branham:

I hope you and your tribe are doing well. The Commissioners of St. Mary's County, Maryland, owner and operator of the St. Mary's County Regional Airport (2W6), are proposing a supplement to the 2006 Environmental Assessment (EA) for Five-Year Capital Improvement Program, which involves a runway extension, among other development projects. Your tribe has expressed interest in St. Mary's County, Maryland.

A Finding of No Significant Impact (FONSI) was issued by the Federal Aviation Administration (FAA) in June 2006. In summer 2021, during construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree sumps, bricks, trash, and dark-stained soil. The County developed a sampling plan in consultation with the Maryland Department of the Environment (MDE) and soil test pits at depths of between five and six feet were advanced within an approximately five-acre area (see Figure 1 in the enclosed package).

The removal, transport, and disposal of the unearthed debris is considered by FAA to be a substantial change to the proposed action that was reviewed in 2006, and therefore, a Supplemental EA is required.

The enclosed package provides additional information including proposed ground disturbance. The project area is entirely within airport boundaries. Please note that a previous Phase 1 Archaeological Survey was completed in 2004 during the previous environmental effort (see attached). No archeological resources were identified during the survey.

In order to fulfill our responsibilities under the National Historic Preservation Act, I am contacting you as part of the environmental review process. With this letter, the FAA is seeking input or concerns that uniquely or significantly affect your tribe related to planned and proposed airport improvements. Early identification of tribal concerns will allow the FAA and the airport owner and operator to consider ways to avoid and minimize potential impacts to tribal resources and practices as project planning and alternatives are developed and refined. The FAA is also extending an offer of Consultation on this project, if you would prefer that to providing informal comments.

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of Transportation
**Federal Aviation
Administration**

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Note that FAA procedures dictate that in the event a cultural or archeological artifact is discovered during construction, that the construction is halted and the State Historic Preservation Officer (SHPO) and/or the interested Tribe is notified.

If you have any questions or need further information regarding the project, please contact me (Genevieve.J.Walker@faa.gov) directly.

Sincerely,

Genevieve Walker

Genevieve Walker, Environmental Protection Specialist
Federal Aviation Administration – Washington Airports District Office
13783 Park Center Road, Suite 490S
Herndon, VA 20171
Genevieve.J.Walker@faa.gov

Enclosures: Project Descriptions and Exhibits; 2004 Phase 1 Cultural Resources report

U.S. Department
of Transportation
**Federal Aviation
Administration**

Washington Airports District Office
13873 Park Center Rd. Ste 490-S
Herndon, VA 20171

T: (703) 487-3980
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February 28, 2023

Susan Bachor, Preservation Representative, East Coast
Delaware Tribe of Indians
126 University Circle East
Stroudsburg, PA 18301
sbachor@delawaretribe.org

Subject: **Project Review for Supplemental Environmental Assessment**
St. Mary's County Regional Airport (2W6)

Dear Ms. Bachor:

I hope you and your tribe are doing well. The Commissioners of St. Mary's County, Maryland, owner and operator of the St. Mary's County Regional Airport (2W6), are proposing a supplement to the 2006 Environmental Assessment (EA) for Five-Year Capital Improvement Program, which involves a runway extension, among other development projects. Your tribe has expressed interest in St. Mary's County, Maryland.

A Finding of No Significant Impact (FONSI) was issued by the Federal Aviation Administration (FAA) in June 2006. In summer 2021, during construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree sumps, bricks, trash, and dark-stained soil. The County developed a sampling plan in consultation with the Maryland Department of the Environment (MDE) and soil test pits at depths of between five and six feet were advanced within an approximately five-acre area (see Figure 1 in the enclosed package).

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In order to fulfill our responsibilities under the National Historic Preservation Act, I am contacting you as part of the environmental review process. With this letter, the FAA is seeking input or concerns that uniquely or significantly affect your tribe related to planned and proposed airport improvements. Early identification of tribal concerns will allow the FAA and the airport owner and operator to consider ways to avoid and minimize potential impacts to tribal resources and practices as project planning and alternatives are developed and refined. The FAA is also extending an offer of Consultation on this project, if you would prefer that to providing informal comments.

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If you have any questions or need further information regarding the project, please contact me (Genevieve.J.Walker@faa.gov) directly.

Sincerely,

Genevieve Walker

Genevieve Walker, Environmental Protection Specialist
Federal Aviation Administration – Washington Airports District Office
13783 Park Center Road, Suite 490S
Herndon, VA 20171
Genevieve.J.Walker@faa.gov

Enclosures: Project Descriptions and Exhibits; 2004 Phase 1 Cultural Resources report

Attachment D- EJ Screen Report

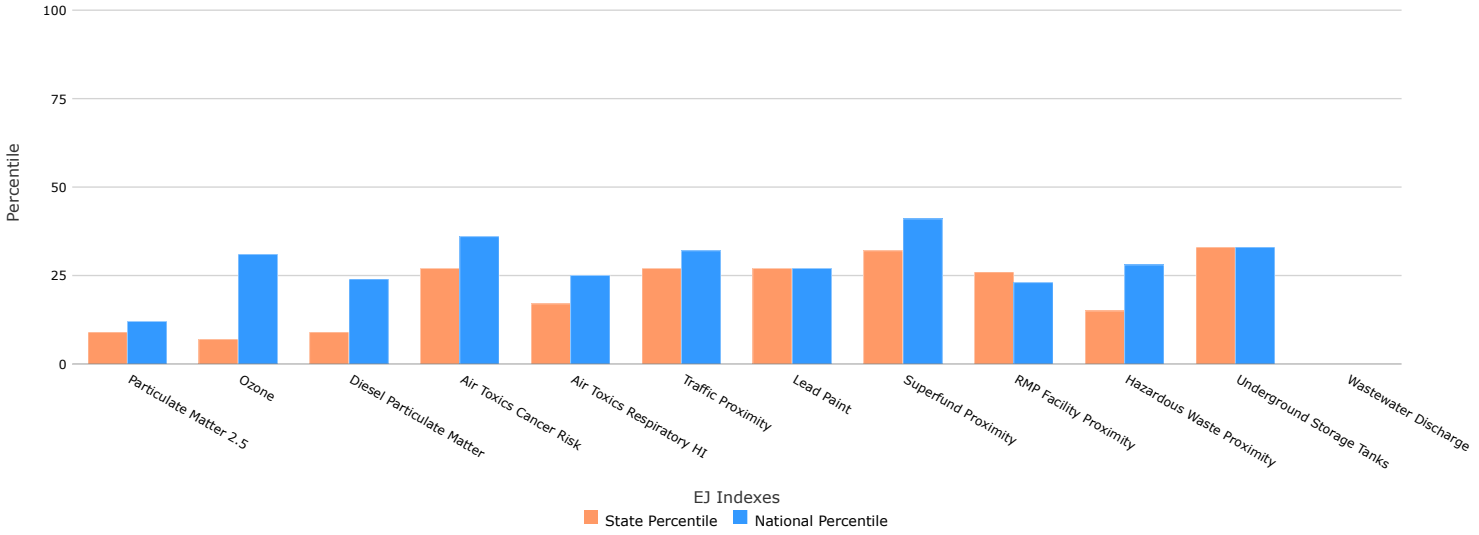
Save as PDF

EJScreen Report (Version 2.1)

0.5 miles Ring Centered at 38.315385,-76.550689
MARYLAND, EPA Region 3
Approximate Population: 70
Input Area (sq. miles): 0.79

Selected Variables	Percentile in State	Percentile in USA
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	9	12
EJ Index for Ozone	7	31
EJ Index for Diesel Particulate Matter*	9	24
EJ Index for Air Toxics Cancer Risk*	27	36
EJ Index for Air Toxics Respiratory HI*	17	25
EJ Index for Traffic Proximity	27	32
EJ Index for Lead Paint	27	27
EJ Index for Superfund Proximity	32	41
EJ Index for RMP Facility Proximity	26	23
EJ Index for Hazardous Waste Proximity	15	28
EJ Index for Underground Storage Tanks	33	33
EJ Index for Wastewater Discharge	0	0

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/US



This report shows the values for environmental and demographic indicators and EJScreen indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports.

December 16, 2022

Project 1

Search Result (point)

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

VITA, Esri, HERE, Garmin, iPC, Maxar

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State		USA	
		Avg.	%tile	Avg.	%tile
Pollution and Sources					
Particulate Matter 2.5 (µg/m^3)	6.94	8.19	8	8.67	12
Ozone (ppb)	41.4	44.2	8	42.5	41
Diesel Particulate Matter* (µg/m^3)	0.145	0.324	7	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	88	28	80-90th
Air Toxics Respiratory HI*	0.3	0.37	32	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	190	810	37	760	45
Lead Paint (% Pre-1960 Housing)	0.11	0.28	35	0.27	35
Superfund Proximity (site count/km distance)	0.074	0.13	43	0.13	57
RMP Facility Proximity (facility count/km distance)	0.15	0.79	33	0.77	27
Hazardous Waste Proximity (facility count/km distance)	0.22	3.8	13	2.2	33
Underground Storage Tanks (count/km^2)	0.34	1.9	34	3.9	36
Wastewater Discharge (toxicity-weighted concentration/m distance)	0	0.48	0	12	0
Socioeconomic Indicators					
Demographic Index	15%	35%	21	35%	20
People of Color	22%	50%	30	40%	41
Low Income	8%	21%	23	30%	13
Unemployment Rate	4%	5%	53	5%	52
Limited English Speaking	0%	3%	0	5%	0
Less Than High School Education	13%	9%	72	12%	65
Under Age 5	8%	6%	75	6%	75
Over Age 64	10%	15%	27	16%	26

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update. (https://www.epa.gov/haps/air-toxics-data-update)

For additional information, see: www.epa.gov/environmentaljustice (https://www.epa.gov/environmentaljustice)

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

Attachment E- Coastal Zone Consistency

Mary Ashburn Pearson

From: Laura L. Canton -DNR- <laural.canton@maryland.gov>
Sent: Tuesday, June 6, 2023 2:56 PM
To: Mary Ashburn Pearson
Cc: Gary.Whipple@stmaryscountymd.gov; Kristen Fleming -DNR-; Danielle Spendiff -MDE-
Subject: Conditional Concurrence - St. Mary's County Airport

Good afternoon Ms. Pearson,

Thank you for your submission for the St. Mary's County Airport. On behalf of Danielle Spendiff (MD Federal Consistency Coordinator), I am responding to your request for CZMA coastal consistency concurrence for the following project:

A previous federal consistency concurrence was issued in 2006 for the initial runway extension project. During construction, scrap metal and debris were found to be buried in the runway extension area. The 2023 Proposed Action consists of the removal, transport, and disposal of the unearthed debris. No adverse impacts are anticipated.

Based on our review of the information provided, the above project is consistent with the enforceable coastal policies of the Maryland Coastal Zone Management Program, with the conditional concurrence based on coordination and findings, if any, with the Maryland Historical Trust during the Supplemental EA effort for the removal, transport, and disposal of the unearthed debris.

Please note that this determination does not obviate the applicant's responsibility to obtain any other State or local approvals that may be necessary for the project.

Best regards,

Laura

--
Laura Canton
Transitioning: Coastal Policy Coordinator, Federal Consistency Review
Center for Marine and Coastal Stewardship
Maryland Department of Natural Resources
580 Taylor Avenue, E-2
Annapolis, MD 21401
M: 443-223-3095
LauraL.Canton@maryland.gov

Mary Ashburn Pearson

From: Google Forms <forms-receipts-noreply@google.com>
Sent: Wednesday, March 15, 2023 4:22 PM
To: Mary Ashburn Pearson
Subject: Maryland Coastal Consistency Request Form

Thanks for filling out Maryland Coastal Consistency Request Form

Here's what was received.

Edit response

Maryland Coastal Consistency Request Form

This request document, under the authority of the Maryland Coastal Zone Management Program, initiates information sharing and state-federal-industry coordination to ensure projects or activities regulated under the Coastal Zone Management Act of 1972, as amended, and NOAA's Federal Consistency Regulations (15 C.F.R Part 930) are consistent to the maximum extent practicable with Maryland's enforceable policies. Federal agencies and other applicants for federal consistency are not required to use this form; it is provided to facilitate the submission and timely review of a Consistency Determination or Consistency Certification. In addition, federal agencies and applicants are only required to provide the information required by NOAA's Federal Consistency Regulations.

Email *

mapearson@deltaairport.com

Name of Project or Activity *

Please include organization, nature of project and location (e.g., FLETC Solar Project, Cheltenham, MD)

St. Mary's County Airport (2W6) - Remove, Transport, and Dispose of Unearthed Debris

Name of Requestor *

Name of Person Submitting Coastal Consistency Request

Mary A. Pearson for Delta Airport Consultants, Inc.

Phone *

804-955-4556

Name of Contractor or Agency

Please provide name of contractor or receiving agency (if applicable)

Delta Airport Consultants, Inc. for St. Mary's County

Federal Agency *

Federal Aviation Administration (FAA)

County *

St. Mary's

Address of Project or Activity *

44174 Airport Road California, Maryland 20619

Web-based Location of Project

(e.g., google maps link)

https://www.google.com/maps/place/St+Mary's+County+Regional-2W6/@38.3149655,-76.5520128,1189m/data=!3m1!1e3!4m6!3m5!1s0x89b763f336cb41b9:0x64969ee501ac8b3b!8m2!3d38.3137702!4d-76.5509185!16s%2Fm%2F025yvr8

Federal Consistency Category * *

Please select the appropriate Federal Consistency Category:

Subpart C - Federal Activity or Development Project (15 C.F.R. Part 930, Subpart C)

Subpart D - Federal License or Permit Activity (15. C.F.R Part 930, Subpart D)

Subpart E - Outer Continental Shelf Exploration, Development & Production Activities (15 C.F.R. Part 930, Subpart E)

Subpart F - Federal Financial Assistance to State & Local Governments (15 C.F.R Part 930, Subpart F)

Summary Description *

Please describe the nature, areal extent and location of project or activity. Describe reasonable foreseeable effects on coastal resources and coastal uses.

The Commissioners of St. Mary's County, owner and operator of 2W6 airport, are currently constructing a runway extension on the airport property. The runway extension project and other on-airport development projects were environmentally reviewed under a 2006 Environmental Assessment (EA), and a Finding of No Significant Impact (FONSI) was issued by FAA in June 2006. Coordination with MDE regarding federal consistency was completed during the 2006 EA (see Attachment A). Since the FONSI was issued, the County has completed the land acquisition and obstruction removal necessary to accommodate the runway extension. The County has also completed the design of the project and initiated construction. In summer 2021, during construction, unearthed scrap metal and other buried debris was discovered while the runway extension area was being excavated and graded. The buried debris consists mainly of scrap metal (such as metal sheeting, wire, and mattress springs), glass bottles, cans, wood, tree stumps, bricks, trash, and dark-stained soil. The removal, transport, and disposal of the unearthed debris is considered by FAA to be a substantial change to the proposed action that is relevant to environmental concerns, and therefore, in accordance with the guidance in FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, Paragraph 9-3, a Supplemental EA is required. The 2023 Supplemental EA is to focus on the analysis and conclusions specifically in the previous trash deposit location and will not revisit other environmental impact categories in detail. The removal, transport, and disposal of the unearthed debris is referred to as the '2023 Proposed Action' in this document. This federal consistency determination is being conducted as part of the required Supplemental EA and is considered to be Federal Consistency Review Subpart C, Federal Activities & Development Projects.

Relevant Policy Area Checklists

Please select policy area checklists relevant to your project or activity

☑ Core Policies (required for all projects and activities)

The Chesapeake and Atlantic Coastal Bays Critical Area

Tidal Wetlands

Non-Tidal Wetlands

Forests

✓ Historical and Archaeological Sites

Living Aquatic Resources

Mineral Extraction

Electrical Generation and Transmission

Tidal Shoreline Erosion Control

Oil and Natural Gas Facilities

Dredging and Disposal of Dredge Materials

Navigation

Transportation

Agriculture

Development

Sewage Treatment

Supporting Documentation

Please list maps, diagrams, reports, letters and other materials below:

Project Description with exhibits; Attachment A (2006 Consistency Determination)

Attachment F- Trash Pit Exploration Report

August 14, 2023

Gary B. Whipple
Department of Public Works and Transportation
44825 St. Andrews Church Road, P.O. Box 508
California, MD 20619-0508

Dear Gary Whipple:

The Maryland Department of the Environment's Solid Waste Program (MDE/SWP) has reviewed the St. Mary's County Airport Runway Expansion Test Pit Report dated November 29, 2021 and agrees with the recommendations of the Maryland Environmental Service (MES) on excavation, removal and filling at the airport runway expansion area.

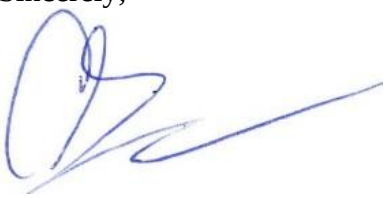
Material that has already been flagged as non-conforming to the non-residential cleanup standards and from the documented burn area should be excavated and disposed of off-site at an appropriate facility. MDE/SWP requires the County to stockpile and analyze the excavated material prior to approval for burial at the site. Stockpiled material shall be free of metal/debris and dioxin impacted soil. Based on our email correspondence from March 2022, excavated material utilized for fill shall contain a de minimis amount of glass and plastic but there is no compliant screening size as long as the material can be compacted to design standards. The material should be analyzed for the following to compare to the non-residential standards:

Typical Sampling Analyses		**Analytical Method***
Priority Pollutant Metals		SW-846 EPA Method 6020A
Mercury		SW-846 EPA Method 7471A
Chromium, Hexavalent		SW-846 EPA Method 7196A
Volatile Organic Compounds (VOCs) – Target Compound List (TCL)		SW-846 EPA Method 8260B
Semi-Volatile Organic Compounds (SVOCs) - TCL, including Polycyclic Aromatic Hydrocarbons (PAHs)		SW-846 EPA Method 8270C
Organochlorine Pesticides		SW-846 EPA Method 8081B
Chlorinated Herbicides		SW-846 EPA Method 8151A
Polychlorinated Biphenyls (PCBs) Aroclors		SW-846 EPA Method 8082A
Total Petroleum Hydrocarbons (TPH)	TPH-GRO(Gasoline Range Organics)	SW-846 EPA Method 8015C
	TPH-DRO(Diesel Range Organics)	SW-846 EPA Method 8015C
pH		SW-846 EPA Method 9040C

The County estimated the stockpile at approximately 30,000 cubic yards. MDE/SWP requires four composite samples to characterize the material for use as fill. Should the pile exceed 50,000 cubic yards additional samples may be required. The County shall provide analytical results from the composite samples to MDE/SWP for approval prior to utilizing the material as fill. Once filling operations are complete the County shall provide MDE/SWP documentation of fill material utilization.

For further information, please contact me at (410) 537-3922 or *andrew.grenzer@maryland.gov*

Sincerely,



Andrew Grenzer, Chief
Solid Waste Operations Division

cc: John Agnoli, MES
Greg Kolarik, Water and Science Administration
Tyler Abbott, Director, Land and Materials Administration (LMA)
Brian Coblentz, Chief, Compliance Division, LMA
Andrew Grenzer, Chief, Solid Waste Operations Division LMA

1.0 INTRODUCTION

St. Mary's County (SMC) Department of Public Works (DPW) is currently expanding the runway at the SMC Regional Airport in California, Maryland (Figures 1 and 2). In August 2021, SMC's consultant Delta Airport Consultants, Inc. (Delta) and Penn Ave Construction LLC. (Penn Ave) unearthed scrap metal and other buried debris while excavating and grading the runway extension area. In August 2021, SMC informed the Maryland Department of the Environment (MDE) of the discovery, and developed a sampling plan in consultation with MDE that consisted of advancing a series of soil test pits to identify and delineate the horizontal and vertical extents of the buried debris, screen excavated soil airspace for the presence of total volatile organic compound (TVOCs), and collect soil samples to chemically profile the material for handling and disposal.

2.0 FIELD PROCEDURES AND SAMPLING

Initially, 20 test pits (PIT-1 through PIT-20) were advanced by Penn Ave on September 8 and 10, 2021 (Figure 3). Twenty additional test pits (P-1 through P-20) were advanced on September 16, 2021 to further refine the extent of the debris and fill data gaps (see Figure 3). Mr. Ron Prettyman of SMC was onsite to direct test pit operations on September 8 and 10, and to document the results of the investigation. SMC tasked Maryland Environmental Service (MES) to document the test pits, screen the excavated soil and debris for TVOCs, and collect soil samples for laboratory chemical analyses. EBA Engineering was also contracted by Delta to document the test pit investigation and screen the soil for TVOCs for the first group of test pits on September 8 and 10.

The test pit locations were staked and surveyed by Penn to provide horizontal coordinates and vertical elevations to develop detailed and accurate plan maps and cross sections. Total test pit depths and depths to the tops and bottoms of the debris and were measured with a weighted fiberglass tape, metal measuring tape, or laser tape. Photographs were taken of each test pit, stockpiled soil, and debris. As each test pit was advanced, soil airspace and debris were screened in the field for TVOCs using a MultiRAE PGM-6228 portable photoionization detector (PID) equipped with a 10.6 electron-Volt lamp. Test pits were excavated several feet below the base of the debris to ensure the bottom of the debris was reached. Test pit excavations were backfilled after obtaining depth measurements, photographs, and soil samples.

Soil samples were collected for laboratory chemical analyses from test pits PIT-2 and PIT-5 on September 10, and P-7 and P-12 on September 16. Samples from PIT-2, PIT-5, and P-12 were collected in the area of the thickest debris (9-12 feet), and at locations having the highest field TVOCs readings (2.1-30.2 ppm). Soil from P-7 was sampled to provide chemical characterization of buried material east the area of thickest

debris (i.e., PIT-2, PIT-5, and P-12). The samples were submitted to ALS Environmental Services in Middletown, Pennsylvania using written chain-of-custody procedures. The samples were analyzed for the following parameters using the U.S. Environmental Protection Agency (USEPA) SW-846 Compendium methods listed below:

- Toxicity Characteristic Leaching Procedure (TCLP) VOCs (Methods 1311/8260C)
- TCLP semivolatile organic compounds (SVOCs) (Methods 1311/8270E)
- TCLP pesticides/herbicides (Methods 1311/8081B/8151A)
- TCLP metals (Methods 1311/6010C)
- polychlorinated biphenyls (PCBs) (Method 8082A)
- total petroleum hydrocarbons (TPH) gasoline-range organics (TPH-GRO) (Method 8015D)
- TPH diesel-range organics (TPH-DRO) (Method 8015D)
- total organic halogens (TOX) (Method 9023)
- paint filter liquids (Method 9095B)
- dioxins/furans, (Method 8290)
- benzene, toluene, ethylbenzene and xylenes (BTEX) (Method 8260B)

The analyses include those required for characterizing wastes for offsite disposal and those recommended by MDE for initial site characterization.

3.0 RESULTS

3.1 Field Measurements

The results of the field measurements are provided in Tables 1 through 4. Figures 4 through 9 present vertical cross-sections of the site. As shown in Tables 3 and 4, the buried debris consists mainly of scrap metal, glass bottles, cans, wood, tree stumps, bricks, trash, and dark-stained soil. Metal items observed were metal sheeting, wire, crushed buckets, mattress springs, small empty tanks (possible propane tanks), and machinery.

The results of the investigation show that the buried debris has a central area of maximum thickness of 12 feet in the western portion of the site at PIT-2, PIT-5, and P-17, with secondary thicknesses of 9-11 feet around the maximum area at P-13 (9 feet), P-18 (10 feet), and P-19 (11 feet). As shown in Figures 4-9, thickness of the buried debris tapers off gradually from the central area defined by PIT-2, PIT-5, and P-17 to the east towards PIT-16, but tapers more steeply to the west, north and south.

No TVOCs or lower levels of TVOCs (0.1-0.2 ppm) were measured in soil at most test pit locations (Tables 3 and 4). Elevated TVOC measurements were recorded for several locations and ranged from 2.1-30.2 ppm at test pits PIT-2, PIT-5, P-12, and P-19 in the western portion of the investigation area where the buried debris is thickest.

P-20 (not shown in Figure 3) was excavated at the lowest point in the area east of P-7 between PIT-16 and PIT-17 to evaluate the presence of groundwater. Although deep soil at P-20 was wet, free flowing groundwater was not observed at this location. Shallow, free-flowing groundwater was encountered at depths of 5.5-6 feet below grade at test pits PIT-1 and PIT-6, causing some soil caving at the pit bottoms. The groundwater was perched on top of a layer of fine-grained, organic soil at 5-6 feet below grade in those test pits. Groundwater was also observed at a depth of 15 feet at P-19 in the westernmost portion of the study area.

3.2 Soil Sampling and Chemical Analyses

Table 5 lists the analytes detected in the four soil samples collected from test pits PIT-2 (sample TP-2), PIT-5 (sample TP-5), P-7 and P-12 and analyzed by ALS Environmental Services. The results of the soil samples are compared to TCLP regulatory standards for chemicals that determines if the waste meets the definition of extraction procedure (EP) toxicity (i.e., TCLP limits). These chemicals are used to define a waste as hazardous under the Resource Conservation and Recovery Act (RCRA; 40 Code of Federal Regulations [CFR] Part 261) and are used for landfills as acceptance criteria for disposal.

Because public access to the airport runway expansion area is restricted by fencing and is used as an airport runway, the soil sample results are screened against MDE's non-residential soil cleanup standards for TPH-DRO and TPH-GRO (MDE, 2018).

USEPA regulates PCBs under the Toxic Substance Control Act (TSCA) (40 CFR Part 700-799). Wastes with PCB concentrations of less than 50 milligrams/kilogram (mg/kg or parts per million) can be disposed of at certain approved facilities. USEPA has used 1 mg/kg as a starting point for PCB cleanup in soil defined as a PCB remediation waste and released/disposed of after 1978 (USEPA, 2017).

The results for PCBs, dioxins, and furans are screened against the most current USEPA soil screening levels (SSLs) (USEPA, 2021a). USEPA uses SSLs as a basis for which no further action or study is generally warranted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). SSLs can be used as Preliminary Remediation Goals (PRGs) provided appropriate conditions are met. PRGs are risk-based concentrations in soil based on readily available information that are used as a starting point in developing final remedial goals. Previously for dioxins, USEPA has used a toxic equivalent (TEQ) of 1 part per billion (ppb) or 1,000 nanograms per kilogram (ng/kg) as a starting point for setting cleanup levels in surface soil for residential exposure scenarios, and within the range of 5-20 ppb (5,000-20,000 ng/kg) for cleanup levels of dioxins in surface soils using commercial/industrial exposure scenarios

(USEPA, 1998 and 2008). However, USEPA no longer considers a need for these previous cleanup levels with the release of the more current dioxin reference-dose information and SSLs (USEPA, 2021b). The SSLs are considered by USEPA the preferred starting point for establishing levels protective of human health. The screening levels use default exposure scenarios, a threshold risk of 1E-06 (one in one million) excess cancer risk, and a threshold hazard quotient of 1, and assumes the absence of multiple pathways and cumulative risk from other contaminants.

Of 40 TCLP constituents tested in the samples, only TCLP cadmium and TCLP lead were detected. PCBs, TPH-DRO, and dioxins/furans were also detected in the soil samples. Not detected in the samples were TCLP VOCs, TCLP SVOCs, TCLP pesticides/herbicides, BTEX, TPH-GRO, TOX, and paint filter free liquids. For non-detected analytes, laboratory reporting limits (RLs) and method detection limits (MDLs) are less than the screening criteria used for this investigation.

The concentrations of TCLP cadmium and TCLP lead were detected at concentrations 10 to 300 times lower than the regulatory levels for these constituents; therefore, the sample results demonstrate that the buried debris is not considered hazardous based on consistent EP-toxicity results for the four samples. PCBs were detected in the soil samples, but at concentrations less than the TSCA level of 50 mg/kg, the USEPA soil cleanup level of 1.0 mg/kg, and USEPA SSL of 0.94 mg/kg for the industrial use scenario. TPH-DRO concentrations are all below the MDE level for non-residential soil and are several orders of magnitude lower than the average TPH-DRO required for landfill disposal.

Concentrations of individual dioxins are less than the dioxin SSLs for industrial exposure scenario. Additionally, three of the four calculated dioxin TEQs, which take into account varying toxicity of each dioxin isomer and adjusts it to an equivalent 2,3,7,8-TCDD toxicity, are less than the 2,3,7,8-TCDD SSL for industrial use. However, total dioxin concentrations in the four soil samples range from 1,493 ng/kg at test pit P-12 to 11,090 ng/kg at PIT-5 (sample TP-5). These concentrations exceed the landfill acceptance concentration of 1,000 ng/kg (i.e., 1 ppb) for total dioxins. Therefore, this waste cannot be accepted for disposal in a municipal landfill based on dioxin content.

4.0 SUMMARY AND CONCLUSIONS

Buried debris was encountered by SMC's construction contractor while excavating soil for the expansion of the SMC Regional Airport runway. In consultation with MDE, SMC's construction contractor advanced forty soil test pits over three days in September 2021 to delineate the horizontal and vertical extents of the debris, and to collect soil samples for chemical profiling for possible offsite disposal. The buried debris

consists mainly of scrap metal, glass bottles, cans, wood, tree stumps, bricks, trash, and dark-stained soil. Soil samples were collected from test pits PIT-2, PIT-5, and P-12 in the central portion of the site where the debris was thickest (9-12 feet), and where soil had elevated levels of volatile organic compounds measured using a portable PID (2.1-30.2 ppm). Soil from test pit P-7 was sampled to provide chemical characterization of soil east the area of thickest debris and elevated field readings.

The sample results demonstrate that the buried debris is not considered hazardous based on consistent EP-toxicity results for the four soil samples. PCBs were detected in the soil samples, but at concentrations less than the TSCA level of 50 mg/kg, the USEPA recommended soil cleanup level of 1.0 mg/kg, and USEPA SSL of 0.94 mg/kg for industrial use scenario. Detected concentrations of TPH-DRO are all below the MDE level for non-residential soil and are several orders of magnitude lower than the average TPH-DRO concentration required for landfill disposal. Furthermore, concentrations of individual dioxins are less than the USEPA dioxin SSLs for industrial exposure scenario. However, these concentrations exceed the landfill acceptance concentration of 1,000 ng/kg (i.e., 1 ppb) for total dioxins; therefore, this waste cannot be accepted for disposal in a municipal landfill based on dioxin content.

Based on the soil sample results, SMC proposes to excavate soil containing more than 1 ppb total dioxins and dispose of this material at an offsite facility licensed to accept dioxin wastes at these concentrations. Additionally, scrap metal and other large debris will be separated from the soil and disposed of or recycled at an appropriate offsite facility based on the chemical analytical results of equipment wipe samples. Once all metal/debris and dioxin impacted soil are removed, SMC requests permission from MDE to use the remaining soil (with dioxins below 1 ppb) as fill for the airport runway expansion area.

5.0 REFERENCES

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TABLES

Table 1
Test Pit Field Results-September 8-10, 2021
Runway Expansion Area
St. Mary's County Regional Airport, California, Maryland

WATER PRESENCE	STATION (FT)	OFFSET (FT)	TEST PIT #	TEST PIT RESULTS	TRASH TOP DEPTH (FT BELOW GRADE)	TRASH TOP ELEVATION (FT)	TRASH BOTTOM DEPTH (FT BELOW GRADE)	TRASH BOTTOM ELEVATION (FT)	TEST PIT BOTTOM DEPTH (FT BELOW GRADE)	TEST PIT BOTTOM ELEVATION (FT)	GROUND ELEVATION (FT)	FINISH GRADE ELEVATION (FT)	CUT FINISH GRADE	PIPE INVERT ELEVATION (FT)	PIPE CUT INVERT DEPTH (FT BELOW GRADE)	TEST PIT #
WATER	92+74.94	-169.392	PIT-1	TRASH	3	138.00	8.50	132.50	13.00	128.00	141.00	141.00	0.00			PIT-1
	93+75.36	-184.943	PIT-2	TRASH	0	152.10	12.00	140.10	16.00	136.10	152.10	140.00	12.10	134.2	17.90	PIT-2
	95+75.00	-84.711	PIT-3	TRASH	1	148.70	7.00	142.70	16.00	133.70	149.70	139.19	10.51	133.9	15.80	PIT-3
	94+75.00	-84.948	PIT-4	TRASH	1	153.10	7.00	147.10	19.00	135.10	154.10	139.19	14.91	132.9	21.20	PIT-4
	93+75.16	-84.943	PIT-5	TRASH	0	150.16	12.00	138.16	18.00	132.16	150.16	139.19	10.97	132.7	17.46	PIT-5
WATER	92+75.18	-84.937	PIT-6	TRASH	1	136.29	2.00	135.29	7.00	130.29	137.29	141.00	-3.71			PIT-6
	92+75.00	14.784	PIT-7	TRASH	1	134.80	2.00	133.80	8.50	127.30	135.80	141.00	-5.20			PIT-7
	93+74.76	15.057	PIT-8	CLEAN					14.00	135.00	149.00	141.00	8.00			PIT-8
	95+74.99	-184.954	PIT-9	TRASH	2	149.50	6.00	145.50	13.00	138.50	151.50	141.00	10.50			PIT-9
	93+73.04	-241.151	PIT-10	CLEAN					13.00	139.70	152.70	141.00	11.70			PIT-10
	96+34.20	-241.143	PIT-11	CLEAN					14.00	138.00	152.00	141.00	11.00			PIT-11
	94+75.41	15.052	PIT-12	CLEAN					12.00	137.00	149.00	141.00	8.00			PIT-12
	94+74.98	149.992	PIT-13	CLEAN					17.00	129.70	146.70	134.00	12.70	127.2	19.50	PIT-13
	93+75.03	150.057	PIT-14	CLEAN					11.00	130.70	141.70	130.00	11.70	124.8	16.90	PIT-14
	93+75.01	240.057	PIT-15	CLEAN					5.00	133.00	138.00	133.40	4.60			PIT-15
	96+37.42	-84.927	PIT-16	CLEAN					12.00	132.80	144.80	140.00	4.80	134.7	10.10	PIT-16
	96+33.92	-185.468	PIT-17	CLEAN					11.00	132.80	143.80	140.00	3.80			PIT-17
	96+36.66	-35.674	PIT-18	CLEAN					5.00	138.80	143.80	139.85	3.95			PIT-18
	93+30.02	96.691	PIT-19	CLEAN					7.00	137.00	144.00	136.90	7.10			PIT-19
	94+76.47	-184.533	PIT-20	TRASH	4	150.50	7.00	147.50	13.00	141.50	154.50	140.00	14.50			PIT-20

LEGEND	
TRASH	
SD PIPE	
WATER	

SD- STORM DRAIN
FT-FEET
Test pit locations are only accurate to within 5 feet of test pit.

Table 2
Test Pit Field Results-September 16, 2021
Runway Expansion Area
St. Mary's County Regional Airport, California, Maryland

WATER PRESENCE	STATION (FT)	OFFSET (FT)	TEST PIT #	TEST PIT RESULTS	TRASH TOP DEPTH (FT BELOW GRADE)	TRASH TOP ELEVATION (FT)	TRASH BOTTOM DEPTH (FT BELOW GRADE)	TRASH BOTTOM ELEVATION (FT)	TEST PIT BOTTOM DEPTH (FT BELOW GRADE)	TEST PIT BOTTOM ELEVATION (FT)	GROUND ELEVATION (FT)	FINISH GRADE ELEVATION (FT)	CUT FINISH GRADE	TEST PIT #
	94+20.07	-39.435	P-1	TRASH	2.0	151.0	6.0	147.00	9.0	144.00	153.00	139.85	13.15	P-1
	94+75.06	-39.408	P-2	TRASH	0.0	154.0	4.0	150.00	8.0	146.00	154.00	139.85	14.15	P-2
	95+19.76	-39.408	P-3	TRASH	1.0	151.0	7.0	145.00	9.0	143.00	152.00	139.85	12.15	P-3
	95+75.71	-39.776	P-4	TRASH	3.0	146.0	6.0	143.00	9.0	140.00	149.00	139.85	9.15	P-4
	96+04.52	-39.088	P-5	TRASH	1.0	144.0	4.0	141.00	9.0	136.00	145.00	139.85	5.15	P-5
	96+05.08	-91.352	P-6	TRASH	0.0	148.0	4.0	144.00	7.0	141.00	148.00	139.85	8.15	P-6
	96+04.11	-145.158	P-7	TRASH	1.0	147.0	7.0	141.00	12.0	136.00	148.00	139.85	8.15	P-7
	96+02.93	-185.852	P-8	CLEAN					12.0	137.00	149.00	140.00	9.00	P-8
	95+74.86	-145.089	P-9	TRASH	1.0	151.0	3.0	149.00	12.0	140.00	152.00	139.85	12.15	P-9
	95+20.63	-145.005	P-10	TRASH	2.0	152.0	7.0	147.00	10.0	144.00	154.00	139.85	14.15	P-10
	94+74.39	-145.025	P-11	TRASH	1.5	153.2	7.0	147.70	10.0	144.70	154.70	139.85	14.85	P-11
	94+20.10	-145.196	P-12	TRASH	1.5	153.2	9.0	145.70	12.0	142.70	154.70	139.85	14.85	P-12
	93+58.69	-144.918	P-13	TRASH	2.0	149.2	11.0	140.20	15.0	136.20	151.20	140.00	11.20	P-13
	95+19.12	-185.336	P-14	CLEAN					11.0	143.00	154.00	139.85	14.15	P-14
	94+18.64	-183.422	P-15	TRASH	1.0	153.5	8.0	146.50	12.0	142.50	154.50	139.85	14.65	P-15
	95+19.72	-91.841	P-16	TRASH	3.0	150.0	7.0	146.00	9.5	143.50	153.00	139.85	13.15	P-16
	94+20.30	-93.071	P-17	TRASH	0.0	155.0	12.0	143.00	15.0	140.00	155.00	139.85	15.15	P-17
	93+74.60	-39.641	P-18	TRASH	0.0	151.0	10.0	141.00	13.0	138.00	151.00	139.85	11.15	P-18
WATER @ 15'	93+38.30	-92.127	P-19	TRASH	0.0	152.7	11.0	141.65	15.0	137.65	152.65	139.85	12.80	P-19
WET			P-20	CLEAN					18.0			139.85		P-20

LEGEND	
TRASH	
WATER	

FT-FEET

Test pit locations are only accurate to within 5 feet of test pit.

Table 3
Summary of Test Pit Field Screening - September 8-10, 2021
Runway Expansion Area
St. Mary's County Regional Airport, California, Maryland

Test Pit No.	Date	Field PID Readings (PPM TVOCs)	Comments	Sample Collected	Station (Feet)	Offset (Fteet)
PIT-1	9/10/2021	0.0-0.1	Buried tree stumps present (no debris such as bottles or metal); water seepage on west side at 5.5-6 ft; root mass at 4-4.5 ft and another at 6 ft;		92+74.94	-169.392
PIT-2	9/10/2021	Max. 4.4 ppm in 0-6 ft; 0.0-0.1 6-14 ft	Tires, glass bottles, metal tank, scrap metal, black soil	SMC-AP-TP-3	93+75.36	-184.943
PIT-3	9/10/2021	0.0-0.1	New TP-3 offset approx 10 feet from first test pit; Black debris/soil		95+75.00	-84.711
PIT-4	9/10/2021	0.0-0.1	Black debris/soil, glass bottles, possible propane metal tank, scrap metal		94+75.00	-84.948
PIT-5	9/10/2021	0.2-2.1	Black soil, bottles, odor, scrap metal, metal springs, metal pipe	SMC-AP-TP-5	93+75.16	-84.943
PIT-6	9/10/2021	0.0-0.1	No debris; groundwater seeping into excavation at approx 6 ft; dark organic soil at 6-7 ft		92+75.18	-84.937
PIT-7	9/10/2021	0.0-0.1	Some debris in corner at 1 ft; minor black stained soil at 1 ft.		92+75.00	14.784
PIT-8	9/10/2021	0.0-0.1	No debris; orange-brown fill and gray clayey sand		93+74.76	15.057
PIT-9	9/10/2021	0.0-0.1	Glass bottles (8 oz to 1 gal.), crushed metal bucket, scrap metal		95+74.99	-184.954
PIT-10	9/10/2021	0.0-0.2	No debris; outside of berm		93+73.04	-241.151
PIT-11	9/10/2021	0.0-0.1	No debris		96+34.20	-241.143
PIT-12	9/10/2021	0.0-0.1	No debris		94+75.41	15.052
PIT-13	9/8/2021	0.1	No debris		94+74.98	149.992
PIT-14	9/8/2021	0.1-0.2	No debris		93+75.03	150.057
PIT-15	9/8/2021	0.1-0.3	No debris		93+75.01	240.057
PIT-16	9/10/2021	0.1	No debris		96+37.42	-84.927
PIT-17	9/10/2021	0.0-0.1	No debris		96+33.92	-185.468
PIT-18	9/10/2021	0.1-0.2	No debris		96+36.66	-35.674
PIT-19	9/10/2021	0.0-0.1	No debris; located between TP-8 and TP-14		93+30.02	96.691
PIT-20	9/10/2021	0.0-0.4	Bricks, scrap metal, black soil, cans,		94+76.47	-184.533

PID = photoionization detector

PPM - parts per million

TVOCs - Total volatile organic compounds

Table 4
Summary of Test Pit Field Screening - September 16, 2021
Runway Expansion Area
St. Mary's County Regional Airport, California, Maryland

Test Pit No.	Date	Field PID Readings (PPM TVOCs)	Comments	Sample Collected	Station (Feet)	Offset (Feet)
P-1	9/16/2021	0.0	Black stained soil, scrap metal, reddish-brown granular soil, glass bottles, metal cans		94+20.07	-39.435
P-2	9/16/2021	0.0	Black stained soil, scrap metal, tree stumps, concrete rubble, glass bottles		94+75.06	-39.408
P-3	9/16/2021	0.0	Black stained soil, scrap metal, glass bottles, metal machinery, metal pipes		95+19.76	-39.408
P-4	9/16/2021	0.0-0.2	Black stained soil, scrap metal, glass bottles, metal cans, metal bucket, bricks, metal pipes, wood, tree stump		95+75.71	-39.776
P-5	9/16/2021	0.0-0.4	Black stained soil, scrap metal, glass bottles, metal canister, metal springs		96+04.52	-39.088
P-6	9/16/2021	0.0	Black stained soil, scrap metal, glass bottles, cans		96+05.08	-91.352
P-7	9/16/2021	0.0	Scrap metal, glass bottles, metal cans, wood	SMC-AP-P-7	96+04.11	-145.158
P-8	9/16/2021	0.0	No debris		96+02.93	-185.852
P-9	9/16/2021	0.0	Small amount of debris on west side of excavation only		95+74.86	-145.089
P-10	9/16/2021	0.0-0.3	Black stained soil, scrap metal, glass bottles, metal cans		95+20.63	-145.005
P-11	9/16/2021	0.2-0.6	Black stained soil, scrap metal, metal tank (possible propane tank), glass bottles, metal cans, bricks		94+74.39	-145.025
P-12	9/16/2021	0.2-30.2	Black stained soil, scrap metal, metal cans, glass bottles, bricks, metal pipes; 30.2 ppm reading in soil from approximately 2-3 feet below grade	SMC-AP-P-12	94+20.10	-145.196
P-13	9/16/2021	0.2-0.6	Black stained soil, scrap metal, glass bottles, wood debris, tires, reddish-brown soil at base		93+58.69	-144.918
P-14	9/16/2021	0.0	No debris		95+19.12	-185.336
P-15	9/16/2021	0.0-0.2	Black stained soil, scrap metal, glass bottles, cans, bricks		94+18.64	-183.422
P-16	9/16/2021	0.0	Black stained soil, scrap metal, glass bottles, tree stump, wood debris		95+19.72	-91.841
P-17	9/16/2021	0.2-1.0	Black stained soil, scrap metal, bricks, glass bottles, burnt wood, metal tank (open, empty, possible propane tank)		94+20.30	-93.071
P-18	9/16/2021	0.0-0.1	Black stained soil, scrap metal, wood, glass bottles, metal tank (open, empty, possible propane tank)		93+74.60	-39.641
P-19	9/16/2021	1.2-9.8	Black stained soil, metal pipes, boxes, metal wire, wood, tree stumps, bricks. 9.8 ppm reading in soil from approximately 5-7 feet below grade.		93+38.30	-92.127
P-20	9/16/2021	0.0	No debris-Test pit was located at airport "350' line". Goal was to locate groundwater. Observed moist-to-wet, clayey sand at 9-10 feet; no free running water or accumulated water observed in test pit			

PID = photoionization detector

PPM - parts per million

TVOCs - total volatile organic compounds

Table 5
Analytes Detected in Test Pit Soil Samples - September 10 and 16, 2021
Runway Expansion Area
St. Mary's County Regional Airport, California, Maryland

Analyte Detected (1)	Regulatory Standard or Soil Cleanup Levels	Risk-Based Screening Criteria	SMC-AP-TP-5 9/10/2021 PIT-5	SMC-AP-TP-2 9/10/2021 PIT-2	SMC-AP-P-12 9/16/2021 P-7	SMC-AP-TP-7 9/16/2021 P-12
TCLP Metals (mg/L)						
Cadmium	1.0 a, b		0.030	0.022	0.0033 U	0.033
Lead	5.0 a, b		0.23	0.47	0.040	0.33
Polychlorinated biphenyls (mg/kg)						
Total PCBs	1.0 c	0.94 d	0.058	0.32	0.11	0.023 U
Aroclor-1248	1.0 c	0.94 d	0.038 U	0.22	0.083	0.008 U
Aroclor-1254	1.0 c	0.97 d	0.038 U	0.091	0.005 U	0.0053 U
Miscellaneous						
TPH-DRO (mg/kg)	Avg <3000 b	620 e	49.8	129	59.7	35.8
Dioxins (ng/kg)						
2,3,7,8-TCDD		22 d	4.33	1.49	0.508 U	0.473 JK
1,2,3,7,8-PeCDD			37.9	3.5	1.48 J	2.24
1,2,3,4,7,8-HxCDD		470 d	71.9	3.75	5.64	15.4
1,2,3,6,7,8-HxCDD		470 d	120	7.82	1.86 J	2.75 J
1,2,3,7,8,9-HxCDD		470 d	146	5.87	5.10	5.54
1,2,3,4,6,7,8-HpCDD			1790	220	169	572
OCDD			8920 E	4900 E	1310	9270 E
Total dioxins	1000 b		11090.13	5142.43	1493.08	9867.93
TEQ dioxins		22 d, f	96.6	10.404	4.823	13.58
Furans (ng/kg)						
2,3,7,8-TCDF		1.20E+09 d	12.7	14.8	1.62 K	3.82 K
1,2,3,7,8-PeCDF		1.20E+09 d	10.5	6.23	0.897 JK	1.96 JK
2,3,4,7,8-PeCDF		1.20E+09 d	21.9	13.5	2.09 JK	4.11
1,2,3,4,7,8-HxCDF		1.20E+09 d	18.1 K	6.98	1.53 JK	3.46 J
1,2,3,6,7,8-HxCDF		1.20E+09 d	17.7 K	7.28	0.807 BJ	1.48 J
1,2,3,7,8,9-HxCDF		1.20E+09 d	5.73 K	1.77 JK	2.20 J	5.31
2,3,4,6,7,8-HxCDF		1.20E+09 d	20.4	7.43 K	1.65 JK	3.69 J
1,2,3,4,6,7,8-HpCDF		1.20E+09 d	85.9	37.1	17.8	192
1,2,3,4,7,8,9-HpCDF		1.20E+09 d	6.17 K	1.87 J	0.504 JK	6.07
OCDF		1.20E+09 d	38.7	34.1	26.5	488
Total furans		1.20E+09 d	237.8	131.06	54.791	709.9
TEQ furans			15.4	8.496	1.627	5.22

a EP Toxicity (TCLP) concentration for defining a solid waste as hazardous
b Landfill acceptance criterion
c USEPA cleanup level in soil for release after 1978
d USEPA (2021a) SSL for industrial use scenario TR=1E-06 THQ=1.0
e MDE (2018) TPH-DRO soil cleanup level for non-residential use

Data Qualifiers
E - estimated concentration above the upper quantitation limit
J - estimated concentration below the reporting limit
K - estimated or biased concentration
U - analyte not detected at the method detection limit (MDL) concentration shown left of the letter.
1 Samples were analyzed for TCLP VOCs, TCLP SVOCs, TCLP pesticides/herbicides, VOCs (benzene, toluene, ethylbenzene, and xylenes), TPH-GRO, total organic halogens (TOX), paint filter (free liquids) but none were detected.
TCLP - Toxicity Characteristic Leaching Procedure
VOCs - volatile organic compounds
SVOCs-semivolatile organic compounds
TPH-total petroleum hydrocarbons
GRO-gasoline-range organics
mg/kg-milligrams per kilogram (parts per million)
ug/L-micrograms per liter (i.e., parts per billion)
TOX-total organic halogens

FIGURES

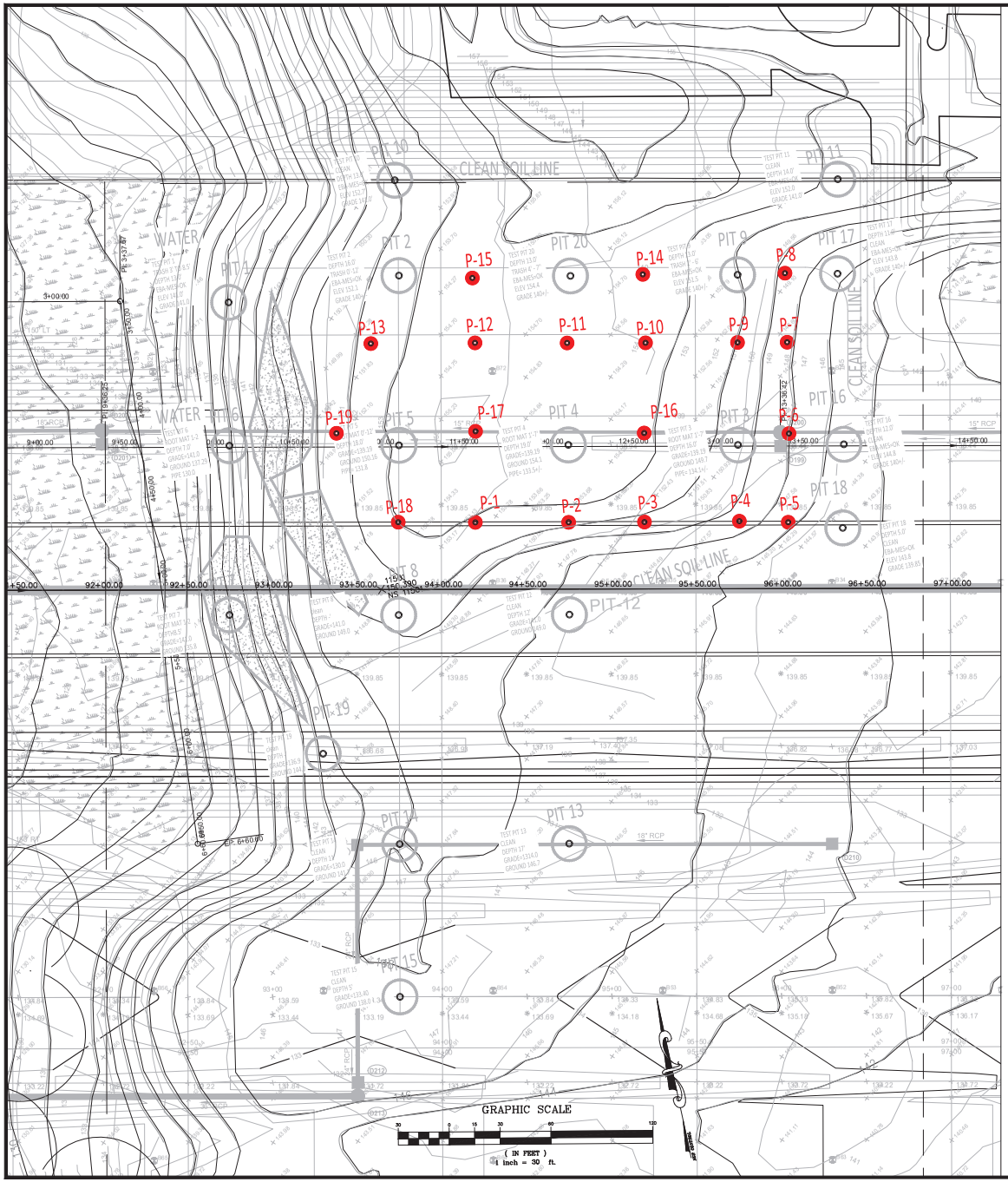
Source: Maryland Environmental Resources and Land Information Network (MERLIN)
Maryland Department of Natural Resources

Figure 1
Test Pit Area
St. Mary's County Regional Airport
California, Maryland

0 5000 Feet

N

Figure 2
Test Pit Area – September 2021
St. Mary's County Regional Airport, California, Maryland



TEST PIT TABLE SEPTEMBER 13, 2021

	Station	Offset	TEST PIT #	TEST PIT RESULTS	TRASH DEPTH TOP	TRASH DEPTH ELEVATION TOP	TRASH DEPTH BOTTOM	TRASH DEPTH ELEVATION BOTTOM	DEPTH OF TEST PIT	DEPTH OF TEST PIT ELEVATION	GROUND ELEVATION	FINISH GRADE	CUT FINISH GRADE	PIPE INVERT	PIPE CUT INVERT	TEST PIT #
WATER	92+74.94	-169.392	1	TRASH	3	138.00	8.50	132.50	13.00	128.00	141.00	141.00	0.00			1
	93+75.36	-184.943	2	TRASH	0	152.10	12.00	140.10	16.00	136.10	152.10	140.00	12.10	134.2	17.90	2
	95+75.00	-84.711	3	TRASH	1	148.70	7.00	142.70	16.00	133.70	149.70	139.19	10.51	133.9	15.80	3
	94+75.00	-84.948	4	TRASH	1	153.10	7.00	147.10	19.00	135.10	154.10	139.19	14.91	132.9	21.20	4
	93+75.16	-84.943	5	TRASH	0	150.16	12.00	138.16	18.00	132.16	150.16	139.19	10.97	132.7	17.46	5
WATER	92+75.18	-84.937	6	TRASH	1	136.29	2.00	135.29	7.00	130.29	137.29	141.00	-3.71			6
	92+75.00	14.784	7	TRASH	1	134.80	2.00	133.80	8.50	127.30	135.80	141.00	-5.20			7
	93+74.76	15.057	8	CLEAN					14.00	135.00	149.00	141.00	8.00			8
	95+74.99	-184.954	9	TRASH	2	149.50	6.00	145.50	13.00	138.50	151.50	141.00	10.50			9
	93+73.04	-241.151	10	CLEAN					13.00	139.70	152.70	141.00	11.70			10
	96+34.20	-241.143	11	CLEAN					14.00	138.00	152.00	141.00	11.00			11
	94+75.41	15.052	12	CLEAN					12.00	137.00	149.00	141.00	8.00			12
	94+74.98	149.992	13	CLEAN					17.00	129.70	146.70	134.00	12.70	127.2	19.50	13
	93+75.03	150.057	14	CLEAN					11.00	130.70	141.70	130.00	11.70	124.8	16.90	14
	93+75.01	240.057	15	CLEAN					5.00	133.00	138.00	133.40	4.60			15
	96+37.42	-84.927	16	CLEAN					12.00	132.80	144.80	140.00	4.80	134.7	10.10	16
	96+33.92	-185.468	17	CLEAN					11.00	132.80	143.80	140.00	3.80			17
	96+36.66	-35.674	18	CLEAN					5.00	138.80	143.80	139.85	3.95			18
	93+30.02	96.691	19	CLEAN					7.00	137.00	144.00	136.90	7.10			19
	94+76.47	-184.533	20	TRASH	4	150.50	7.00	147.50	13.00	141.50	154.50	140.00	14.50			20

	Station	Offset	TEST PIT #	TES PIT RESULTS	TRASH TOP	TRASH DEPTH ELEVATION TOP	TRASH DEPTH BOTTOM	TRASH DEPTH BOTTOM ELEVATION	DEPTH OF TEST PIT	DEPTH OF TEST PIT ELEVATION	Ground elevation	FINISH GRADE	CUT FINISH GRADE		
	94+20.07	-39.435	P-1	TRASH	2.0	151.0	6.0	147.00	9.0	144.00	153.00	139.85	13.15	P-1	
	94+75.06	-39.408	P-2	TRASH	0.0	154.0	4.0	150.00	8.0	146.00	154.00	139.85	14.15	P-2	
	95+19.76	-39.408	P-3	TRASH	1.0	151.0	7.0	145.00	9.0	143.00	152.00	139.85	12.15	P-3	
	95+75.71	-39.776	P-4	TRASH	3.0	146.0	6.0	143.00	9.0	140.00	149.00	139.85	9.15	P-4	
	96+04.52	-39.088	P-5	TRASH	1.0	144.0	4.0	141.00	9.0	136.00	145.00	139.85	5.15	P-5	
	96+05.08	-91.352	P-6	TRASH	0.0	148.0	4.0	144.00	7.0	141.00	148.00	139.85	8.15	P-6	
	96+04.11	-145.158	P-7	TRASH	1.0	147.0	7.0	141.00	12.0	136.00	148.00	139.85	8.15	P-7	SOIL SAMPLE
	96+02.93	-185.852	P-8	CLEAN					12.0	137.00	149.00	140.00	9.00	P-8	
	95+74.86	-145.089	P-9	TRASH	1.0	151.0	3.0	149.00	12.0	140.00	152.00	139.85	12.15	P-9	
	95+20.63	-145.005	P-10	TRASH	2.0	152.0	7.0	147.00	10.0	144.00	154.00	139.85	14.15	P-10	
	94+74.39	-145.025	P-11	TRASH	1.5	153.2	7.0	147.70	10.0	144.70	154.70	139.85	14.85	P-11	
	94+20.10	-145.196	P-12	TRASH	1.5	153.2	9.0	145.70	12.0	142.70	154.70	139.85	14.85	P-12	SOIL SAMPLE
	93+58.69	-144.918	P-13	TRASH	2.0	149.2	11.0	140.20	15.0	136.20	151.20	140.00	11.20	P-13	
	95+19.12	-185.336	P-14	CLEAN					11.0	143.00	154.00	139.85	14.15	P-14	
	94+18.64	-183.422	P-15	TRASH	1.0	153.5	8.0	146.50	12.0	142.50	154.50	139.85	14.65	P-15	
	95+19.72	-91.841	P-16	TRASH	3.0	150.0	7.0	146.00	9.5	143.50	153.00	139.85	13.15	P-16	
	94+20.30	-93.071	P-17	TRASH	0.0	155.0	12.0	143.00	15.0	140.00	155.00	139.85	15.15	P-17	
	93+74.60	-39.641	P-18	TRASH	0.0	151.0	10.0	141.00	13.0	138.00	151.00	139.85	11.15	P-18	
WATER	93+38.30	-92.127	P-19	TRASH	0.0	152.7	11.0	141.65	15.0	137.65	152.65	139.85	12.80	P-19	WATER @15'
WET/			P-20	CLEAN					18.0	-18.00		139.85	-139.85	P-20	WET
										0.00		139.85		0	

Figure 3
Test Pit Locations and Field Measurements-September 2021
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

REVISIONS
DATE/INITIAL ITEMS

ST. MARY'S COUNTY, MARYLAND
SCALE HOR2 1"=20' VERT 1"=20'
APPROVED BY:
DRAWN BY RJP
DATE AUGUST 23, 2021
SHEET 2 OF 2

AIRPORT PHASE 2 TEMPORARY ENTRANCE

ST. MARY'S COUNTY DEPT. OF PUBLIC WORKS AND TRANSPORTATION
P.O. BOX 508, CALIFORNIA, MARYLAND 20619

10,001
DRAWING NO.

LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- TRASH TO BE REMOVED

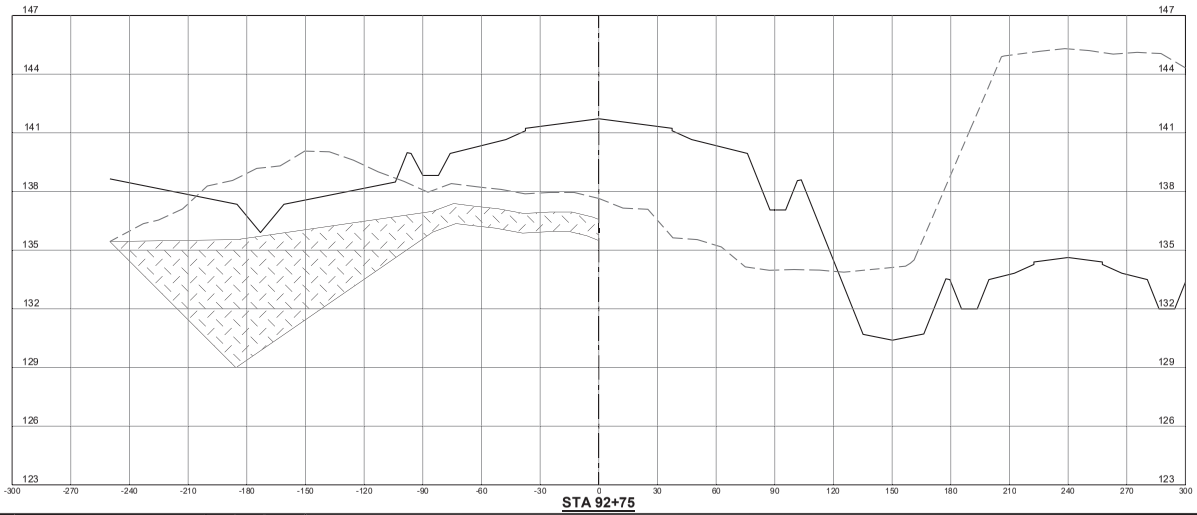


Figure 4
Cross Section Station 92+75
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

NO.	REVISIONS	BY	APP.	DATE
6	CONFORMED DOCUMENTS	NYB	JDB	8/31/20

2700 Polo Parkway
Midlothian, Virginia 23113
phone: (804) 275-8301
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 51444, Expiration Date: 8/17/2021.

EXTEND RUNWAY 11-29 - PHASE 2	AIP NO. 3-24-0022-PENDING		JOB NO. 18057
CROSS SECTIONS	DRAWN BY: DWS		SHEET 58 OF 68
	DESIGNED BY: TJS/JDB		
ST. MARY'S COUNTY REGIONAL AIRPORT	SCALE: HORZ. 1" = 30' VERT. 1" = 3'	DATE: JUNE 2019	

DRAWING: 18057cs-hash.dwg LAYOUT: L11
XREFS: IMAGES:

LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- TRASH TO BE REMOVED

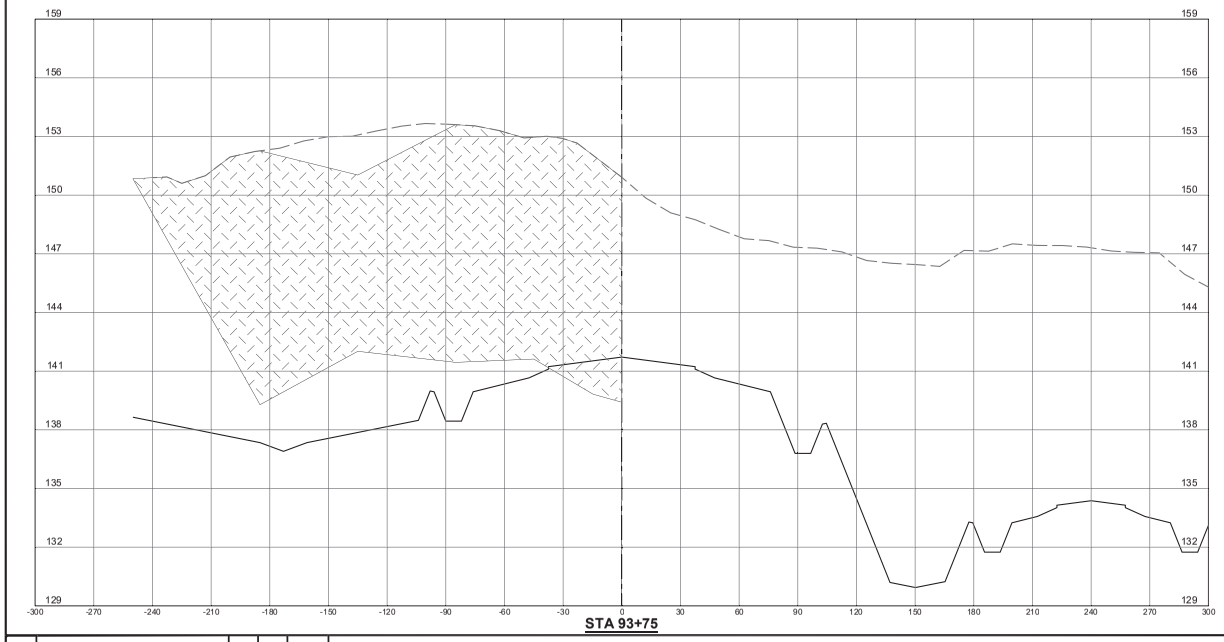


Figure 5
Cross Section Station 93+75
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

NO.	REVISIONS	BY	APP.	DATE
6	CONFORMED DOCUMENTS	NYB	JDB	8/31/20

2700 Polo Parkway
Midlothian, Virginia 23113
phone: (804) 275-8301
www.deltaairport.com

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EXTEND RUNWAY 11-29 - PHASE 2	AIP NO. 3-24-0022-PENDING		JOB NO. 18057
CROSS SECTIONS	DRAWN BY: DWS		SHEET 59 OF 68
	DESIGNED BY: TJS/JDB		
ST. MARY'S COUNTY REGIONAL AIRPORT	SCALE: HORZ. 1" = 30' VERT. 1" = 3'	DATE: JUNE 2019	

DRAWING: 18057cs-trash.dwg LAYOUT: L12
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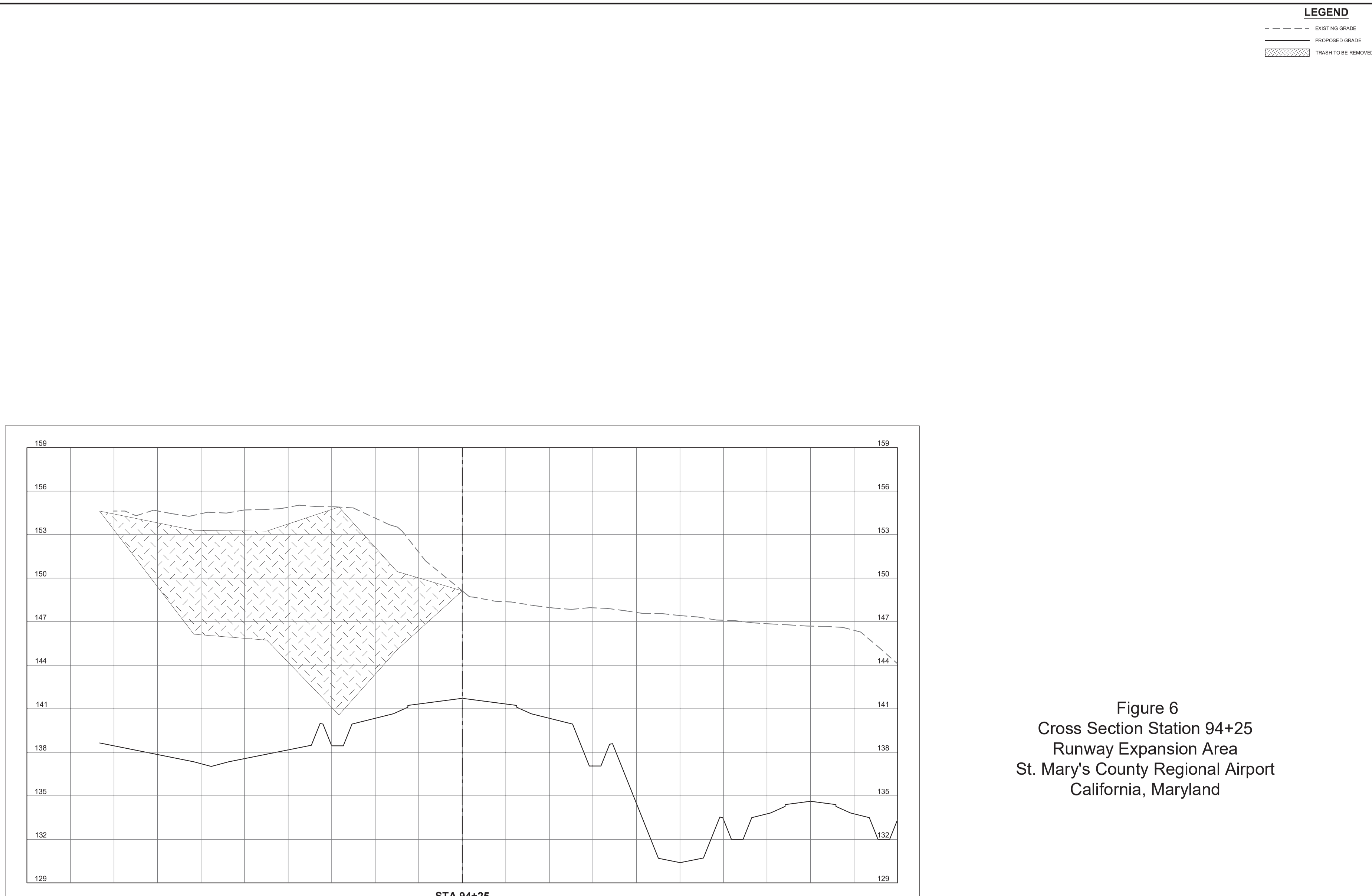

Figure 6
Cross Section Station 94+25
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

NO.	REVISIONS	BY	APP.	DATE
6	CONFORMED DOCUMENTS	NYB	JDB	8/31/20

2700 Polo Parkway
Midlothian, Virginia 23113
phone: (804) 275-8301
www.deltaairport.com

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EXTEND RUNWAY 11-29 - PHASE 2

CROSS SECTIONS

ST. MARY'S COUNTY REGIONAL AIRPORT

AIP NO. 3-24-0022-PENDING
JOB NO. 18057
DRAWN BY: DWS
DESIGNED BY: TJS/JDB
SCALE: HORIZ: 1" = 30' VERT: 1" = 3'
DATE: JUNE 2019
SHEET 60 OF 68

DRAWING: 18057xs-trash.dwg LAYOUT: L13
XREFS: IMAGES

LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- TRASH TO BE REMOVED

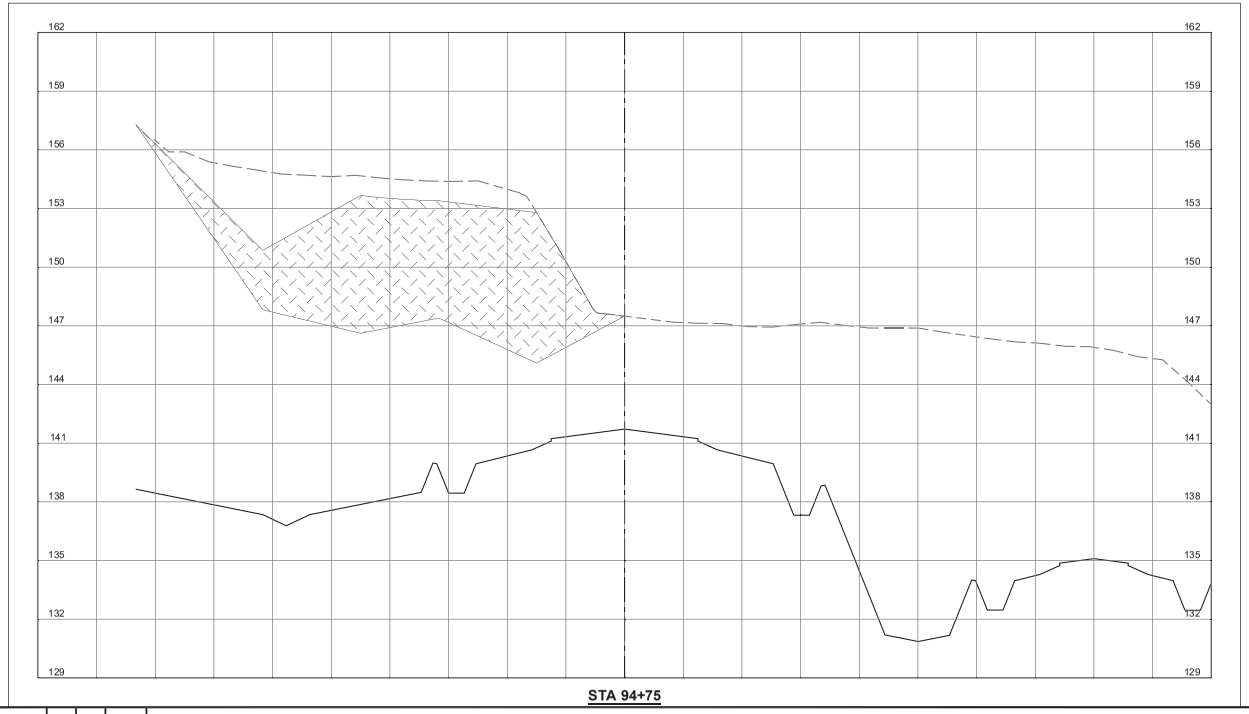

Figure 7
Cross Section Station 94+75
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

NO.	REVISIONS	BY	APP.	DATE
6	CONFORMED DOCUMENTS	NYB	JDB	8/31/20

2700 Polo Parkway
Midlothian, Virginia 23113
phone: (804) 275-8301
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

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EXTEND RUNWAY 11-29 - PHASE 2	AIP NO. 3-24-0022-PENDING		JOB NO. 18057
CROSS SECTIONS	DRAWN BY: DWS		SHEET 61 OF 68
	DESIGNED BY: TJS/JDB		
ST. MARY'S COUNTY REGIONAL AIRPORT	SCALE: HORZ. 1" = 30' VERT. 1" = 3'	DATE: JUNE 2019	

DRAWING: 18057cs-hash.dwg LAYOUT: L14
XREFS: IMAGES:

LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- TRASH TO BE REMOVED

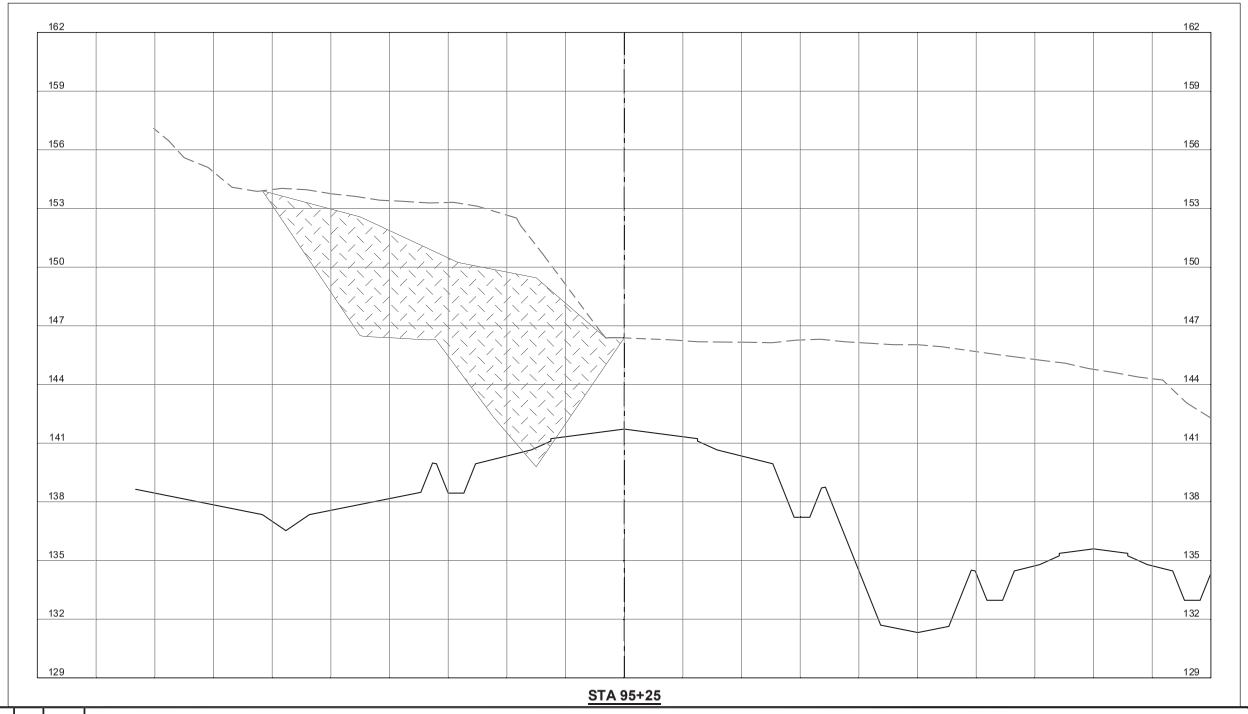

Figure 8
Cross Section Station 95+25
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

NO.	REVISIONS	BY	APP.	DATE
6	CONFORMED DOCUMENTS	NYB	JDB	8/31/20

2700 Polo Parkway
Midlothian, Virginia 23113
phone: (804) 275-8301
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

Professional Certification.
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EXTEND RUNWAY 11-29 - PHASE 2	AIP NO. 3-24-0022-PENDING		JOB NO. 18057
CROSS SECTIONS	DRAWN BY: DWS		SHEET 62 OF 68
	DESIGNED BY: TJS/JDB		
ST. MARY'S COUNTY REGIONAL AIRPORT	SCALE: HORZ. 1" = 30' VERT. 1" = 3'	DATE: JUNE 2019	

DRAWING: 18057cs-hash.dwg LAYOUT: L15
XREFS: IMAGES:

LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- TRASH TO BE REMOVED

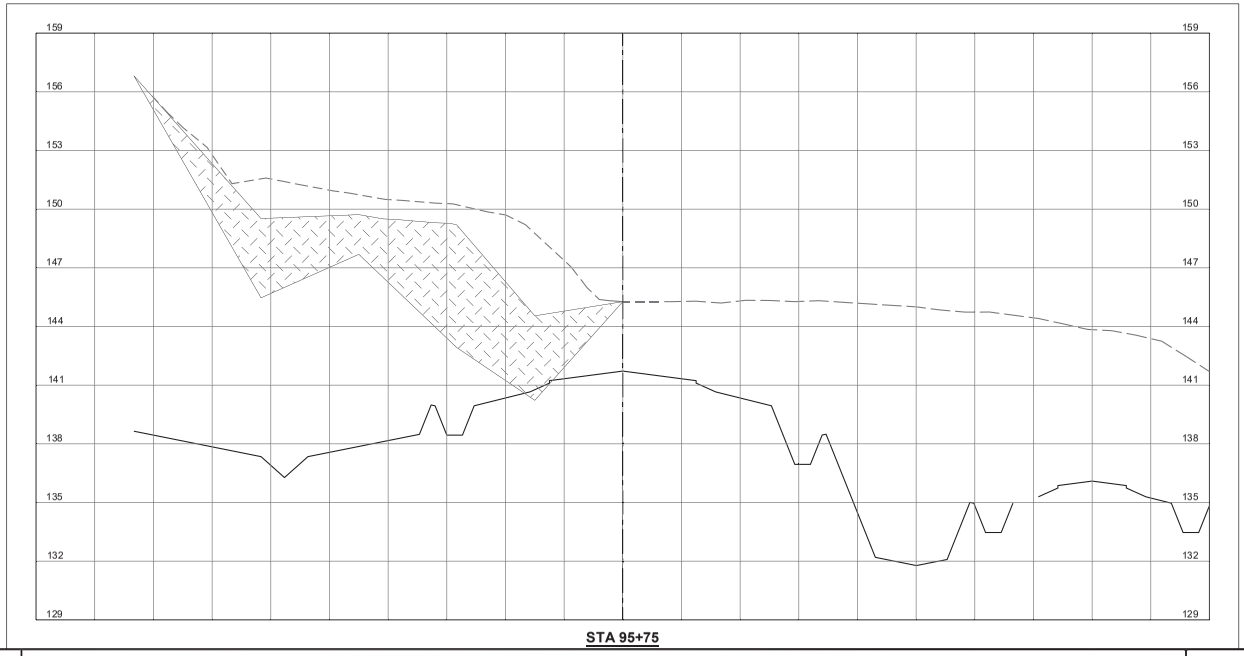

Figure 9
Cross Section Station 95+75
Runway Expansion Area
St. Mary's County Regional Airport
California, Maryland

NO.	REVISIONS	BY	APP.	DATE
	CONFORMED DOCUMENTS	NYB	JDB	8/31/20

2700 Polo Parkway
Midlothian, Virginia 23113
phone: (804) 275-8301
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

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EXTEND RUNWAY 11-29 - PHASE 2	AIP NO. 3-24-0022-PENDING		JOB NO. 18057
CROSS SECTIONS	DRAWN BY: DWS		SHEET 63 OF 68
	DESIGNED BY: TJS/JDB		
ST. MARY'S COUNTY REGIONAL AIRPORT	SCALE: HORZ. 1" = 30' VERT. 1" = 3'	DATE: JUNE 2019	

ATTACHMENT A

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

October 25, 2021

Maryland Environmental Services-LF Data
Maryland Environmental Services
259 Najoles Road
Millersville, MD 21108

Certificate of Analysis

Project Name:	**2021-St Mary's Airport Waste**	Workorder:	**3200672**
Purchase Order:		Workorder ID:	**2021-St Mary's Airport Waste**

Dear Maryland Services-LF Data:

Enclosed are the analytical results for samples received by the laboratory on Monday, September 13, 2021.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact George J Methlie (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Maryland Environmental Services-WWW Data , Ms. Amy Kline , Ms. Cheryl Griffin

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

George J Methlie
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

SAMPLE SUMMARY

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3200672001	SMC-AP-TP-5	Solid	9/10/2021 10:10	9/13/2021 17:39	
3200672002	SMC-AP-TP-2	Solid	9/10/2021 12:10	9/13/2021 17:39	

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

SAMPLE SUMMARY

Workorder: 3200672 2021-St Mary's Airport Waste

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

PROJECT SUMMARY

Workorder: 3200672 2021-St Mary's Airport Waste

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3200672001 **Sample ID:** SMC-AP-TP-5 **Sample Type:** SAMPLE

This sample was collected in a soil jar for the volatile analysis. The sample was received and prepared by Method 5035 after the 48-hour holding time.

Lab ID: 3200672002 **Sample ID:** SMC-AP-TP-2 **Sample Type:** SAMPLE

This sample was collected in a soil jar for the volatile analysis. The sample was received and prepared by Method 5035 after the 48-hour holding time.

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672001** Date Collected: 9/10/2021 10:10 Matrix: Solid

Sample ID: **SMC-AP-TP-5** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
TCLP EPA 1311 VOLATILE ORGANIC										
Benzene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
2-Butanone	ND	C	ug/L	200	SW846 8260C			9/17/21 17:51	DPC	A
Carbon Tetrachloride	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
Chlorobenzene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
Chloroform	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
1,2-Dichloroethane	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
1,1-Dichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
Tetrachloroethene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
Trichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
Vinyl Chloride	ND	C	ug/L	20.0	SW846 8260C			9/17/21 17:51	DPC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	115	C	%	62 - 133	SW846 8260C			9/17/21 17:51	DPC	A
4-Bromofluorobenzene (S)	96.8	C	%	79 - 114	SW846 8260C			9/17/21 17:51	DPC	A
Dibromofluoromethane (S)	104	C	%	78 - 116	SW846 8260C			9/17/21 17:51	DPC	A
Toluene-d8 (S)	92.8	C	%	76 - 127	SW846 8260C			9/17/21 17:51	DPC	A
GASOLINE RANGE ORGANICS										
Gasoline Range Organics	ND	C	ug/kg	11400	SW846 8015D	9/17/21 03:19	CHS	9/17/21 10:19	CHS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	121	C	%	72 - 134	SW846 8015D	9/17/21 03:19	CHS	9/17/21 10:19	CHS	A
VOLATILE ORGANICS										
Benzene	ND	C	ug/kg	57.2	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
Ethylbenzene	ND	C	ug/kg	57.2	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
Toluene	ND	C	ug/kg	57.2	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
Total Xylenes	ND	C	ug/kg	172	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	105	C	%	71 - 146	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
4-Bromofluorobenzene (S)	93	C	%	46 - 138	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
Dibromofluoromethane (S)	102	C	%	42 - 143	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
Toluene-d8 (S)	107	C	%	54 - 141	SW846 8260B	9/15/21 20:21	VLM	9/16/21 00:48	VLM	B1
TCLP EPA 1311 SEMI-VOLATILES										
mp-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
o-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
1,4-Dichlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
2,4-Dinitrotoluene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672001** Date Collected: 9/10/2021 10:10 Matrix: Solid

Sample ID: **SMC-AP-TP-5** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Hexachlorobutadiene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Hexachloroethane	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Nitrobenzene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Pentachlorophenol	ND	C	ug/L	120	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Pyridine	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
2,4,5-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
2,4,6-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	98.2	C	%	23 - 131	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
2-Fluorobiphenyl (S)	57.4	C	%	24 - 116	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
2-Fluorophenol (S)	54.4	C	%	10 - 85	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Nitrobenzene-d5 (S)	78.4	C	%	32 - 125	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Phenol-d5 (S)	35.7	C	%	7 - 56	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
Terphenyl-d14 (S)	104	C	%	41 - 145	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:10	GEC	A
PCBs										
Total Polychlorinated Biphenyl	0.058	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1016	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1221	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1232	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1242	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1248	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1254	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1260	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1262	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Aroclor-1268	ND	C	mg/kg	0.038	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	62.2	C	%	49 - 115	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
Tetrachloro-m-xylene (S)	68.9	C	%	27 - 137	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:35	JXS	A
TCLP EPA 1311 PESTICIDES										
gamma-BHC	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Chlordane	ND	C	ug/L	10.0	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Endrin	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Heptachlor	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Heptachlor Epoxide	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Methoxychlor	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672001** Date Collected: 9/10/2021 10:10 Matrix: Solid

Sample ID: **SMC-AP-TP-5** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Toxaphene	ND	C	ug/L	20.0	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	92.8	C	%	30 - 140	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Decachlorobiphenyl. (S)	81	C	%	30 - 140	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Tetrachloro-m-xylene (S)	67.4	C	%	30 - 123	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
Tetrachloro-m-xylene. (S)	64.3	C	%	30 - 123	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:51	KJH	A
PETROLEUM HC's										
Diesel Range Organics C10-C28	49.8	C	mg/kg	12.0	SW846 8015D	9/15/21 00:50	S7M	9/17/21 21:58	KJH	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	56.9	C	%	36 - 122	SW846 8015D	9/15/21 00:50	S7M	9/17/21 21:58	KJH	A
WET CHEMISTRY										
Free Liquids	Negative	C			SW846 9095B			9/20/21 11:18	MJE	A
Halogen, Total Organic (TOX)	ND	C	mg/kg	5.5	SW846 9023			9/16/21 17:57	PAG	A
Moisture	14.1	C	%	0.1	S2540G-11			9/16/21 11:45	II	
Total Solids	85.9	C	%	0.1	S2540G-11			9/16/21 11:45	II	
TCLP EPA 1311 METALS										
Arsenic, Total	ND	C	mg/L	0.13	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
Barium, Total	ND	C	mg/L	2.5	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
Cadmium, Total	0.030	C	mg/L	0.0099	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
Chromium, Total	ND	C	mg/L	0.025	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
Lead, Total	0.23	C	mg/L	0.030	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
Mercury, Total	ND	C	mg/L	0.0020	SW846 7470A	9/16/21 18:19	JSE	9/18/21 13:38	AHI	A
Selenium, Total	ND	C	mg/L	0.099	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
Silver, Total	ND	C	mg/L	0.020	SW846 6010C	9/16/21 16:16	SXC	9/17/21 09:57	SRT	A1
TCLP EPA 1311 HERBICIDES										
2,4-D	ND	C	ug/L	20.0	SW846 8151A	9/20/21 16:50	AJW	9/21/21 16:10	JXS	A
2,4,5-TP	ND	C	ug/L	4.0	SW846 8151A	9/20/21 16:50	AJW	9/21/21 16:10	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4-Dichlorophenylacetic acid (S)	67.3	C	%	14 - 172	SW846 8151A	9/20/21 16:50	AJW	9/21/21 16:10	JXS	A
SUBCONTRACTED ANALYSIS										

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672001** Date Collected: 9/10/2021 10:10 Matrix: Solid

Sample ID: **SMC-AP-TP-5** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
Subcontracted Analysis	Subcontract results attached GJM 10/25/21	C			Subcontract			10/25/21 11:02	GJM	A

George J Methlie
Project Coordinator

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672002** Date Collected: 9/10/2021 12:10 Matrix: Solid

Sample ID: **SMC-AP-TP-2** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
TCLP EPA 1311 VOLATILE ORGANIC										
Benzene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
2-Butanone	ND	C	ug/L	200	SW846 8260C			9/17/21 18:14	DPC	A
Carbon Tetrachloride	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
Chlorobenzene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
Chloroform	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
1,2-Dichloroethane	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
1,1-Dichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
Tetrachloroethene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
Trichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
Vinyl Chloride	ND	C	ug/L	20.0	SW846 8260C			9/17/21 18:14	DPC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	116	C	%	62 - 133	SW846 8260C			9/17/21 18:14	DPC	A
4-Bromofluorobenzene (S)	94	C	%	79 - 114	SW846 8260C			9/17/21 18:14	DPC	A
Dibromofluoromethane (S)	103	C	%	78 - 116	SW846 8260C			9/17/21 18:14	DPC	A
Toluene-d8 (S)	92.2	C	%	76 - 127	SW846 8260C			9/17/21 18:14	DPC	A
GASOLINE RANGE ORGANICS										
Gasoline Range Organics	ND	C	ug/kg	10800	SW846 8015D	9/17/21 03:19	CHS	9/17/21 10:47	CHS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	115	C	%	72 - 134	SW846 8015D	9/17/21 03:19	CHS	9/17/21 10:47	CHS	A
VOLATILE ORGANICS										
Benzene	ND	C	ug/kg	54.0	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
Ethylbenzene	ND	C	ug/kg	54.0	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
Toluene	ND	C	ug/kg	54.0	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
Total Xylenes	ND	C	ug/kg	162	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	103	C	%	71 - 146	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
4-Bromofluorobenzene (S)	101	C	%	46 - 138	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
Dibromofluoromethane (S)	105	C	%	42 - 143	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
Toluene-d8 (S)	105	C	%	54 - 141	SW846 8260B	9/15/21 20:22	VLM	9/16/21 01:10	VLM	B1
TCLP EPA 1311 SEMI-VOLATILES										
mp-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
o-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
1,4-Dichlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
2,4-Dinitrotoluene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672002** Date Collected: 9/10/2021 12:10 Matrix: Solid

Sample ID: **SMC-AP-TP-2** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Hexachlorobutadiene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Hexachloroethane	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Nitrobenzene	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Pentachlorophenol	ND	C	ug/L	120	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Pyridine	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
2,4,5-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
2,4,6-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	102	C	%	23 - 131	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
2-Fluorobiphenyl (S)	59.6	C	%	24 - 116	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
2-Fluorophenol (S)	57.7	C	%	10 - 85	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Nitrobenzene-d5 (S)	79.9	C	%	32 - 125	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Phenol-d5 (S)	38.3	C	%	7 - 56	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
Terphenyl-d14 (S)	106	C	%	41 - 145	SW846 8270E	9/17/21 07:40	LEH	9/18/21 17:34	GEC	A
PCBs										
Total Polychlorinated Biphenyl	0.32	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1016	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1221	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1232	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1242	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1248	0.22	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1254	0.091	C,1	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1260	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1262	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Aroclor-1268	ND	C	mg/kg	0.037	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	57.5	C	%	49 - 115	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
Tetrachloro-m-xylene (S)	61.6	C	%	27 - 137	SW846 8082A	9/18/21 00:45	MSY	9/20/21 23:46	JXS	A
TCLP EPA 1311 PESTICIDES										
gamma-BHC	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Chlordane	ND	C	ug/L	10.0	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Endrin	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Heptachlor	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Heptachlor Epoxide	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Methoxychlor	ND	C	ug/L	0.40	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672002** Date Collected: 9/10/2021 12:10 Matrix: Solid

Sample ID: **SMC-AP-TP-2** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Toxaphene	ND	C	ug/L	20.0	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	98.9	C	%	30 - 140	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Decachlorobiphenyl. (S)	86.2	C	%	30 - 140	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Tetrachloro-m-xylene (S)	66.2	C	%	30 - 123	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
Tetrachloro-m-xylene. (S)	63.4	C	%	30 - 123	SW846 8081B	9/16/21 14:40	AJW	9/17/21 16:29	JXS	A
PETROLEUM HC's										
Diesel Range Organics C10-C28	129	C	mg/kg	12.1	SW846 8015D	9/15/21 00:50	S7M	9/17/21 22:29	KJH	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	60.3	C	%	36 - 122	SW846 8015D	9/15/21 00:50	S7M	9/17/21 22:29	KJH	A
WET CHEMISTRY										
Free Liquids	Negative	C			SW846 9095B			9/20/21 11:18	MJE	A
Halogen, Total Organic (TOX)	ND	C	mg/kg	5.8	SW846 9023			9/16/21 18:11	PAG	A
Moisture	14.9	C	%	0.1	S2540G-11			9/16/21 11:45	II	
Total Solids	85.1	C	%	0.1	S2540G-11			9/16/21 11:45	II	
TCLP EPA 1311 METALS										
Arsenic, Total	ND	C	mg/L	0.13	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
Barium, Total	ND	C	mg/L	2.5	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
Cadmium, Total	0.022	C	mg/L	0.0099	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
Chromium, Total	ND	C	mg/L	0.025	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
Lead, Total	0.47	C	mg/L	0.030	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
Mercury, Total	ND	C	mg/L	0.0020	SW846 7470A	9/16/21 18:19	JSE	9/18/21 13:42	AHI	A
Selenium, Total	ND	C	mg/L	0.099	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
Silver, Total	ND	C	mg/L	0.020	SW846 6010C	9/16/21 16:16	SXC	9/17/21 10:00	SRT	A1
TCLP EPA 1311 HERBICIDES										
2,4-D	ND	C	ug/L	20.0	SW846 8151A	9/20/21 16:50	AJW	9/21/21 16:36	JXS	A
2,4,5-TP	ND	C	ug/L	4.0	SW846 8151A	9/20/21 16:50	AJW	9/21/21 16:36	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4-Dichlorophenylacetic acid (S)	76.4	C	%	14 - 172	SW846 8151A	9/20/21 16:50	AJW	9/21/21 16:36	JXS	A
SUBCONTRACTED ANALYSIS										

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID: **3200672002** Date Collected: 9/10/2021 12:10 Matrix: Solid

Sample ID: **SMC-AP-TP-2** Date Received: 9/13/2021 17:39

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
Subcontracted Analysis	Subcontract results attached GJM 10/25/21	C			Subcontract			10/25/21 11:03	GJM	A

George J Methlie
Project Coordinator

ANALYTICAL RESULTS

Workorder: 3200672 2021-St Mary's Airport Waste

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3200672002	1	SMC-AP-TP-2	SW846 8082A	Aroclor-1254

The detection of this compound was confirmed on an alternate column. Precision between the two results exceeded in house control limits (<40%RPD).

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3200672 2021-St Mary's Airport Waste

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3200672001	SMC-AP-TP-5	S2540G-11		
3200672001	SMC-AP-TP-5	SW846 6010C	SW846 3015	SW846 3511
3200672001	SMC-AP-TP-5	SW846 7470A	SW846 7470A	SW846 3511
3200672001	SMC-AP-TP-5	SW846 8015D	SW846 3546A	
3200672001	SMC-AP-TP-5	SW846 8015D	SW846 5035	
3200672001	SMC-AP-TP-5	SW846 8081B	SW846 3511	
3200672001	SMC-AP-TP-5	SW846 8082A	SW846 3546A	
3200672001	SMC-AP-TP-5	SW846 8151A	SW846 8151A	
3200672001	SMC-AP-TP-5	SW846 8260B	SW846 5035	
3200672001	SMC-AP-TP-5	SW846 8260C		SW846 3511
3200672001	SMC-AP-TP-5	SW846 8270E	SW846 3510C	
3200672001	SMC-AP-TP-5	SW846 9023		
3200672001	SMC-AP-TP-5	SW846 9095B		
3200672001	SMC-AP-TP-5	Subcontract		
3200672002	SMC-AP-TP-2	S2540G-11		
3200672002	SMC-AP-TP-2	SW846 6010C	SW846 3015	
3200672002	SMC-AP-TP-2	SW846 7470A	SW846 7470A	
3200672002	SMC-AP-TP-2	SW846 8015D	SW846 3546A	
3200672002	SMC-AP-TP-2	SW846 8015D	SW846 5035	
3200672002	SMC-AP-TP-2	SW846 8081B	SW846 3511	SW846 3511
3200672002	SMC-AP-TP-2	SW846 8082A	SW846 3546A	
3200672002	SMC-AP-TP-2	SW846 8151A	SW846 8151A	
3200672002	SMC-AP-TP-2	SW846 8260B	SW846 5035	
3200672002	SMC-AP-TP-2	SW846 8260C		SW846 3511
3200672002	SMC-AP-TP-2	SW846 8270E	SW846 3510C	
3200672002	SMC-AP-TP-2	SW846 9023		
3200672002	SMC-AP-TP-2	SW846 9095B		
3200672002	SMC-AP-TP-2	Subcontract		

CHAIN OF CUSTODY / SAMPLE INFORMATION F

Maryland Environmental Service • 259 Najoles Rd. • Millersville, MD 21108 • (410) 729-8200 • FAX (

3200672

Laboratory: ALS

Sampler: Fred Kolberg - MES

Client Name: Maryland Environmental Service, Attn: Cheryl Griffin

Facility Name: St. Mary's Airport Test Pit Waste

Client Address: 259 Najoles Rd, Millersville, MD 21108 410-729-8356

Project# / Purpose: 3981-0000 (John Agnoli)

Invoice To: Same

Turnaround Time: Standard

Sample #	Sample ID	Grab or Composite	Container Description/ Preservation Status	Matrix	# of Containers	Date	Time	Analyses Required/Comments
1	SMC-AP-TP-5	G	32 oz Glass Soil Jar 4 oz Glass Soil Jar	S	2	9/10/2021	1010	TPH DRO/GRO (8015), TOXS (9023), Total PCBS (8082), Paint Filter (9095), Dioxin (8290), BTEX (8260), Full TCLP (Metals 6010, Volatiles 8260, Semivolatiles 8270, Pesticides 8081, Herbicides 8151)
2	SMC-AP-TP-2	G	32 oz Glass Soil Jar 4 oz Glass Soil Jar	S	2	9/10/2021	1210	TPH DRO/GRO (8015), TOXS (9023), Total PCBS (8082), Paint Filter (9095), Dioxin (8290), BTEX (8260), Full TCLP (Metals 6010, Volatiles 8260, Semivolatiles 8270, Pesticides 8081, Herbicides 8151)

Transferred by:	Received by:	Date	Time
9/13/21 1300	AS Bill Duke	9-13-21	1445
AS Bill Duke 9-13-21 1739	Received by:	Date	Time
Transferred by:	Received by:	Date	Time

Cooler Receipt Information **(LAB USE ONLY)**

Sufficient ice? - Yes/No Temp.= _____

Sample containers properly pres'd? - Yes/No If No, explain

Initials: Date:

ALS

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1

Condition of Sample Receipt Form

3200672

Client: Maryland Environmental Services – WWW

Initials: [illegible] **Date:** 9/14/21

1. Were airbills / tracking numbers p…	(NONE)	YES	NO
Tracking number: _____			
2. Are Custody Seals on shipping containers intact?	(NONE)	YES	NO
3. Are Custody Seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present?		(YES)	NO
5. Are the COC and bottle labels complete, legible and in agreement?		(YES)	NO
5a. Does the COC contain sample locations?		(YES)	NO
5b. Does the COC contain date and time of sample collection for all samples?		(YES)	NO
5c. Does the COC contain sample collectors name?		(YES)	NO
5d. Does the COC note the type(s) of preservation for all bottles?		(YES)	NO
5e. Does the COC note the number of bottles submitted for each sample?		(YES)	NO
5f. Does the COC note the type of sample, composite or grab?		(YES)	NO
5g. Does the COC note the matrix of the sample(s)?		(YES)	NO
6. Are all aqueous samples requiring preservation preserved correctly?[1]	(N/A)	YES	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		(YES)	NO
8. Are all samples within holding times for the requested analyses?		(YES)	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		(YES)	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	(N/A)	YES	NO
11. Were the samples received on ice?		(YES)	NO
12. Were sample temperatures measured at 0.0-6.0°C		(YES)	NO
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	(NO)
13a. Are the samples required for SDWA compliance reporting?	(N/A)	YES	NO
13b. Did the client provide a SDWA PWS ID#?	(N/A)	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	(N/A)	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	(N/A)	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	(N/A)	YES	NO

Cooler #: _____

Temperature (°C): 0 °C

Thermometer ID: 573

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

[1]Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

Rev 1/20/2020

October 21, 2021 Service Request No:E2101017

George Methlie
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057

Laboratory Results for: 3200672

Dear George,

Enclosed are the results of the sample(s) submitted to our laboratory September 21, 2021
For your reference, these analyses have been assigned our service request number **E2101017.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS MT	**Service Request No.:**	E2101017
Project:	3200672	**Date Received:**	09/21/21
Sample Matrix:	S		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two samples were received for analysis at ALS Environmental in Houston on 09/21/21.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2100572: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch. The LCS and DLCS recoveries are within QC limits.

Method Blank

The Method Blank EQ2100572-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are only flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

Y flag – Cleanup Standard

The recovery for the cleanup standard, 37Cl-2,3,7,8-TCDD is below control limits in the MBLK. The sample results are not affected since this labeled standard is provided as a means of demonstrating that both the sample extraction and subsequent cleanup steps performed as expected, and is not used in quantitation of target analytes.

Y flags – Labeled Standards

Sample E2101017-001; low labeled standard recoveries due to matrix interference suppressing the %R. Quantification of the native 2,3,7,8-substituted congeners is based on isotopic dilution, which automatically corrects for variation in extraction efficiency and provides accurate values even with poor recovery. Samples that had recoveries of labeled standards outside the acceptance limits are qualified with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1 and detection limits were below the Method Reporting Limits.

E flags

When OCDD exceed the upper method calibration limit (MCL), we use an 'E' flag on the Sample Analytical Report results page when the detector is not saturated. Samples in E2101017 are reported with an 'E' flag to denote that they had concentration greater than the highest calibration point. The process of dilution is counter to the isotopic dilution technique that the laboratory uses to determine recovery and produces variability in the final value. The laboratory only dilutes when detector saturation occurs.

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

2378-TCDF

Samples analyzed on the DB-5MSUI column were analyzed under conditions where sufficient separation between 2,3,7,8-TCDF and its closest eluter was achieved. Confirmation of this result was not required.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2101017-001	3200672-001	9/10/2021	1010
E2101017-002	3200672-002	9/10/2021	1210

Service Request Summary

Folder #:
Client Name:
Project Name:
Project Number:

Report To:

Phone Number:
Cell Number:
Fax Number:
E-mail:

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 09/21/21
Internal Due Date: 10/7/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: N, Y
Report to MDL?: Y
P.O. Number: 3200672
EDD: No EDD Specified

2 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 8A
Pressure Gas:

				HOUSTON	
Lab Samp No.	Client Samp No	Matrix	Collected	PCDD PCDF/8290	Total Solids/ALS SOP
E21O1017-001	3200672-001	Soil	09/10/21 1010	II	II
E21O1017-002	3200672-002	Soil	09/10/21 1210	II	II

Service Request Summary

Folder #:
Client Name:
Project Name:
Project Number:

Report To:

Phone Number:
Cell Number:
Fax Number:
E-mail:

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 09/21/21
Internal Due Date: 10/7/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: N, Y
Report to MDL?: Y
P.O. Number: 3200672
EDD: No EDD Specified

2 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 8A
Pressure Gas:

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.

Data Qualifiers

Lab Standard

O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
American Association for Laboratory Accreditation	2897.01 2020	11/30/2021
Arkansas Department of Environmental Quality	19-028-0	6/30/2022
Arkansas Department of Environmental Quality	21-022-0	3/26/2022
Department of Defense	A2LA 2897.01	11/30/2021
Florida Department of Health	E87611-33	6/30/2022
Hawaii Department of Health	2021-2022	4/30/2022
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2021	6/30/2022
Louisiana Department of Health and Hospitals	LA028-2021	12/31/2021
Maine Department of Health and Human Services	2020016	6/5/2022
Minnesota Department of Health	2021671	12/31/2021
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209421	4/24/2022
Pennsylvania Department of Environmental Protection	68-03441-015	6/30/2022
Tennessee Department of Environment and Concervation	04016-2021	4/30/2022
Texas Commision on Environmental Quality	T104704231-21-27	4/30/2022
Texas Commision on Environmental Quality	T104704231-21-28	5/1/2022
United States Department of Agriculture	P330-19-00299	10/10/2022

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID: E2101017 | DB-5MSUI | SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
10/20/21	LKL	001, 002

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
10/21/21	WJ	001, 002

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 1 of 1

ALS Quote #:

Client Name: ALS

Address: 301 Fulling Mill Road
Middletown PA 17057

Contact: George Methlie

Phone#: (717) 944-5541

Project Name/#: 40-3200672

Bill To: ALS

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [X] -Y george.methlie@ALSGlobal.com

Fax? [ ] -Y No.:

	Container Type	CG									
	Container Size	8oZ									
	Preservative	None									

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Dioxin 8290	Enter Number of Containers Per Sample or Field Results Below.									
1	3200672-001	9/10/21	10:10	G	S	1										
2	3200672-002	9/10/21	12:10	G	S	1										
3																
4																
5																
6																
7																
8																
9																
10																

Receipt Information (completed by Receiving Lab)

W.O. Temp: 1.4 °C Therm ID: 31

Courier/Tracking #:

Purchase Order #: 40-3200672

Project Comments:

Subcontract to ALS Houston TX

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

SAMPLED BY (Please Print):

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1		9/2021	1600	2	J. Macrum	9/21/21	10:25
3				4			
5				6			
7				8			
9				10			

Data Deliverables: [X] Standard [ ] CLP-like [ ] USACE/DOD [ ]

Special Processing: USACE [ ] Navy [ ] [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [X] MD [ ] other

Reportable to PADEP? Yes [ ] No [ ]

PWSID #

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type-

* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Cooler - Rad 1.2.1

Rev 11/18

Cooler Receipt Form

ALS Environmental

Project Chemist: RA

Client/Project: ALS-MI

Thermometer ID: 1031

Date/Time Received: 9/24/21 Initials: JM

Date/Time Logged in: 9/24/21 Initials: RA

1. Method of delivery: ○ US Mail ◐ Fed Ex ○ UPS ○ DHL ○ Courier ○ Client

2. Samples received in: ◐ Cooler ○ Box ○ Envelope ○ Other _____

3. Were custody seals on coolers? ○ Yes ◐ No
   Were they intact? ○ Yes ○ No ◐ N/A
   Were they signed and dated? ○ Yes ○ No ◐ N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ◐ Baggies ○ Bubble Wrap ○ Gel Packs ◐ Wet Ice ○ Sleeves ○ Other _____

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling: _____

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
9807 3599 9171		9/24/21	1025	JM	1.4	☐
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ◐ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ◐ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ◐ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ◐ Yes ○ No
10. Did sample labels and tags agree with custody documents? ◐ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 388431 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped
Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 9/29/21 10:52

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2101017-001	3200672-001	.01	8290/PCDD PCDF			Soil	10.255g	wet sand brown
2	E2101017-002	3200672-002	.01	8290/PCDD PCDF			Soil	10.334g	wet sand brown
3	E2101047-001	3201777-001	.01	8290A/PCDD PCDF			Soil	10.261g	wet sand brown
4	E2101047-002	3201777-002	.01	8290A/PCDD PCDF			Soil	10.054g	wet sand brown
5	EQ2100572-01	MB		8290A/PCDD PCDF			Solid	10.114g	
6	EQ2100572-02	LCS		8290A/PCDD PCDF			Solid	10.046g	
7	EQ2100572-03	DLCS		8290A/PCDD PCDF			Solid	10.131g	
8	K2110022-006	Composite	.01	8290/PCDD PCDF			Paperboard	10.364g	
9	K2110479-003	B-24 (0-10)C	.02	8290A/PCDD PCDF			Soil	10.214g	Sample contains large rocks.
10	K2110479-007	B-24 (10-20)C	.01	8290A/PCDD PCDF			Soil	10.052g	
11	K2110832-003	B-26(0-10)C	.03	8290A/PCDD PCDF			Soil	10.196g	
12	K2110832-007	B-26(10-25)C	.01	8290A/PCDD PCDF			Soil	10.003g	
13	K2110938-003	B-25(10-25)C	.01	8290A/PCDD PCDF			Soil	10.000g	
14	K2110938-006	B-25(0-10)C	.03	8290A/PCDD PCDF			Soil	10.286g	
15	R2109845-002	Spent Carbon	.01	8290A/PCDD PCDF			Soil	10.213g	

Spiking Solutions

Name: 8290/1613B Cleanup Working Standard Inventory ID 219262 Logbook Ref: tw 219262 8ng/ml 9/16/21 Expires On: 02/18/2022

E2101017-001	100.00µL	E2101017-002	100.00µL	E2101047-001	100.00µL	E2101047-002	100.00µL	EQ2100572-01	100.00µL	EQ2100572-01	100.00µL
EQ2100572-02	100.00µL	EQ2100572-02	100.00µL	EQ2100572-03	100.00µL	EQ2100572-03	100.00µL	K2110022-006	100.00µL	K2110479-003	100.00µL
K2110479-007	100.00µL	K2110832-003	100.00µL	K2110832-007	100.00µL	K2110938-003	100.00µL	K2110938-006	100.00µL	R2109845-002	100.00µL
R2109845-002.F	100.00µL										

Name: 1613B Matrix Working Standard Inventory ID 219330 Logbook Ref: tw 09/20/21 219330 Expires On: 03/19/2022

EQ2100572-02	100.00µL	EQ2100572-02	100.00µL	EQ2100572-03	100.00µL	EQ2100572-03	100.00µL

Name: 1613B Labeled Working Standard Inventory ID 219477 Logbook Ref: tw 219477 09/29/21 Expires On: 11/30/2021

E2101017-001	1,000.00µL	E2101017-002	1,000.00µL	E2101047-001	1,000.00µL	E2101047-002	1,000.00µL	EQ2100572-01	1,000.00µL	EQ2100572-01	1,000.00µL
EQ2100572-02	1,000.00µL	EQ2100572-02	1,000.00µL	EQ2100572-03	1,000.00µL	EQ2100572-03	1,000.00µL	K2110022-006	1,000.00µL	K2110479-003	1,000.00µL
K2110479-007	1,000.00µL	K2110832-003	1,000.00µL	K2110832-007	1,000.00µL	K2110938-003	1,000.00µL	K2110938-006	1,000.00µL	R2109845-002	1,000.00µL
R2109845-002.F	1,000.00µL										

Preparation Information Benchsheet

Prep Run#: 388431 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped
Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 9/29/21 10:52

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	9/29/21 10:52	Started:	10/6/21 10:00	Started:	10/6/21 13:00	Started:	10/7/21 12:00
Finished:	9/30/21 09:00	Finished:	10/6/21 11:00	Finished:	10/6/21 16:00	Finished:	10/7/21 15:00
By:	TWOODS	By:	TWOODS	By:	TWOODS	By:	TWOODS
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: TW Date: 10/7/21

Chain of Custody

Relinquished By: Date: Extracts Examined

Received By: Date: Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 10:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-001	**Units:**	ng/Kg
Lab Code:	E2101017-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/19/21 14:02
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.255g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534811	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534806

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.33		0.731	0.731	0.72	1.001	1
1,2,3,7,8-PeCDD	37.9		0.445	3.04	1.59	1.001	1
1,2,3,4,7,8-HxCDD	71.9		0.330	3.04	1.20	1.000	1
1,2,3,6,7,8-HxCDD	120		0.282	3.04	1.25	1.000	1
1,2,3,7,8,9-HxCDD	146		0.290	3.04	1.26	1.007	1
1,2,3,4,6,7,8-HpCDD	1790		0.889	3.04	1.03	1.000	1
OCDD	8920	E	4.59	6.09	0.87	1.000	1
2,3,7,8-TCDF	12.7		0.575	0.609	0.65	1.001	1
1,2,3,7,8-PeCDF	10.5		1.10	3.04	1.39	1.000	1
2,3,4,7,8-PeCDF	21.9		1.27	3.04	1.42	1.001	1
1,2,3,4,7,8-HxCDF	18.1	K	0.424	3.04	1.04	1.000	1
1,2,3,6,7,8-HxCDF	17.7	K	0.449	3.04	0.96	1.000	1
1,2,3,7,8,9-HxCDF	5.73	K	0.771	3.04	1.01	1.000	1
2,3,4,6,7,8-HxCDF	20.4		0.442	3.04	1.27	1.000	1
1,2,3,4,6,7,8-HpCDF	85.9		1.01	3.04	0.94	1.000	1
1,2,3,4,7,8,9-HpCDF	6.17	K	1.81	3.04	1.50	1.000	1
OCDF	38.7		2.45	6.09	0.92	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 10:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-001	**Units:**	ng/Kg
Lab Code:	E2101017-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/19/21 14:02
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.255g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534811	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534806

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	479		0.731	0.731	0.76		1
Total Penta-Dioxins	1260		0.445	3.04	1.56		1
Total Hexa-Dioxins	3730		0.299	3.04	1.25		1
Total Hepta-Dioxins	4270		0.889	3.04	1.02		1
Total Tetra-Furans	89.4		0.575	0.609	0.66		1
Total Penta-Furans	197		0.0763	3.04	1.42		1
Total Hexa-Furans	171		0.493	3.04	1.14		1
Total Hepta-Furans	131		1.33	3.04	0.94		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 10:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-001	**Units:**	Percent
Lab Code:	E2101017-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/19/21 14:02
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.255g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534811	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534806

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	506.515	25	Y	40-135	0.75	1.022
13C-1,2,3,7,8-PeCDD	2000	671.629	34	Y	40-135	1.60	1.194
13C-1,2,3,4,7,8-HxCDD	2000	503.051	25	Y	40-135	1.28	0.991
13C-1,2,3,6,7,8-HxCDD	2000	503.725	25	Y	40-135	1.32	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	376.646	19	Y	40-135	1.07	1.067
13C-OCDD	4000	270.310	7	Y	40-135	0.88	1.139
13C-2,3,7,8-TCDF	2000	411.215	21	Y	40-135	0.80	0.993
13C-1,2,3,7,8-PeCDF	2000	617.695	31	Y	40-135	1.58	1.150
13C-2,3,4,7,8-PeCDF	2000	513.685	26	Y	40-135	1.59	1.184
13C-1,2,3,4,7,8-HxCDF	2000	465.658	23	Y	40-135	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	377.132	19	Y	40-135	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	291.721	15	Y	40-135	0.50	1.009
13C-2,3,4,6,7,8-HxCDF	2000	419.497	21	Y	40-135	0.50	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	232.086	12	Y	40-135	0.40	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	183.477	9	Y	40-135	0.43	1.079
37Cl-2,3,7,8-TCDD	800	533.415	67		40-135	NA	1.023

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 10:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-001	**Units:**	ng/Kg
Lab Code:	E2101017-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	**4.33**	0.731	0.731	1	1	4.33
1,2,3,7,8-PeCDD	**37.9**	0.445	3.04	1	1	37.9
1,2,3,4,7,8-HxCDD	**71.9**	0.330	3.04	1	0.1	7.19
1,2,3,6,7,8-HxCDD	**120**	0.282	3.04	1	0.1	12.0
1,2,3,7,8,9-HxCDD	**146**	0.290	3.04	1	0.1	14.6
1,2,3,4,6,7,8-HpCDD	**1790**	0.889	3.04	1	0.01	17.9
OCDD	**8920**	4.59	6.09	1	0.0003	2.68
2,3,7,8-TCDF	**12.7**	0.575	0.609	1	0.1	1.27
1,2,3,7,8-PeCDF	**10.5**	1.10	3.04	1	0.03	0.315
2,3,4,7,8-PeCDF	**21.9**	1.27	3.04	1	0.3	6.57
1,2,3,4,7,8-HxCDF	**18.1**	0.424	3.04	1	0.1	1.81
1,2,3,6,7,8-HxCDF	**17.7**	0.449	3.04	1	0.1	1.77
1,2,3,7,8,9-HxCDF	**5.73**	0.771	3.04	1	0.1	0.573
2,3,4,6,7,8-HxCDF	**20.4**	0.442	3.04	1	0.1	2.04
1,2,3,4,6,7,8-HpCDF	**85.9**	1.01	3.04	1	0.01	0.859
1,2,3,4,7,8,9-HpCDF	**6.17**	1.81	3.04	1	0.01	0.0617
OCDF	**38.7**	2.45	6.09	1	0.0003	0.0116
		Total TEQ				112

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 10:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-001	**Units:**	Percent
Lab Code:	E2101017-001	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/07/21 10:28
	6.074g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	80.1		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 12:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-002	**Units:**	ng/Kg
Lab Code:	E2101017-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/19/21 14:50
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.334g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534812	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534806

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.49		0.350	0.579	0.68	1.001	1
1,2,3,7,8-PeCDD	3.50		0.103	2.89	1.63	1.000	1
1,2,3,4,7,8-HxCDD	3.75		0.132	2.89	1.30	1.000	1
1,2,3,6,7,8-HxCDD	7.82		0.118	2.89	1.13	1.000	1
1,2,3,7,8,9-HxCDD	5.87		0.119	2.89	1.34	1.006	1
1,2,3,4,6,7,8-HpCDD	220		0.392	2.89	1.04	1.000	1
OCDD	4900	**E**	1.63	5.79	0.88	1.000	1
2,3,7,8-TCDF	14.8		0.340	0.579	0.70	1.001	1
1,2,3,7,8-PeCDF	6.23		0.277	2.89	1.38	1.001	1
2,3,4,7,8-PeCDF	13.5		0.312	2.89	1.33	1.001	1
1,2,3,4,7,8-HxCDF	6.98		0.186	2.89	1.16	1.000	1
1,2,3,6,7,8-HxCDF	7.28		0.207	2.89	1.16	1.000	1
1,2,3,7,8,9-HxCDF	1.77	**JK**	0.235	2.89	0.98	1.001	1
2,3,4,6,7,8-HxCDF	7.43	**K**	0.192	2.89	1.01	1.001	1
1,2,3,4,6,7,8-HpCDF	37.1		0.190	2.89	0.93	1.000	1
1,2,3,4,7,8,9-HpCDF	1.87	**J**	0.158	2.89	0.96	1.000	1
OCDF	34.1		0.342	5.79	0.80	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 12:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-002	**Units:**	ng/Kg
Lab Code:	E2101017-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/19/21 14:50
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.334g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534812	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534806

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	33.2		0.350	0.579	0.81		1
Total Penta-Dioxins	52.7		0.103	2.89	1.63		1
Total Hexa-Dioxins	113		0.123	2.89	1.23		1
Total Hepta-Dioxins	455		0.392	2.89	1.04		1
Total Tetra-Furans	116		0.340	0.579	0.71		1
Total Penta-Furans	144		0.0725	2.89	1.40		1
Total Hexa-Furans	75.5		0.204	2.89	1.12		1
Total Hepta-Furans	66.1		0.172	2.89	0.93		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 12:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-002	**Units:**	Percent
Lab Code:	E2101017-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/19/21 14:50
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.334g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534812	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534806

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1025.438	51		40-135	0.76	1.022
13C-1,2,3,7,8-PeCDD	2000	1312.541	66		40-135	1.60	1.194
13C-1,2,3,4,7,8-HxCDD	2000	1224.814	61		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1142.280	57		40-135	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1051.340	53		40-135	1.07	1.066
13C-OCDD	4000	1659.266	41		40-135	0.89	1.139
13C-2,3,7,8-TCDF	2000	806.650	40		40-135	0.79	0.993
13C-1,2,3,7,8-PeCDF	2000	1248.106	62		40-135	1.57	1.149
13C-2,3,4,7,8-PeCDF	2000	1072.604	54		40-135	1.58	1.183
13C-1,2,3,4,7,8-HxCDF	2000	1049.535	52		40-135	0.49	0.970
13C-1,2,3,6,7,8-HxCDF	2000	806.812	40		40-135	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	981.702	49		40-135	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	980.322	49		40-135	0.52	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	823.055	41		40-135	0.44	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	1305.130	65		40-135	0.43	1.079
37Cl-2,3,7,8-TCDD	800	411.011	51		40-135	NA	1.023

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 12:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-002	**Units:**	ng/Kg
Lab Code:	E2101017-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	**1.49**	0.350	0.579	1	1	1.49
1,2,3,7,8-PeCDD	**3.50**	0.103	2.89	1	1	3.50
1,2,3,4,7,8-HxCDD	**3.75**	0.132	2.89	1	0.1	0.375
1,2,3,6,7,8-HxCDD	**7.82**	0.118	2.89	1	0.1	0.782
1,2,3,7,8,9-HxCDD	**5.87**	0.119	2.89	1	0.1	0.587
1,2,3,4,6,7,8-HpCDD	**220**	0.392	2.89	1	0.01	2.20
OCDD	**4900**	1.63	5.79	1	0.0003	1.47
2,3,7,8-TCDF	**14.8**	0.340	0.579	1	0.1	1.48
1,2,3,7,8-PeCDF	**6.23**	0.277	2.89	1	0.03	0.187
2,3,4,7,8-PeCDF	**13.5**	0.312	2.89	1	0.3	4.05
1,2,3,4,7,8-HxCDF	**6.98**	0.186	2.89	1	0.1	0.698
1,2,3,6,7,8-HxCDF	**7.28**	0.207	2.89	1	0.1	0.728
1,2,3,7,8,9-HxCDF	**1.77**	0.235	2.89	1	0.1	0.177
2,3,4,6,7,8-HxCDF	**7.43**	0.192	2.89	1	0.1	0.743
1,2,3,4,6,7,8-HpCDF	**37.1**	0.190	2.89	1	0.01	0.371
1,2,3,4,7,8,9-HpCDF	**1.87**	0.158	2.89	1	0.01	0.0187
OCDF	**34.1**	0.342	5.79	1	0.0003	0.0102
		Total TEQ				18.9

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	09/10/21 12:10
Sample Matrix:	Soil	**Date Received:**	09/21/21 10:25
Sample Name:	3200672-002	**Units:**	Percent
Lab Code:	E2101017-002	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/07/21 10:28
	6.2884g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	83.6		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2100572-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/15/21 20:20
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.114g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534730	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534725

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.482	0.494			1
1,2,3,7,8-PeCDD	ND	U	0.0963	2.47			1
1,2,3,4,7,8-HxCDD	ND	U	0.0711	2.47			1
1,2,3,6,7,8-HxCDD	ND	U	0.0627	2.47			1
1,2,3,7,8,9-HxCDD	ND	U	0.0637	2.47			1
1,2,3,4,6,7,8-HpCDD	ND	U	0.0703	2.47			1
OCDD	0.137**JK**		0.0472	4.94	1.26	1.000	1
2,3,7,8-TCDF	ND	U	0.392	0.494			1
1,2,3,7,8-PeCDF	ND	U	0.0945	2.47			1
2,3,4,7,8-PeCDF	ND	U	0.104	2.47			1
1,2,3,4,7,8-HxCDF	ND	U	0.0365	2.47			1
1,2,3,6,7,8-HxCDF	ND	U	0.0395	2.47			1
1,2,3,7,8,9-HxCDF	0.127**J**		0.0476	2.47	1.23	1.001	1
2,3,4,6,7,8-HxCDF	ND	U	0.0377	2.47			1
1,2,3,4,6,7,8-HpCDF	0.0769**J**		0.0157	2.47	1.00	1.001	1
1,2,3,4,7,8,9-HpCDF	0.0267**JK**		0.0142	2.47	1.88	1.000	1
OCDF	ND	U	0.155	4.94			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2100572-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/15/21 20:20
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.114g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534730	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534725

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.482	0.494			1
Total Penta-Dioxins	ND	U	0.0963	2.47			1
Total Hexa-Dioxins	ND	U	0.0656	2.47			1
Total Hepta-Dioxins	ND	U	0.0703	2.47			1
Total Tetra-Furans	ND	U	0.392	0.494			1
Total Penta-Furans	ND	U	0.0987	2.47			1
Total Hexa-Furans	0.127**J**		0.0400	2.47	1.23		1
Total Hepta-Furans	0.0769**J**		0.0149	2.47	1.00		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ2100572-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/15/21 20:20
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.114g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534730	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534725

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	820.993	41		40-135	0.80	1.022
13C-1,2,3,7,8-PeCDD	2000	1349.358	67		40-135	1.58	1.193
13C-1,2,3,4,7,8-HxCDD	2000	1621.577	81		40-135	1.28	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1556.849	78		40-135	1.28	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1431.105	72		40-135	1.08	1.066
13C-OCDD	4000	2735.163	68		40-135	0.88	1.139
13C-2,3,7,8-TCDF	2000	594.630	30	Y	40-135	0.80	0.993
13C-1,2,3,7,8-PeCDF	2000	1232.071	62		40-135	1.57	1.149
13C-2,3,4,7,8-PeCDF	2000	1108.766	55		40-135	1.56	1.183
13C-1,2,3,4,7,8-HxCDF	2000	1449.566	72		40-135	0.49	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1165.742	58		40-135	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1306.956	65		40-135	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1365.442	68		40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1295.371	65		40-135	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1793.127	90		40-135	0.43	1.079
37Cl-2,3,7,8-TCDD	800	313.217	39	Y	40-135	NA	1.023

Accuracy & Precision

ALS Environmental - Houston HRMS
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Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Analyzed:**	10/20/21 - 10/16/21
Sample Matrix:	Soil	**Date Extracted:**	09/29/21

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Units:**	ng/Kg
Prep Method:	Method	**Basis:**	Dry
		Analysis Lot:	743346

	Lab Control Sample EQ2100572-02			Duplicate Lab Control Sample EQ2100572-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,3,4,6,7,8-HpCDD	86.9	99.5	87	90.2	98.7	91	70-130	4	25
1,2,3,4,7,8-HxCDD	92.6	99.5	93	96.4	98.7	98	70-130	4	25
1,2,3,6,7,8-HxCDD	75.6	99.5	76	77.6	98.7	79	70-130	3	25
1,2,3,7,8,9-HxCDD	84.9	99.5	85	88.4	98.7	90	70-130	4	25
1,2,3,7,8-PeCDD	88.0	99.5	88	85.7	98.7	87	70-130	3	25
2,3,7,8-TCDD	15.6	19.9	78	16.4	19.7	83	70-130	5	25
OCDD	178	199	90	176	197	89	70-130	<1	25
1,2,3,4,6,7,8-HpCDF	93.3	99.5	94	85.0	98.7	86	70-130	9	25
1,2,3,4,7,8,9-HpCDF	75.7	99.5	76	72.5	98.7	73	70-130	4	25
1,2,3,4,7,8-HxCDF	85.7	99.5	86	88.1	98.7	89	70-130	3	25
1,2,3,6,7,8-HxCDF	95.5	99.5	96	94.1	98.7	95	70-130	1	25
1,2,3,7,8,9-HxCDF	94.1	99.5	95	89.6	98.7	91	70-130	5	25
1,2,3,7,8-PeCDF	73.5	99.5	74	73.4	98.7	74	70-130	<1	25
2,3,4,6,7,8-HxCDF	87.3	99.5	88	87.6	98.7	89	70-130	<1	25
2,3,4,7,8-PeCDF	86.7	99.5	87	90.0	98.7	91	70-130	4	25
2,3,7,8-TCDF	16.0	19.9	81	16.7	19.7	84	70-130	4	25
OCDF	157	199	79	175	197	89	70-130	11	25

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/20/21 04:11
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534828	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534819

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	15.6		0.130	0.498	0.76	1.001	1
1,2,3,7,8-PeCDD	88.0		0.0249	2.49	1.58	1.001	1
1,2,3,4,7,8-HxCDD	92.6		0.0456	2.49	1.32	1.000	1
1,2,3,6,7,8-HxCDD	75.6		0.0390	2.49	1.19	1.000	1
1,2,3,7,8,9-HxCDD	84.9		0.0402	2.49	1.30	1.007	1
1,2,3,4,6,7,8-HpCDD	86.9		0.0264	2.49	1.03	1.000	1
OCDD	178		0.370	4.98	0.86	1.000	1
2,3,7,8-TCDF	16.0		0.122	0.498	0.71	1.001	1
1,2,3,7,8-PeCDF	73.5		0.0559	2.49	1.43	1.001	1
2,3,4,7,8-PeCDF	86.7		0.0608	2.49	1.43	1.001	1
1,2,3,4,7,8-HxCDF	85.7		0.0252	2.49	1.17	1.000	1
1,2,3,6,7,8-HxCDF	95.5		0.0279	2.49	1.17	1.000	1
1,2,3,7,8,9-HxCDF	94.1		0.0309	2.49	1.13	1.000	1
2,3,4,6,7,8-HxCDF	87.3		0.0253	2.49	1.16	1.000	1
1,2,3,4,6,7,8-HpCDF	93.3		0.0555	2.49	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	75.7		0.0502	2.49	0.99	1.000	1
OCDF	157		0.146	4.98	0.86	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/20/21 04:11
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534828	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534819

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	15.6		0.130	0.498	0.76		1
Total Penta-Dioxins	88.0		0.0249	2.49	1.58		1
Total Hexa-Dioxins	253		0.0414	2.49	1.32		1
Total Hepta-Dioxins	86.9		0.0264	2.49	1.03		1
Total Tetra-Furans	16.0		0.122	0.498	0.71		1
Total Penta-Furans	160		0.0581	2.49	1.43		1
Total Hexa-Furans	363		0.0272	2.49	1.17		1
Total Hepta-Furans	159		0.0526	2.49	0.97		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2100572-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/20/21 04:11
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534828	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534819

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1440.808	72		40-135	0.78	1.022
13C-1,2,3,7,8-PeCDD	2000	1760.985	88		40-135	1.58	1.194
13C-1,2,3,4,7,8-HxCDD	2000	1689.864	84		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1714.523	86		40-135	1.29	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1595.962	80		40-135	1.08	1.066
13C-OCDD	4000	3149.351	79		40-135	0.87	1.139
13C-2,3,7,8-TCDF	2000	1166.168	58		40-135	0.78	0.993
13C-1,2,3,7,8-PeCDF	2000	1660.999	83		40-135	1.54	1.150
13C-2,3,4,7,8-PeCDF	2000	1440.260	72		40-135	1.56	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1544.052	77		40-135	0.51	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1205.786	60		40-135	0.52	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1470.601	74		40-135	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1447.939	72		40-135	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1345.240	67		40-135	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1964.463	98		40-135	0.44	1.079
37Cl-2,3,7,8-TCDD	800	564.842	71		40-135	NA	1.023

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/16/21 22:34
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.131g	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P627807	**Blank File Name:**	P534730
ICAL Date:	10/14/21	**Cal Ver. File Name:**	P627796

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	16.4		0.710	0.710	0.78	1.001	1
1,2,3,7,8-PeCDD	85.7		0.419	2.47	1.69	1.001	1
1,2,3,4,7,8-HxCDD	96.4		0.237	2.47	1.37	1.000	1
1,2,3,6,7,8-HxCDD	77.6		0.192	2.47	1.26	1.000	1
1,2,3,7,8,9-HxCDD	88.4		0.196	2.47	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	90.2		0.426	2.47	1.04	1.000	1
OCDD	176		1.17	4.94	0.86	1.000	1
2,3,7,8-TCDF	16.7		0.684	0.684	0.67	1.001	1
1,2,3,7,8-PeCDF	73.4		0.349	2.47	1.64	1.001	1
2,3,4,7,8-PeCDF	90.0		0.395	2.47	1.54	1.001	1
1,2,3,4,7,8-HxCDF	88.1		0.165	2.47	1.22	1.000	1
1,2,3,6,7,8-HxCDF	94.1		0.175	2.47	1.23	1.000	1
1,2,3,7,8,9-HxCDF	89.6		0.199	2.47	1.31	1.000	1
2,3,4,6,7,8-HxCDF	87.6		0.159	2.47	1.22	1.000	1
1,2,3,4,6,7,8-HpCDF	85.0		0.403	2.47	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	72.5		0.396	2.47	0.97	1.000	1
OCDF	175		0.821	4.94	0.94	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/16/21 22:34
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.131g	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P627807	**Blank File Name:**	P534730
ICAL Date:	10/14/21	**Cal Ver. File Name:**	P627796

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	16.4		0.710	0.710	0.78		1
Total Penta-Dioxins	87.4		0.419	2.47	1.69		1
Total Hexa-Dioxins	262		0.207	2.47	1.37		1
Total Hepta-Dioxins	90.2		0.426	2.47	1.04		1
Total Tetra-Furans	16.7		0.684	0.684	0.67		1
Total Penta-Furans	163		0.370	2.47	1.64		1
Total Hexa-Furans	361		0.173	2.47	1.22		1
Total Hepta-Furans	148		0.399	2.47	1.05		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101017
Project:	3200672	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2100572-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290	**Date Analyzed:**	10/16/21 22:34
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.131g	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P627807	**Blank File Name:**	P534730
ICAL Date:	10/14/21	**Cal Ver. File Name:**	P627796

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1003.951	50		40-135	0.81	1.022
13C-1,2,3,7,8-PeCDD	2000	1099.441	55		40-135	1.66	1.194
13C-1,2,3,4,7,8-HxCDD	2000	1071.997	54		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1341.378	67		40-135	1.23	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1032.260	52		40-135	1.00	1.067
13C-OCDD	4000	1866.339	47		40-135	0.93	1.140
13C-2,3,7,8-TCDF	2000	891.085	45		40-135	0.75	0.992
13C-1,2,3,7,8-PeCDF	2000	1284.820	64		40-135	1.62	1.150
13C-2,3,4,7,8-PeCDF	2000	1082.060	54		40-135	1.63	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1209.580	60		40-135	0.53	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1090.106	55		40-135	0.55	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1074.149	54		40-135	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1218.920	61		40-135	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1137.048	57		40-135	0.45	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	1363.860	68		40-135	0.44	1.079
37Cl-2,3,7,8-TCDD	800	398.261	50		40-135	NA	1.023

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

October 25, 2021

Ms. Cheryl Griffin
Maryland Environmental Services
259 Najoles Road
Millersville, MD 21108

Certificate of Analysis

Project Name:	**2021-St Mary's Airport Waste**	Workorder:	**3201777**
Purchase Order:		Workorder ID:	**2021-St Mary's Airport Waste**

Dear Ms. Griffin:

Enclosed are the analytical results for samples received by the laboratory on Friday, September 17, 2021.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact George J Methlie (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Maryland Environmental Services-WWW Data , Maryland Environmental Services-LF Data , Ms. Amy Kline

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

George J Methlie
Project Coordinator

ALS Environmental

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SAMPLE SUMMARY

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3201777001	SMC-AP-P-12	Solid	9/16/2021 08:15	9/17/2021 17:30	Collected by Client
3201777002	SMC-AP-P-7	Solid	9/16/2021 09:40	9/17/2021 17:30	Collected by Client

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SAMPLE SUMMARY

Workorder: 3201777 2021-St Mary's Airport Waste

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

ALS Environmental

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PROJECT SUMMARY

Workorder: 3201777 2021-St Mary's Airport Waste

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777001** Date Collected: 9/16/2021 08:15 Matrix: Solid

Sample ID: **SMC-AP-P-12** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
TCLP EPA 1311 VOLATILE ORGANIC										
Benzene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
2-Butanone	ND	C	ug/L	200	SW846 8260C			9/23/21 07:44	VLM	A
Carbon Tetrachloride	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
Chlorobenzene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
Chloroform	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
1,2-Dichloroethane	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
1,1-Dichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
Tetrachloroethene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
Trichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
Vinyl Chloride	ND	C	ug/L	20.0	SW846 8260C			9/23/21 07:44	VLM	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	93.1	C	%	62 - 133	SW846 8260C			9/23/21 07:44	VLM	A
4-Bromofluorobenzene (S)	93.9	C	%	79 - 114	SW846 8260C			9/23/21 07:44	VLM	A
Dibromofluoromethane (S)	83.1	C	%	78 - 116	SW846 8260C			9/23/21 07:44	VLM	A
Toluene-d8 (S)	94.1	C	%	76 - 127	SW846 8260C			9/23/21 07:44	VLM	A
WET CHEMISTRY										
Free Liquids	Negative	C			SW846 9095B			9/20/21 11:18	MJE	A
Halogen, Total Organic (TOX)	ND	C	mg/kg	6.0	SW846 9023			9/24/21 14:58	PAG	A
Moisture	21.3	C	%	0.1	S2540G-11			9/21/21 09:30	IXK	
Total Solids	78.7	C	%	0.1	S2540G-11			9/21/21 09:30	IXK	
GASOLINE RANGE ORGANICS										
Gasoline Range Organics	ND	C	ug/kg	12400	SW846 8015D	9/20/21 04:15	CHS	9/20/21 11:33	CHS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	107	C	%	72 - 134	SW846 8015D	9/20/21 04:15	CHS	9/20/21 11:33	CHS	A
VOLATILE ORGANICS										
Benzene	ND	C	ug/kg	62.2	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
Ethylbenzene	ND	C	ug/kg	62.2	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
Toluene	ND	C	ug/kg	62.2	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
Total Xylenes	ND	C	ug/kg	187	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	102	C	%	71 - 146	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
4-Bromofluorobenzene (S)	81.4	C	%	46 - 138	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
Dibromofluoromethane (S)	99.2	C	%	42 - 143	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1
Toluene-d8 (S)	90.5	C	%	54 - 141	SW846 8260B	9/18/21 00:19	VLM	9/22/21 03:39	VLM	A1

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777001** Date Collected: 9/16/2021 08:15 Matrix: Solid

Sample ID: **SMC-AP-P-12** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
TCLP EPA 1311 SEMI-VOLATILES										
mp-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
o-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
1,4-Dichlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
2,4-Dinitrotoluene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Hexachlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Hexachlorobutadiene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Hexachloroethane	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Nitrobenzene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Pentachlorophenol	ND	C	ug/L	120	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Pyridine	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
2,4,5-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
2,4,6-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	82.3	C	%	23 - 131	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
2-Fluorobiphenyl (S)	54.4	C	%	24 - 116	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
2-Fluorophenol (S)	56.1	C	%	10 - 85	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Nitrobenzene-d5 (S)	83.8	C	%	32 - 125	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Phenol-d5 (S)	37	C	%	7 - 56	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
Terphenyl-d14 (S)	93.3	C	%	41 - 145	SW846 8270E	9/22/21 11:15	CAC	9/23/21 12:35	GEC	A
PCBs										
Total Polychlorinated Biphenyl	0.11	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1016	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1221	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1232	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1242	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1248	0.083	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1254	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1260	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1262	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Aroclor-1268	ND	C	mg/kg	0.041	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	115	C	%	49 - 115	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
Tetrachloro-m-xylene (S)	120	C	%	27 - 137	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:36	JXS	A
TCLP EPA 1311 PESTICIDES										
gamma-BHC	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777001** Date Collected: 9/16/2021 08:15 Matrix: Solid

Sample ID: **SMC-AP-P-12** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Chlordane	ND	C	ug/L	10.0	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Endrin	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Heptachlor	ND	C,1	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Heptachlor Epoxide	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Methoxychlor	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Toxaphene	ND	C	ug/L	20.0	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	97.1	C	%	30 - 140	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Decachlorobiphenyl. (S)	71.1	C	%	30 - 140	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Tetrachloro-m-xylene (S)	66.7	C	%	30 - 123	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
Tetrachloro-m-xylene. (S)	56.4	C	%	30 - 123	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:29	JXS	A
PETROLEUM HC's										
Diesel Range Organics C10-C28	59.7	C	mg/kg	13.0	SW846 8015D	9/22/21 16:20	J1H	9/23/21 20:41	DXL	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	58.7	C	%	36 - 122	SW846 8015D	9/22/21 16:20	J1H	9/23/21 20:41	DXL	A
TCLP EPA 1311 METALS										
Arsenic, Total	ND	C	mg/L	0.13	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
Barium, Total	ND	C	mg/L	2.5	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
Cadmium, Total	ND	C	mg/L	0.0099	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
Chromium, Total	ND	C	mg/L	0.025	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
Lead, Total	0.040	C	mg/L	0.030	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
Mercury, Total	ND	C	mg/L	0.0020	SW846 7470A	9/21/21 20:15	JSE	9/23/21 16:12	A1S	A
Selenium, Total	ND	C	mg/L	0.099	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
Silver, Total	ND	C	mg/L	0.020	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:34	SRT	A1
TCLP EPA 1311 HERBICIDES										
2,4-D	ND	C	ug/L	20.0	SW846 8151A	9/23/21 07:20	CAC	9/24/21 13:11	JXS	A
2,4,5-TP	ND	C	ug/L	4.0	SW846 8151A	9/23/21 07:20	CAC	9/24/21 13:11	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4-Dichlorophenylacetic acid (S)	104	C	%	14 - 172	SW846 8151A	9/23/21 07:20	CAC	9/24/21 13:11	JXS	A
SUBCONTRACTED ANALYSIS										
Subcontracted Analysis	Subcontract report attached 10/25/21 GJM	C			Subcontract			10/25/21 11:13	GJM	A

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777001** Date Collected: 9/16/2021 08:15 Matrix: Solid

Sample ID: **SMC-AP-P-12** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*

George J Methlie
Project Coordinator

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777002** Date Collected: 9/16/2021 09:40 Matrix: Solid

Sample ID: **SMC-AP-P-7** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
TCLP EPA 1311 VOLATILE ORGANIC										
Benzene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
2-Butanone	ND	C	ug/L	200	SW846 8260C			9/23/21 08:07	VLM	A
Carbon Tetrachloride	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
Chlorobenzene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
Chloroform	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
1,2-Dichloroethane	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
1,1-Dichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
Tetrachloroethene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
Trichloroethene	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
Vinyl Chloride	ND	C	ug/L	20.0	SW846 8260C			9/23/21 08:07	VLM	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	90.8	C	%	62 - 133	SW846 8260C			9/23/21 08:07	VLM	A
4-Bromofluorobenzene (S)	95.6	C	%	79 - 114	SW846 8260C			9/23/21 08:07	VLM	A
Dibromofluoromethane (S)	83.2	C	%	78 - 116	SW846 8260C			9/23/21 08:07	VLM	A
Toluene-d8 (S)	95.1	C	%	76 - 127	SW846 8260C			9/23/21 08:07	VLM	A
WET CHEMISTRY										
Free Liquids	Negative	C			SW846 9095B			9/20/21 11:18	MJE	A
Halogen, Total Organic (TOX)	ND	C	mg/kg	6.9	SW846 9023			9/24/21 15:10	PAG	A
Moisture	27.6	C	%	0.1	S2540G-11			9/21/21 09:30	IXK	
Total Solids	72.4	C	%	0.1	S2540G-11			9/21/21 09:30	IXK	
GASOLINE RANGE ORGANICS										
Gasoline Range Organics	ND	C	ug/kg	13400	SW846 8015D	9/20/21 04:15	CHS	9/20/21 12:01	CHS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	109	C	%	72 - 134	SW846 8015D	9/20/21 04:15	CHS	9/20/21 12:01	CHS	A
VOLATILE ORGANICS										
Benzene	ND	C	ug/kg	67.2	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
Ethylbenzene	ND	C	ug/kg	67.2	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
Toluene	ND	C	ug/kg	67.2	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
Total Xylenes	ND	C	ug/kg	201	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	102	C	%	71 - 146	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
4-Bromofluorobenzene (S)	93.4	C	%	46 - 138	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
Dibromofluoromethane (S)	98	C	%	42 - 143	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1
Toluene-d8 (S)	92.4	C	%	54 - 141	SW846 8260B	9/18/21 00:20	VLM	9/22/21 04:01	VLM	A1

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777002** Date Collected: 9/16/2021 09:40 Matrix: Solid

Sample ID: **SMC-AP-P-7** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
TCLP EPA 1311 SEMI-VOLATILES										
mp-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
o-Cresol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
1,4-Dichlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
2,4-Dinitrotoluene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Hexachlorobenzene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Hexachlorobutadiene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Hexachloroethane	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Nitrobenzene	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Pentachlorophenol	ND	C	ug/L	120	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Pyridine	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
2,4,5-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
2,4,6-Trichlorophenol	ND	C	ug/L	60.0	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	82.8	C	%	23 - 131	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
2-Fluorobiphenyl (S)	52.3	C	%	24 - 116	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
2-Fluorophenol (S)	50.6	C	%	10 - 85	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Nitrobenzene-d5 (S)	78.5	C	%	32 - 125	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Phenol-d5 (S)	33.3	C	%	7 - 56	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
Terphenyl-d14 (S)	96.9	C	%	41 - 145	SW846 8270E	9/22/21 11:15	CAC	9/23/21 13:00	GEC	A
PCBs										
Total Polychlorinated Biphenyl	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1016	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1221	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1232	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1242	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1248	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1254	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1260	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1262	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Aroclor-1268	ND	C	mg/kg	0.044	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	61.6	C	%	49 - 115	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
Tetrachloro-m-xylene (S)	60	C	%	27 - 137	SW846 8082A	9/22/21 01:30	MSY	9/23/21 20:59	JXS	A
TCLP EPA 1311 PESTICIDES										
gamma-BHC	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID: **3201777002** Date Collected: 9/16/2021 09:40 Matrix: Solid

Sample ID: **SMC-AP-P-7** Date Received: 9/17/2021 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Chlordane	ND	C	ug/L	10.0	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Endrin	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Heptachlor	ND	C,1	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Heptachlor Epoxide	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Methoxychlor	ND	C	ug/L	0.40	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Toxaphene	ND	C	ug/L	20.0	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	111	C	%	30 - 140	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Decachlorobiphenyl. (S)	80.1	C	%	30 - 140	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Tetrachloro-m-xylene (S)	64.1	C	%	30 - 123	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
Tetrachloro-m-xylene. (S)	53.2	C	%	30 - 123	SW846 8081B	9/22/21 17:00	AJW	9/24/21 16:39	JXS	A
PETROLEUM HC's										
Diesel Range Organics C10-C28	35.8	C	mg/kg	14.2	SW846 8015D	9/22/21 16:20	J1H	9/23/21 21:13	DXL	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	51.2	C	%	36 - 122	SW846 8015D	9/22/21 16:20	J1H	9/23/21 21:13	DXL	A
TCLP EPA 1311 METALS										
Arsenic, Total	ND	C	mg/L	0.13	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
Barium, Total	ND	C	mg/L	2.5	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
Cadmium, Total	0.033	C	mg/L	0.0099	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
Chromium, Total	ND	C	mg/L	0.025	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
Lead, Total	0.33	C	mg/L	0.030	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
Mercury, Total	ND	C	mg/L	0.0020	SW846 7470A	9/21/21 20:15	JSE	9/23/21 16:13	A1S	A
Selenium, Total	ND	C	mg/L	0.099	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
Silver, Total	ND	C	mg/L	0.020	SW846 6010C	9/22/21 22:02	SXC	9/23/21 10:38	SRT	A1
TCLP EPA 1311 HERBICIDES										
2,4-D	ND	C	ug/L	20.0	SW846 8151A	9/23/21 07:20	CAC	9/24/21 13:37	JXS	A
2,4,5-TP	ND	C	ug/L	4.0	SW846 8151A	9/23/21 07:20	CAC	9/24/21 13:37	JXS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4-Dichlorophenylacetic acid (S)	86.1	C	%	14 - 172	SW846 8151A	9/23/21 07:20	CAC	9/24/21 13:37	JXS	A
SUBCONTRACTED ANALYSIS										
Subcontracted Analysis	Subcontract report attached 10/25/21 GJM	C			Subcontract			10/25/21 11:13	GJM	A

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID:	**3201777002**	Date Collected:	9/16/2021 09:40	Matrix:	Solid
Sample ID:	**SMC-AP-P-7**	Date Received:	9/17/2021 17:30		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*

George J Methlie
Project Coordinator

ANALYTICAL RESULTS

Workorder: 3201777 2021-St Mary's Airport Waste

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3201777001	1	SMC-AP-P-12	SW846 8081B	Heptachlor
Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 22% in the bracketing CCV.				
3201777002	1	SMC-AP-P-7	SW846 8081B	Heptachlor
Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 22% in the bracketing CCV.				

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3201777 2021-St Mary's Airport Waste

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3201777001	SMC-AP-P-12	S2540G-11		
3201777001	SMC-AP-P-12	SW846 6010C	SW846 3015	SW846 3511
3201777001	SMC-AP-P-12	SW846 7470A	SW846 7470A	SW846 3511
3201777001	SMC-AP-P-12	SW846 8015D	SW846 3546A	
3201777001	SMC-AP-P-12	SW846 8015D	SW846 5035	
3201777001	SMC-AP-P-12	SW846 8081B	SW846 3511	
3201777001	SMC-AP-P-12	SW846 8082A	SW846 3546A	
3201777001	SMC-AP-P-12	SW846 8151A	SW846 8151A	SW846 3511
3201777001	SMC-AP-P-12	SW846 8260B	SW846 5035	
3201777001	SMC-AP-P-12	SW846 8260C		SW846 3511
3201777001	SMC-AP-P-12	SW846 8270E	SW846 3510C	SW846 3511
3201777001	SMC-AP-P-12	SW846 9023		
3201777001	SMC-AP-P-12	SW846 9095B		
3201777001	SMC-AP-P-12	Subcontract		
3201777002	SMC-AP-P-7	S2540G-11		
3201777002	SMC-AP-P-7	SW846 6010C	SW846 3015	SW846 3511
3201777002	SMC-AP-P-7	SW846 7470A	SW846 7470A	SW846 3511
3201777002	SMC-AP-P-7	SW846 8015D	SW846 3546A	
3201777002	SMC-AP-P-7	SW846 8015D	SW846 5035	
3201777002	SMC-AP-P-7	SW846 8081B	SW846 3511	SW846 3511
3201777002	SMC-AP-P-7	SW846 8082A	SW846 3546A	
3201777002	SMC-AP-P-7	SW846 8151A	SW846 8151A	SW846 3511
3201777002	SMC-AP-P-7	SW846 8260B	SW846 5035	
3201777002	SMC-AP-P-7	SW846 8260C		SW846 3511
3201777002	SMC-AP-P-7	SW846 8270E	SW846 3510C	SW846 3511
3201777002	SMC-AP-P-7	SW846 9023		
3201777002	SMC-AP-P-7	SW846 9095B		
3201777002	SMC-AP-P-7	Subcontract		

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CHAIN OF CUSTODY / SAMPLE INFORMATION FORM

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3201777

Laboratory: ALS

Sampler: Fred Kolberg - MES

Client Name: Maryland Environmental Service, Attn: Cheryl Griffin

Facility Name: St. Mary's Airport Test Pit Waste

Client Address: 259 Najoles Rd, Millersville, MD 21108 410-729-8356

Project# / Purpose: 3981-0000 (John Agnoli)

Invoice To: Same

Turnaround Time: Standard

Sample #	Sample ID	Grab or Composite	Container Description/ Preservation Status	Matrix	# of Containers	Date	Time	Analyses Required/Comments
1	SMC-AP-P-12	G	8 oz Glass Soil Jar	S	2	9/16/2021	0815	TPH DRO/GRO (8015), TOXS (9023), Total PCBS (8082), Paint Filter (9095), Dioxin (8290), BTEX (8260), Full TCLP (Metals 6010, Volatiles 8260, Semivolatiles 8270, Pesticides 8081, Herbicides 8151)
2	SMC-AP-P-7	G	8 oz Glass Soil Jar	S	2	9/16/2021	0940	TPH DRO/GRO (8015), TOXS (9023), Total PCBS (8082), Paint Filter (9095), Dioxin (8290), BTEX (8260), Full TCLP (Metals 6010, Volatiles 8260, Semivolatiles 8270, Pesticides 8081, Herbicides 8151)

Transferred by:	Received by:	Date	Time
FBK 9/16/2021	Jeremy Dean ALS	9-17-21	1318
Jeremy Dean ALS 9-17-21 1730		9-17-21	1730
Transferred by:	Received by:	Date	Time

Cooler Receipt Information **(LAB USE ONLY)**

Sufficient ice? - Yes/No Temp.= _____

Sample containers properly pres'd? - Yes/No If No, explain

Initials: Date:

ALS

301 Fulling Mill Road
Middletown, PA 170[illegible]
P: (717) 944-5541
F: (717) 944-1430

3201777

dition of Sample Receipt Form

Maryland Environmental Services – W/WW

Client:

Initials: JES Date: 9/17

1. Were airbills / tracking numbers present and recorded?	NONE	YES	NO
Tracking number:			
2. Are Custody Seals on shipping containers intact?	NONE	YES	NO
3. Are Custody Seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present?		YES	NO
5. Are the COC and bottle labels complete, legible and in agreement?		YES	NO
5a. Does the COC contain sample locations?		YES	NO
5b. Does the COC contain date and time of sample collection for all samples?		YES	NO
5c. Does the COC contain sample collectors name?		YES	NO
5d. Does the COC note the type(s) of preservation for all bottles?		YES	NO
5e. Does the COC note the number of bottles submitted for each sample?		YES	NO
5f. Does the COC note the type of sample, composite or grab?		YES	NO
5g. Does the COC note the matrix of the sample(s)?		YES	NO
6. Are all aqueous samples requiring preservation preserved correctly?[1]	N/A	YES	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		YES	NO
8. Are all samples within holding times for the requested analyses?		YES	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		YES	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	N/A	YES	NO
11. Were the samples received on ice?		YES	NO
12. Were sample temperatures measured at 0.0-6.0°C		YES	NO
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	NO
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO

Cooler #: _____

Temperature (°C): 2

Thermometer ID: SR3

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

[1]Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

Rev 1/20/2020

October 21, 2021 Service Request No:E2101047

George Methlie
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057

Laboratory Results for: 3201777

Dear George,

Enclosed are the results of the sample(s) submitted to our laboratory September 28, 2021
For your reference, these analyses have been assigned our service request number **E2101047.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS MT	**Service Request No.:**	E2101047
Project:	3201777	**Date Received:**	09/28/21
Sample Matrix:	S		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two samples were received for analysis at ALS Environmental in Houston on 09/28/21.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2100572: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch. The LCS and DLCS recoveries are within QC limits.

Method Blank

The Method Blank EQ2100572-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are only flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

Y flag – Cleanup Standard

The recovery for the cleanup standard, 37Cl-2,3,7,8-TCDD is below control limits in the MBLK. The sample results are not affected since this labeled standard is provided as a means of demonstrating that both the sample extraction and subsequent cleanup steps performed as expected, and is not used in quantitation of target analytes.

Y flags – Labeled Standards – (all recoveries > 20%)

Quantification of the native 2,3,7,8-substituted congeners is based on isotopic dilution, which automatically corrects for variation in extraction efficiency and provides accurate values even with poor recovery. Samples that had recoveries of labeled standards outside the acceptance limits are qualified with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1 and detection limits were below the Method Reporting Limits.

E flags

When OCDD exceed the upper method calibration limit (MCL), we use an 'E' flag on the Sample Analytical Report results page when the detector is not saturated. Sample in E2101047-002 IS reported with an 'E' flag to denote that the sample had a concentration greater than the highest calibration point. The process of dilution is counter to the isotopic dilution technique that the laboratory uses to determine recovery and produces variability in the final value. The laboratory only dilutes when detector saturation occurs.

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

2378-TCDF

Samples analyzed on the DB-5MSUI column were analyzed under conditions where sufficient separation between 2,3,7,8-TCDF and its closest eluter was achieved. Confirmation of this result was not required.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2101047-001	3201777-001	9/16/2021	0815
E2101047-002	3201777-002	9/16/2021	0940

Service Request Summary

Folder #:
Client Name:
Project Name:
Project Number:

Report To:

Phone Number:
Cell Number:
Fax Number:
E-mail:

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 09/28/21
Internal Due Date: 10/19/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: N, Y
Report to MDL?: Y
P.O. Number: 3201777
EDD: No EDD Specified

2 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 9B
Pressure Gas:

				HOUSTON	
Lab Samp No.	Client Samp No	Matrix	Collected	PCDD PCDF /8290A	Total Solids/ALS SOP
E2101047-001	3201777-001	Soil	09/16/21 0815	II	II
E2101047-002	3201777-002	Soil	09/16/21 0940	II	II

Service Request Summary

Folder #:
Client Name:
Project Name:
Project Number:

Report To:

Phone Number:
Cell Number:
Fax Number:
E-mail:

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 09/28/21
Internal Due Date: 10/19/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: N, Y
Report to MDL?: Y
P.O. Number: 3201777
EDD: No EDD Specified

2 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 9B
Pressure Gas:

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.

Data Qualifiers

Lab Standard

O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
American Association for Laboratory Accreditation	2897.01 2020	11/30/2021
Arkansas Department of Environmental Quality	19-028-0	6/30/2022
Arkansas Department of Environmental Quality	21-022-0	3/26/2022
Department of Defense	A2LA 2897.01	11/30/2021
Florida Department of Health	E87611-33	6/30/2022
Hawaii Department of Health	2021-2022	4/30/2022
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2021	6/30/2022
Louisiana Department of Health and Hospitals	LA028-2021	12/31/2021
Maine Department of Health and Human Services	2020016	6/5/2022
Minnesota Department of Health	2021671	12/31/2021
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209421	4/24/2022
Pennsylvania Department of Environmental Protection	68-03441-015	6/30/2022
Tennessee Department of Environment and Concervation	04016-2021	4/30/2022
Texas Commision on Environmental Quality	T104704231-21-27	4/30/2022
Texas Commision on Environmental Quality	T104704231-21-28	5/1/2022
United States Department of Agriculture	P330-19-00299	10/10/2022

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID: E210104 7 | DB-5MSUI | SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date: 10/21/21 Analyst: YC Samples: 001, 002

Second Level - Data Review – to be filled by person doing peer review

Date: 10/21/21 Analyst: KW Samples: 001, 002

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:	1 of 1
ALS Quote #:	

Client Name: ALS

Address: 301 Fulling Mill Road
Middletown PA 17057

Contact: George Methlie

Phone#: (717) 944-5541

Project Name/#: 40-3201777

Bill To: ALS

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [X] -Y george.methlie@ALSGlobal.com

Fax? [ ] -Y No.:

Container Type: CG
Container Size: 8oZ
Preservative: None

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Dioxin 8290
	Enter Number of Containers Per Sample or Field Results Below.					
1	3201777-001	9/16/21	08:15	G	S	1
2	3201777-002	9/16/21	09:40	G	S	1
3						
4						
5						
6						
7						
8						
9						
10						

Receipt Information (completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 40-3201777

Project Comments:
Subcontract to ALS Houston TX

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

SAMPLED BY (Please Print):

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	9/17/21	1700	2	9/23/2021	10:45
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [X] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [X] MD [ ] other
Reportable to PADEP? Yes [ ] No [ ]
PWSID #
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type-

* G=Grab; C=Composite
**Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 11/18

Cooler Receipt Form

ALS Environmental

Project Chemist [illegible]

Client/Project [illegible]

Thermometer ID [illegible]

Date/Time Received: [illegible] Initials: [illegible] Date/Time Logged in: [illegible] Initials [illegible]

1. Method of delivery: ○ US Mail ◉ Fed Ex ○ UPS ○ DHL ○ Courier ○ Client

2. Samples received in: ◉ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ◉ Yes ○ No
   Were they intact? ◉ Yes ○ No ○ N/A
   Were they signed and dated? ◉ Yes ○ No ○ N/A
   If yes, how many and where? [illegible]

4. Packing Material: ○ Inserts ◉ Baggies ◉ Bubble Wrap ○ Gel Packs ◉ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ◉ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	☐
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ◉ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ◉ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ◉ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ◉ Yes ○ No
10. Did sample labels and tags agree with custody documents? ◉ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 388431 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped
Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 9/29/21 10:52

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2101017-001	3200672-001	.01	8290/PCDD PCDF			Soil	10.255g	wet sand brown
2	E2101017-002	3200672-002	.01	8290/PCDD PCDF			Soil	10.334g	wet sand brown
3	E2101047-001	3201777-001	.01	8290A/PCDD PCDF			Soil	10.261g	wet sand brown
4	E2101047-002	3201777-002	.01	8290A/PCDD PCDF			Soil	10.054g	wet sand brown
5	EQ2100572-01	MB		8290A/PCDD PCDF			Solid	10.114g	
6	EQ2100572-02	LCS		8290A/PCDD PCDF			Solid	10.046g	
7	EQ2100572-03	DLCS		8290A/PCDD PCDF			Solid	10.131g	
8	K2110022-006	Composite	.01	8290/PCDD PCDF			Paperboard	10.364g	
9	K2110479-003	B-24(0-10)C	.02	8290A/PCDD PCDF			Soil	10.214g	Sample contains large rocks.
10	K2110479-007	B-24(10-20)C	.01	8290A/PCDD PCDF			Soil	10.052g	
11	K2110832-003	B-26(0-10)C	.03	8290A/PCDD PCDF			Soil	10.196g	
12	K2110832-007	B-26(10-25)C	.01	8290A/PCDD PCDF			Soil	10.003g	
13	K2110938-003	B-25(10-25)C	.01	8290A/PCDD PCDF			Soil	10.000g	
14	K2110938-006	B-25(0-10)C	.03	8290A/PCDD PCDF			Soil	10.286g	
15	R2109845-002	Spent Carbon	.01	8290A/PCDD PCDF			Soil	10.213g	

Spiking Solutions

Name: 8290/1613B Cleanup Working Standard Inventory ID 219262 Logbook Ref: tw 219262 8ng/ml 9/16/21 Expires On: 02/18/2022

E2101017-001	100.00µL	E2101017-002	100.00µL	E2101047-001	100.00µL	E2101047-002	100.00µL	EQ2100572-01	100.00µL	EQ2100572-01	100.00µL
EQ2100572-02	100.00µL	EQ2100572-02	100.00µL	EQ2100572-03	100.00µL	EQ2100572-03	100.00µL	K2110022-006	100.00µL	K2110479-003	100.00µL
K2110479-007	100.00µL	K2110832-003	100.00µL	K2110832-007	100.00µL	K2110938-003	100.00µL	K2110938-006	100.00µL	R2109845-002	100.00µL
R2109845-002.F	100.00µL										

Name: 1613B Matrix Working Standard Inventory ID 219330 Logbook Ref: tw 09/20/21 219330 Expires On: 03/19/2022

EQ2100572-02	100.00µL	EQ2100572-02	100.00µL	EQ2100572-03	100.00µL	EQ2100572-03	100.00µL

Name: 1613B Labeled Working Standard Inventory ID 219477 Logbook Ref: tw 219477 09/29/21 Expires On: 11/30/2021

E2101017-001	1,000.00µL	E2101017-002	1,000.00µL	E2101047-001	1,000.00µL	E2101047-002	1,000.00µL	EQ2100572-01	1,000.00µL	EQ2100572-01	1,000.00µL
EQ2100572-02	1,000.00µL	EQ2100572-02	1,000.00µL	EQ2100572-03	1,000.00µL	EQ2100572-03	1,000.00µL	K2110022-006	1,000.00µL	K2110479-003	1,000.00µL
K2110479-007	1,000.00µL	K2110832-003	1,000.00µL	K2110832-007	1,000.00µL	K2110938-003	1,000.00µL	K2110938-006	1,000.00µL	R2109845-002	1,000.00µL
R2109845-002.F	1,000.00µL										

Preparation Information Benchsheet

Prep Run#: 388431 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped
Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 9/29/21 10:52

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	9/29/21 10:52	Started:	10/6/21 10:00	Started:	10/6/21 13:00	Started:	10/7/21 12:00
Finished:	9/30/21 09:00	Finished:	10/6/21 11:00	Finished:	10/6/21 16:00	Finished:	10/7/21 15:00
By:	TWOODS	By:	TWOODS	By:	TWOODS	By:	TWOODS
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: TW Date: 10/7/21

Chain of Custody

Relinquished By: Date: Extracts Examined

Received By: Date: Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 08:15
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-001	**Units:**	ng/Kg
Lab Code:	E2101047-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/19/21 02:42
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.261g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534798	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534794

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.508	0.639			1
1,2,3,7,8-PeCDD	1.48**J**		0.159	3.20	1.40	1.001	1
1,2,3,6,7,8-HxCDD	5.64		0.160	3.20	1.30	1.000	1
1,2,3,4,7,8-HxCDD	1.86**J**		0.188	3.20	1.32	1.000	1
1,2,3,7,8,9-HxCDD	5.10		0.166	3.20	1.10	1.007	1
1,2,3,4,6,7,8-HpCDD	169		0.285	3.20	1.05	1.000	1
OCDD	1310		1.63	6.39	0.89	1.000	1
2,3,7,8-TCDF	1.62**K**		0.593	0.639	0.62	1.000	1
1,2,3,7,8-PeCDF	0.897**JK**		0.368	3.20	1.01	1.001	1
2,3,4,7,8-PeCDF	2.09**JK**		0.377	3.20	1.14	1.001	1
1,2,3,6,7,8-HxCDF	1.53**JK**		0.171	3.20	1.01	1.000	1
1,2,3,7,8,9-HxCDF	0.807**BJ**		0.204	3.20	1.22	1.001	1
1,2,3,4,7,8-HxCDF	2.20**J**		0.156	3.20	1.37	1.000	1
2,3,4,6,7,8-HxCDF	1.65**JK**		0.157	3.20	0.94	1.000	1
1,2,3,4,6,7,8-HpCDF	17.8		0.151	3.20	0.94	1.000	1
1,2,3,4,7,8,9-HpCDF	0.504**JK**		0.121	3.20	0.50	1.000	1
OCDF	26.5		0.431	6.39	0.80	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 08:15
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-001	**Units:**	ng/Kg
Lab Code:	E2101047-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/19/21 02:42
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.261g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534798	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534794

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	2.78		0.508	0.639	0.73		1
Total Penta-Dioxins	17.5		0.159	3.20	1.67		1
Total Hexa-Dioxins	60.8		0.171	3.20	1.18		1
Total Hepta-Dioxins	310		0.285	3.20	1.05		1
Total Tetra-Furans	6.76		0.593	0.639	0.76		1
Total Penta-Furans	17.0		0.0801	3.20	1.37		1
Total Hexa-Furans	18.0		0.171	3.20	1.18		1
Total Hepta-Furans	17.8		0.134	3.20	0.94		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 08:15
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-001	**Units:**	Percent
Lab Code:	E2101047-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/19/21 02:42
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.261g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534798	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534794

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	552.716	28	Y	40-135	0.75	1.022
13C-1,2,3,7,8-PeCDD	2000	719.489	36	Y	40-135	1.60	1.194
13C-1,2,3,4,7,8-HxCDD	2000	668.366	33	Y	40-135	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	652.641	33	Y	40-135	1.30	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	532.614	27	Y	40-135	1.05	1.067
13C-OCDD	4000	788.948	20	Y	40-135	0.89	1.139
13C-2,3,7,8-TCDF	2000	454.822	23	Y	40-135	0.77	0.993
13C-1,2,3,7,8-PeCDF	2000	667.021	33	Y	40-135	1.55	1.150
13C-2,3,4,7,8-PeCDF	2000	613.864	31	Y	40-135	1.58	1.184
13C-1,2,3,4,7,8-HxCDF	2000	584.242	29	Y	40-135	0.50	0.971
13C-1,2,3,6,7,8-HxCDF	2000	459.135	23	Y	40-135	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	507.076	25	Y	40-135	0.48	1.009
13C-2,3,4,6,7,8-HxCDF	2000	544.733	27	Y	40-135	0.50	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	413.159	21	Y	40-135	0.43	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	673.372	34	Y	40-135	0.41	1.079
37Cl-2,3,7,8-TCDD	800	362.967	45		40-135	NA	1.023

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 08:15
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-001	**Units:**	ng/Kg
Lab Code:	E2101047-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.508	0.639	1	1	
1,2,3,7,8-PeCDD	**1.48**	0.159	3.20	1	1	1.48
1,2,3,6,7,8-HxCDD	**5.64**	0.160	3.20	1	0.1	0.564
1,2,3,4,7,8-HxCDD	**1.86**	0.188	3.20	1	0.1	0.186
1,2,3,7,8,9-HxCDD	**5.10**	0.166	3.20	1	0.1	0.510
1,2,3,4,6,7,8-HpCDD	**169**	0.285	3.20	1	0.01	1.69
OCDD	**1310**	1.63	6.39	1	0.0003	0.393
2,3,7,8-TCDF	**1.62**	0.593	0.639	1	0.1	0.162
1,2,3,7,8-PeCDF	**0.897**	0.368	3.20	1	0.03	0.0269
2,3,4,7,8-PeCDF	**2.09**	0.377	3.20	1	0.3	0.627
1,2,3,6,7,8-HxCDF	**1.53**	0.171	3.20	1	0.1	0.153
1,2,3,7,8,9-HxCDF	**0.807**	0.204	3.20	1	0.1	0.0807
1,2,3,4,7,8-HxCDF	**2.20**	0.156	3.20	1	0.1	0.220
2,3,4,6,7,8-HxCDF	**1.65**	0.157	3.20	1	0.1	0.165
1,2,3,4,6,7,8-HpCDF	**17.8**	0.151	3.20	1	0.01	0.178
1,2,3,4,7,8,9-HpCDF	**0.504**	0.121	3.20	1	0.01	0.00504
OCDF	**26.5**	0.431	6.39	1	0.0003	0.00795
		Total TEQ				6.45

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 08:15
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-001	**Units:**	Percent
Lab Code:	E2101047-001	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/07/21 10:28
	7.2341g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	76.2		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 09:40
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-002	**Units:**	ng/Kg
Lab Code:	E2101047-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/19/21 03:31
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.054g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534799	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534794

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	0.473	**JK**	0.314	0.738	0.99	1.001	1
1,2,3,7,8-PeCDD	2.24	**J**	0.118	3.69	1.52	1.001	1
1,2,3,6,7,8-HxCDD	15.4		0.186	3.69	1.18	1.000	1
1,2,3,4,7,8-HxCDD	2.75	**J**	0.214	3.69	1.16	1.000	1
1,2,3,7,8,9-HxCDD	5.54		0.190	3.69	1.20	1.007	1
1,2,3,4,6,7,8-HpCDD	572		0.654	3.69	1.03	1.000	1
OCDD	9270	**E**	7.66	7.66	0.89	1.000	1
2,3,7,8-TCDF	3.82	**K**	0.199	0.738	0.62	1.001	1
1,2,3,7,8-PeCDF	1.96	**JK**	0.262	3.69	1.31	1.001	1
2,3,4,7,8-PeCDF	4.11		0.310	3.69	1.55	1.000	1
1,2,3,6,7,8-HxCDF	3.46	**J**	0.235	3.69	1.06	1.000	1
1,2,3,7,8,9-HxCDF	1.48	**J**	0.227	3.69	1.31	1.000	1
1,2,3,4,7,8-HxCDF	5.31		0.216	3.69	1.12	1.000	1
2,3,4,6,7,8-HxCDF	3.69	**J**	0.244	3.69	1.19	1.000	1
1,2,3,4,6,7,8-HpCDF	192		0.617	3.69	0.98	1.000	1
1,2,3,4,7,8,9-HpCDF	6.07		0.536	3.69	0.93	1.000	1
OCDF	488		0.790	7.38	0.82	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 09:40
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-002	**Units:**	ng/Kg
Lab Code:	E2101047-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/19/21 03:31
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.054g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534799	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534794

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	7.92		0.314	0.738	0.85		1
Total Penta-Dioxins	23.9		0.118	3.69	1.65		1
Total Hexa-Dioxins	93.4		0.196	3.69	1.27		1
Total Hepta-Dioxins	1160		0.654	3.69	1.02		1
Total Tetra-Furans	10.8		0.199	0.738	0.65		1
Total Penta-Furans	31.2		0.0924	3.69	1.35		1
Total Hexa-Furans	136		0.231	3.69	1.22		1
Total Hepta-Furans	613		0.571	3.69	0.98		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 09:40
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-002	**Units:**	Percent
Lab Code:	E2101047-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/19/21 03:31
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.054g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534799	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534794

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1043.897	52		40-135	0.78	1.022
13C-1,2,3,7,8-PeCDD	2000	1189.316	59		40-135	1.58	1.194
13C-1,2,3,4,7,8-HxCDD	2000	1071.255	54		40-135	1.24	0.990
13C-1,2,3,6,7,8-HxCDD	2000	991.631	50		40-135	1.31	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	891.390	45		40-135	1.09	1.063
13C-OCDD	4000	1478.892	37	Y	40-135	0.91	1.136
13C-2,3,7,8-TCDF	2000	852.854	43		40-135	0.79	0.993
13C-1,2,3,7,8-PeCDF	2000	1147.158	57		40-135	1.58	1.150
13C-2,3,4,7,8-PeCDF	2000	961.582	48		40-135	1.56	1.184
13C-1,2,3,4,7,8-HxCDF	2000	927.545	46		40-135	0.51	0.969
13C-1,2,3,6,7,8-HxCDF	2000	724.629	36	Y	40-135	0.48	0.972
13C-1,2,3,7,8,9-HxCDF	2000	906.577	45		40-135	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	839.618	42		40-135	0.51	0.986
13C-1,2,3,4,6,7,8-HpCDF	2000	736.315	37	Y	40-135	0.43	1.039
13C-1,2,3,4,7,8,9-HpCDF	2000	1147.269	57		40-135	0.42	1.076
37Cl-2,3,7,8-TCDD	800	466.959	58		40-135	NA	1.023

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 09:40
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-002	**Units:**	ng/Kg
Lab Code:	E2101047-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	**0.473**	0.314	0.738	1	1	0.473
1,2,3,7,8-PeCDD	**2.24**	0.118	3.69	1	1	2.24
1,2,3,6,7,8-HxCDD	**15.4**	0.186	3.69	1	0.1	1.54
1,2,3,4,7,8-HxCDD	**2.75**	0.214	3.69	1	0.1	0.275
1,2,3,7,8,9-HxCDD	**5.54**	0.190	3.69	1	0.1	0.554
1,2,3,4,6,7,8-HpCDD	**572**	0.654	3.69	1	0.01	5.72
OCDD	**9270**	7.66	7.66	1	0.0003	2.78
2,3,7,8-TCDF	**3.82**	0.199	0.738	1	0.1	0.382
1,2,3,7,8-PeCDF	**1.96**	0.262	3.69	1	0.03	0.0588
2,3,4,7,8-PeCDF	**4.11**	0.310	3.69	1	0.3	1.23
1,2,3,6,7,8-HxCDF	**3.46**	0.235	3.69	1	0.1	0.346
1,2,3,7,8,9-HxCDF	**1.48**	0.227	3.69	1	0.1	0.148
1,2,3,4,7,8-HxCDF	**5.31**	0.216	3.69	1	0.1	0.531
2,3,4,6,7,8-HxCDF	**3.69**	0.244	3.69	1	0.1	0.369
1,2,3,4,6,7,8-HpCDF	**192**	0.617	3.69	1	0.01	1.92
1,2,3,4,7,8,9-HpCDF	**6.07**	0.536	3.69	1	0.01	0.0607
OCDF	**488**	0.790	7.38	1	0.0003	0.146
		Total TEQ				18.8

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	09/16/21 09:40
Sample Matrix:	Soil	**Date Received:**	09/28/21 10:40
Sample Name:	3201777-002	**Units:**	Percent
Lab Code:	E2101047-002	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/07/21 10:28
	5.2867g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	67.4		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2100572-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/15/21 20:20
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.114g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534730	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534725

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.482	0.494			1
1,2,3,7,8-PeCDD	ND	U	0.0963	2.47			1
1,2,3,6,7,8-HxCDD	ND	U	0.0627	2.47			1
1,2,3,4,7,8-HxCDD	ND	U	0.0711	2.47			1
1,2,3,7,8,9-HxCDD	ND	U	0.0637	2.47			1
1,2,3,4,6,7,8-HpCDD	ND	U	0.0703	2.47			1
OCDD	0.137**JK**		0.0472	4.94	1.26	1.000	1
2,3,7,8-TCDF	ND	U	0.392	0.494			1
1,2,3,7,8-PeCDF	ND	U	0.0945	2.47			1
2,3,4,7,8-PeCDF	ND	U	0.104	2.47			1
1,2,3,6,7,8-HxCDF	ND	U	0.0395	2.47			1
1,2,3,7,8,9-HxCDF	0.127**J**		0.0476	2.47	1.23	1.001	1
1,2,3,4,7,8-HxCDF	ND	U	0.0365	2.47			1
2,3,4,6,7,8-HxCDF	ND	U	0.0377	2.47			1
1,2,3,4,6,7,8-HpCDF	0.0769**J**		0.0157	2.47	1.00	1.001	1
1,2,3,4,7,8,9-HpCDF	0.0267**JK**		0.0142	2.47	1.88	1.000	1
OCDF	ND	U	0.155	4.94			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2100572-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/15/21 20:20
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.114g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534730	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534725

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.482	0.494			1
Total Penta-Dioxins	ND	U	0.0963	2.47			1
Total Hexa-Dioxins	ND	U	0.0656	2.47			1
Total Hepta-Dioxins	ND	U	0.0703	2.47			1
Total Tetra-Furans	ND	U	0.392	0.494			1
Total Penta-Furans	ND	U	0.0987	2.47			1
Total Hexa-Furans	0.127**J**		0.0400	2.47	1.23		1
Total Hepta-Furans	0.0769**J**		0.0149	2.47	1.00		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ2100572-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/15/21 20:20
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.114g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534730	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534725

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	820.993	41		40-135	0.80	1.022
13C-1,2,3,7,8-PeCDD	2000	1349.358	67		40-135	1.58	1.193
13C-1,2,3,4,7,8-HxCDD	2000	1621.577	81		40-135	1.28	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1556.849	78		40-135	1.28	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1431.105	72		40-135	1.08	1.066
13C-OCDD	4000	2735.163	68		40-135	0.88	1.139
13C-2,3,7,8-TCDF	2000	594.630	30	Y	40-135	0.80	0.993
13C-1,2,3,7,8-PeCDF	2000	1232.071	62		40-135	1.57	1.149
13C-2,3,4,7,8-PeCDF	2000	1108.766	55		40-135	1.56	1.183
13C-1,2,3,4,7,8-HxCDF	2000	1449.566	72		40-135	0.49	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1165.742	58		40-135	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1306.956	65		40-135	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1365.442	68		40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1295.371	65		40-135	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1793.127	90		40-135	0.43	1.079
37Cl-2,3,7,8-TCDD	800	313.217	39	Y	40-135	NA	1.023

Accuracy & Precision

ALS Environmental - Houston HRMS
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Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Analyzed:**	10/20/21 - 10/16/21
Sample Matrix:	Soil	**Date Extracted:**	09/29/21

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Units:**	ng/Kg
Prep Method:	Method	**Basis:**	Dry
		Analysis Lot:	743346

	Lab Control Sample EQ2100572-02			Duplicate Lab Control Sample EQ2100572-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,3,4,6,7,8-HpCDD	86.9	99.5	87	90.2	98.7	91	70-130	4	25
1,2,3,4,7,8-HxCDD	92.6	99.5	93	96.4	98.7	98	70-130	4	25
1,2,3,6,7,8-HxCDD	75.6	99.5	76	77.6	98.7	79	70-130	3	25
1,2,3,7,8,9-HxCDD	84.9	99.5	85	88.4	98.7	90	70-130	4	25
1,2,3,7,8-PeCDD	88.0	99.5	88	85.7	98.7	87	70-130	3	25
2,3,7,8-TCDD	15.6	19.9	78	16.4	19.7	83	70-130	5	25
OCDD	178	199	90	176	197	89	70-130	<1	25
1,2,3,4,6,7,8-HpCDF	93.3	99.5	94	85.0	98.7	86	70-130	9	25
1,2,3,4,7,8,9-HpCDF	75.7	99.5	76	72.5	98.7	73	70-130	4	25
1,2,3,4,7,8-HxCDF	85.7	99.5	86	88.1	98.7	89	70-130	3	25
1,2,3,6,7,8-HxCDF	95.5	99.5	96	94.1	98.7	95	70-130	1	25
1,2,3,7,8,9-HxCDF	94.1	99.5	95	89.6	98.7	91	70-130	5	25
1,2,3,7,8-PeCDF	73.5	99.5	74	73.4	98.7	74	70-130	<1	25
2,3,4,6,7,8-HxCDF	87.3	99.5	88	87.6	98.7	89	70-130	<1	25
2,3,4,7,8-PeCDF	86.7	99.5	87	90.0	98.7	91	70-130	4	25
2,3,7,8-TCDF	16.0	19.9	81	16.7	19.7	84	70-130	4	25
OCDF	157	199	79	175	197	89	70-130	11	25

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Analyzed:**	10/20/21
Sample Matrix:	Soil	**Date Extracted:**	09/29/21

Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Units:**	ng/Kg
Prep Method:	Method	**Basis:**	Dry
		Analysis Lot:	743346

EQ2100572-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,2,3,4,6,7,8-HpCDD	86.9	99.5	87	70-130
1,2,3,4,7,8-HxCDD	92.6	99.5	93	70-130
1,2,3,6,7,8-HxCDD	75.6	99.5	76	70-130
1,2,3,7,8,9-HxCDD	84.9	99.5	85	70-130
1,2,3,7,8-PeCDD	88.0	99.5	88	70-130
2,3,7,8-TCDD	15.6	19.9	78	70-130
OCDD	178	199	90	70-130
1,2,3,4,6,7,8-HpCDF	93.3	99.5	94	70-130
1,2,3,4,7,8,9-HpCDF	75.7	99.5	76	70-130
1,2,3,4,7,8-HxCDF	85.7	99.5	86	70-130
1,2,3,6,7,8-HxCDF	95.5	99.5	96	70-130
1,2,3,7,8,9-HxCDF	94.1	99.5	95	70-130
1,2,3,7,8-PeCDF	73.5	99.5	74	70-130
2,3,4,6,7,8-HxCDF	87.3	99.5	88	70-130
2,3,4,7,8-PeCDF	86.7	99.5	87	70-130
2,3,7,8-TCDF	16.0	19.9	81	70-130
OCDF	157	199	79	70-130

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/20/21 04:11
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534828	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534819

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	15.6		0.130	0.498	0.76	1.001	1
1,2,3,7,8-PeCDD	88.0		0.0249	2.49	1.58	1.001	1
1,2,3,6,7,8-HxCDD	75.6		0.0390	2.49	1.19	1.000	1
1,2,3,4,7,8-HxCDD	92.6		0.0456	2.49	1.32	1.000	1
1,2,3,7,8,9-HxCDD	84.9		0.0402	2.49	1.30	1.007	1
1,2,3,4,6,7,8-HpCDD	86.9		0.0264	2.49	1.03	1.000	1
OCDD	178		0.370	4.98	0.86	1.000	1
2,3,7,8-TCDF	16.0		0.122	0.498	0.71	1.001	1
1,2,3,7,8-PeCDF	73.5		0.0559	2.49	1.43	1.001	1
2,3,4,7,8-PeCDF	86.7		0.0608	2.49	1.43	1.001	1
1,2,3,6,7,8-HxCDF	95.5		0.0279	2.49	1.17	1.000	1
1,2,3,7,8,9-HxCDF	94.1		0.0309	2.49	1.13	1.000	1
1,2,3,4,7,8-HxCDF	85.7		0.0252	2.49	1.17	1.000	1
2,3,4,6,7,8-HxCDF	87.3		0.0253	2.49	1.16	1.000	1
1,2,3,4,6,7,8-HpCDF	93.3		0.0555	2.49	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	75.7		0.0502	2.49	0.99	1.000	1
OCDF	157		0.146	4.98	0.86	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/20/21 04:11
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534828	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534819

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	15.6		0.130	0.498	0.76		1
Total Penta-Dioxins	88.0		0.0249	2.49	1.58		1
Total Hexa-Dioxins	253		0.0414	2.49	1.32		1
Total Hepta-Dioxins	86.9		0.0264	2.49	1.03		1
Total Tetra-Furans	16.0		0.122	0.498	0.71		1
Total Penta-Furans	160		0.0581	2.49	1.43		1
Total Hexa-Furans	363		0.0272	2.49	1.17		1
Total Hepta-Furans	159		0.0526	2.49	0.97		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2100572-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/20/21 04:11
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P534828	**Blank File Name:**	P534730
ICAL Date:	07/10/21	**Cal Ver. File Name:**	P534819

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1440.808	72		40-135	0.78	1.022
13C-1,2,3,7,8-PeCDD	2000	1760.985	88		40-135	1.58	1.194
13C-1,2,3,4,7,8-HxCDD	2000	1689.864	84		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1714.523	86		40-135	1.29	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1595.962	80		40-135	1.08	1.066
13C-OCDD	4000	3149.351	79		40-135	0.87	1.139
13C-2,3,7,8-TCDF	2000	1166.168	58		40-135	0.78	0.993
13C-1,2,3,7,8-PeCDF	2000	1660.999	83		40-135	1.54	1.150
13C-2,3,4,7,8-PeCDF	2000	1440.260	72		40-135	1.56	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1544.052	77		40-135	0.51	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1205.786	60		40-135	0.52	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1470.601	74		40-135	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1447.939	72		40-135	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1345.240	67		40-135	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1964.463	98		40-135	0.44	1.079
37Cl-2,3,7,8-TCDD	800	564.842	71		40-135	NA	1.023

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/16/21 22:34
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.131g	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P627807	**Blank File Name:**	P534730
ICAL Date:	10/14/21	**Cal Ver. File Name:**	P627796

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	16.4		0.710	0.710	0.78	1.001	1
1,2,3,7,8-PeCDD	85.7		0.419	2.47	1.69	1.001	1
1,2,3,6,7,8-HxCDD	77.6		0.192	2.47	1.26	1.000	1
1,2,3,4,7,8-HxCDD	96.4		0.237	2.47	1.37	1.000	1
1,2,3,7,8,9-HxCDD	88.4		0.196	2.47	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	90.2		0.426	2.47	1.04	1.000	1
OCDD	176		1.17	4.94	0.86	1.000	1
2,3,7,8-TCDF	16.7		0.684	0.684	0.67	1.001	1
1,2,3,7,8-PeCDF	73.4		0.349	2.47	1.64	1.001	1
2,3,4,7,8-PeCDF	90.0		0.395	2.47	1.54	1.001	1
1,2,3,6,7,8-HxCDF	94.1		0.175	2.47	1.23	1.000	1
1,2,3,7,8,9-HxCDF	89.6		0.199	2.47	1.31	1.000	1
1,2,3,4,7,8-HxCDF	88.1		0.165	2.47	1.22	1.000	1
2,3,4,6,7,8-HxCDF	87.6		0.159	2.47	1.22	1.000	1
1,2,3,4,6,7,8-HpCDF	85.0		0.403	2.47	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	72.5		0.396	2.47	0.97	1.000	1
OCDF	175		0.821	4.94	0.94	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2100572-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/16/21 22:34
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.131g	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P627807	**Blank File Name:**	P534730
ICAL Date:	10/14/21	**Cal Ver. File Name:**	P627796

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	16.4		0.710	0.710	0.78		1
Total Penta-Dioxins	87.4		0.419	2.47	1.69		1
Total Hexa-Dioxins	262		0.207	2.47	1.37		1
Total Hepta-Dioxins	90.2		0.426	2.47	1.04		1
Total Tetra-Furans	16.7		0.684	0.684	0.67		1
Total Penta-Furans	163		0.370	2.47	1.64		1
Total Hexa-Furans	361		0.173	2.47	1.22		1
Total Hepta-Furans	148		0.399	2.47	1.05		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2101047
Project:	3201777	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2100572-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	10/16/21 22:34
Prep Method:	Method	**Date Extracted:**	9/29/21
Sample Amount:	10.131g	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P627807	**Blank File Name:**	P534730
ICAL Date:	10/14/21	**Cal Ver. File Name:**	P627796

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1003.951	50		40-135	0.81	1.022
13C-1,2,3,7,8-PeCDD	2000	1099.441	55		40-135	1.66	1.194
13C-1,2,3,4,7,8-HxCDD	2000	1071.997	54		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1341.378	67		40-135	1.23	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1032.260	52		40-135	1.00	1.067
13C-OCDD	4000	1866.339	47		40-135	0.93	1.140
13C-2,3,7,8-TCDF	2000	891.085	45		40-135	0.75	0.992
13C-1,2,3,7,8-PeCDF	2000	1284.820	64		40-135	1.62	1.150
13C-2,3,4,7,8-PeCDF	2000	1082.060	54		40-135	1.63	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1209.580	60		40-135	0.53	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1090.106	55		40-135	0.55	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1074.149	54		40-135	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1218.920	61		40-135	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1137.048	57		40-135	0.45	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	1363.860	68		40-135	0.44	1.079
37Cl-2,3,7,8-TCDD	800	398.261	50		40-135	NA	1.023

Attachment G- Public and Agency Review

APG Media of Chesapeake, LLC

INVOICE
08/29/23

29088 Airpark Drive
Easton, MD 21601

Phone: Fax:

Cust. AcctID:	**415831**	Creation Date:	**08/28/23**
		Ad Date:	**09/01/23**
		Class:	**3270**
Name:	**ALLISON SWINT**	Ad ID:	**3032757**
Company:	**ST. MARY'S PUBLIC WORKS & TRANSPORTATION**	Words:	**267**
		Lines:	**39**
Address:	**PO BOX 409**	Agate Lines:	**138**
	44825 ST. ANDREWS CHURCH RD	Depth:	**5.75**
		Inserts:	**4**
	CALIFORNIA, MD 20619	Blind Box:	

Other Charges:	**$0.00**	Total:	**$253.00**
Discount:	**$0.00**		
Surcharge:	**$0.00**	Paid Amount:	**- $0.00**
Credits:	**$0.00**		
Bill Depth:	**5.75**	Amount Due:	**$253.00**

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts	
Southern Maryland News	09/01/23	09/15/23	2	$253.00

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You ALLISON SWINT!

Notice of Availability

On behalf of the Commissioners of St. Mary's County, owner and operator of the St. Mary's County Regional Airport (2W6), Delta Airport Consultants, Inc. has prepared a Supplemental Environmental Assessment (SEA) for the 2006 Environmental Assessment (EA) for Five Year Capital Improvement Program. The purpose of the SEA is to review the potential environmental impacts of the following action, which was not included in the 2006 EA:

- Remove, transport, and dispose of unearthed debris discovered during construction

The Federal Aviation Administration (FAA) is the lead agency under the National Environmental Policy Act (NEPA).

A copy of the Draft SEA is available for public review during business hours from 8:00 AM to 5:00 PM at the Department of Public Works and Transportation, 44825 St. Andrews Church Road, California, Maryland, 20619 and on the airport website (www.stmaryscountymd.gov/dpw/airport-operations/).

Hard copies of the draft document are available upon request. Please contact Mary A. Pearson (mapearson@delta-airport.com, 804-955-4556) if you need special accommodations to review the document.

Comments received will be reviewed and addressed in the Final SEA, as appropriate. Written comments on the Draft SEA may be submitted to **Mary A. Pearson, AICP, Delta Airport Consultants, Inc., 2700 Polo Parkway, Midlothian, Virginia 23113 or mapearson@deltaairport.com.** Comments on the Draft EA must be received no later than 5:00 pm Eastern Time, October 01, 2023.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time pursuant to the Maryland Public Information Act.

3032757 EN 9/1,9/15/2023

Maryland
DEPARTMENT OF PLANNING

August 25, 2023

Ms. Mary Ashburn Pearson, AICP
Project Manager,
Delta Airport Consultants, Inc.
9711 Farrar Court, Suite 100
Richmond, VA 23236

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: MD20230824-0730
Reply Due Date: 09/29/2023
Project Description: Draft Environmental Assessment (EA) FONSI: St. Mary's County Regional Airport
Project Address: 44200 Airport Road, California, MD 20619
Project Location: County(ies) of St. Mary's
Clearinghouse Contact: Myra Barnes

Dear Ms. Ashburn Pearson:

Thank you for submitting your project for intergovernmental review. Your participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps to ensure that your project will be consistent with the plans, programs, and objectives of State agencies and local governments.

We have forwarded your project to the following agencies and/or jurisdictions for their review and comments: the Maryland Department(s) of Transportation, the Environment, Natural Resources; and the Maryland Department of Planning; including the Maryland Historical Trust. A composite review and recommendation letter will be sent to you by the reply due date. Your project has been assigned a unique State Application Identifier that you should use on all documents and correspondence.

Please be assured that we will expeditiously process your project. The issues resolved through the MIRC process enhance the opportunities for project funding and minimize delays during project implementation. Also, if you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at myra.barnes@maryland.gov. Thank you for your cooperation with the MIRC process.

Sincerely,

Myra Barnes, Lead Clearinghouse Coordinator

MB:MB
cc: Jessica Andritz - STMA
23-0730_NRR.NEW.docx

MD20230824-0730 FINANCIAL ASSISTANCE

Delta Airport Consultants, Inc.

Draft Environmental Assessment (EA) FONSI: St. Mary's County Regional Airport

Ms. Mary Ashburn Pearson, AICP
Project Manager,
Delta Airport Consultants, Inc.
9711 Farrar Court, Suite 100
Richmond, VA 23236

Jessica Andritz - STMA

U.S. Department of Transportation (DOT/FAA)
----MD

October 2, 2023

Ms. Mary Ashburn Pearson, AICP
Project Manager
Delta Airport Consultants, Inc.
9711 Farrar Court, Suite 100
Richmond, VA 23236

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20230824-0730
Applicant: Delta Airport Consultants, Inc.
Project Description: Draft Environmental Assessment (EA) FONSI: St. Mary's County Regional Airport
Project Address: 44200 Airport Road, California, MD 20619
Project Location: County(ies) of St. Mary's
Approving Authority: U.S. Department of Transportation/Federal Aviation Administration (DOT/FAA)
Recommendation: Consistent with Qualifying Comments

Dear Ms. Ashburn Pearson:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.01.04-.06, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation. This recommendation is valid for a period of three years from the date of this letter.

Review comments were requested from the Maryland Department(s) of Natural Resources, Transportation, the Environment; and the Maryland Department of Planning, including the Maryland Historical Trust.

The Maryland Department(s) of Transportation, and Natural Resources; and the Maryland Department of Planning, including the Maryland Historical Trust found this project to be consistent with their plans, programs, and objectives.

Our Department (Planning) noted the following:

(1.) The proposed action of removing unearthed debris and scrap metal will take place on dedicated airport property that was previously disturbed.

(2.) The removal, transport, and disposal of the unearthed debris is considered by the FAA to be a substantial change and is referred to as the "2023 Proposed action" in the document.

(3.) The need for the 2023 Proposed Action is the existence of unearthed debris in the area where construction of a runway extension is ongoing.

(4.) The supplemental EA is consistent with all federal laws.

(5.) The airport is surrounded by industrial uses and open space and transport would occur on public roads.

(6.) There are no land use impacts anticipated as a result of this action.

(7.) The airport is located within a Priority Funding Area.

The Maryland Historical Trust has determined that the project will have "no effect" on historic properties and that the federal and/or State historic preservation requirements have been met.

The Maryland Department of Environment (MDE) found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying commens summarized below.

1. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.

2. During the duration of the project, soil excavation/grading/site work will be performed; there is a potential for encountering soil contamination. If soil contamination is present, a permit for soil remediation is required from MDE's Air and Radiation Management Administration. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements for these permits.

3. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land and Materials Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.

4. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.

5. The Solid Waste Program should be contacted directly at (410) 537-3315 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

6. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.

7. Borrow areas used to provide clean earth back fill material may require a surface mine permit. Disposal of excess cut material at a surface mine may require site approval. Contact the Mining Program at (410) 537-3557 for further details.

8. Additional comments from the Water and Science Administration are located in the zipped file.

Any statement of consideration given to the comments should be submitted to the approval authority, with a copy to the State Clearinghouse. The State Application Identifier Number must be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at myra.barnes@maryland.gov. **Also please complete the attached form and return it to the State Clearinghouse as soon as the status of the project is known.** ***Any substitutions of this form must include the State Application Identifier Number.*** **This will ensure that our files are complete.**

Thank you for your cooperation with the MIRC process.

Sincerely,

Myra Barnes, Lead Clearinghouse Coordinator

MB:MB
Enclosure(s)
cc: Jessica Andritz - STMA
Tyson Byrne - MDOT
Amanda Redmiles - MDE
Tony Redman - DNR
Sarah Diehl - MDPLS
Bihui Xu - MDPI-T
Beth Cole – MHT

Maryland
DEPARTMENT OF PLANNING

PROJECT STATUS FORM

Please complete this form and return it to the State Clearinghouse upon receipt of notification that the project has been approved or not approved by the approving authority.

TO: **Maryland State Clearinghouse**
Maryland Department of Planning
301 West Preston Street
Room 1104
Baltimore, MD 21201-2305

DATE: _____
(Please fill in the date form completed)

FROM: _____
(Name of person completing this form.)

PHONE: _____-____-_____
(Area Code & Phone number)

RE: **State Application Identifier:** **MD20230824-0730**
Project Description: Draft Environmental Assessment (EA) FONSI: St. Mary's County Regional Airport

PROJECT APPROVAL

This project/plan was: ☐ **Approved** ☐ **Approved with Modification** ☐ **Disapproved**

Name of Approving Authority: _____

Date Approved: _____

FUNDING APPROVAL

The funding (if applicable) has been approved for the period of:

_____, 202____ to _____, 202____ as follows:

Federal $:	**Local $:**	**State $:**	**Other $:**
_____	_____	_____	_____

OTHER

☐ *Further comment or explanation is attached*

Ms. Mary Ashburn Pearson, AICP
Project Manager,
Delta Airport Consultants, Inc.
9711 Farrar Court, Suite 100

Richmond, VA 23236

Jessica Andritz - STMA

U.S. Department of Transportation (DOT/FAA)
----MD

MDE Comments for Environmental Clearinghouse Project MD20230824-0730

Response Code: R-1

1. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.

2. During the duration of the project, soil excavation/grading/site work will be performed; there is a potential for encountering soil contamination. If soil contamination is present, a permit for soil remediation is required from MDE's Air and Radiation Management Administration. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements for these permits.

3. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land and Materials Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.

4. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.

5. The Solid Waste Program should be contacted directly at (410) 537-3315 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

6. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please Land Restoration Program at (410) 537-3437.

7. Borrow areas used to provide clean earth back fill material may require a surface mine permit. Disposal of excess cut material at a surface mine may requires site approval. Contact the Mining Program at (410) 537-3557 for further details.

MDE Comments for Environmental Clearinghouse Project MD20230824-0730

Response Code: R-1

Draft Environmental Assessment (EA) FONSI: St. Mary's County Regional Airport

Maryland Department of the Environment – WSA/WPRPP

REVIEW FINDING: **R1 Consistent with Qualifying Comments**

(MD20230824-0730)

Direct any questions regarding the Antidegradation Review to Angel Valdez via email at angel.valdez@maryland.gov, or by phone at 410-537-3606.

Special protections for high-quality waters in the local vicinity, which are identified pursuant to Maryland's anti-degradation policy.

Anti-degradation of Water Quality: Maryland requires special protections for waters of very high quality (Tier II waters). The policies and procedures that govern these special waters are commonly called "anti-degradation policies." This policy states that "proposed amendments to county plans or discharge permits for discharge to Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts." Satisfactory completion of the Tier II Antidegradation Review is required to receive numerous State permits, such as those for wastewater treatment, nontidal wetlands disturbance, waterways construction, and coverage under the general construction permit.

The Tier II review is applicable to all portions of the project within the Tier II watersheds of **St Mary's River 1 and McIntosh Run 2**. The Review consists of (1) a no-discharge alternatives analysis which considers if the activity can avoid any impacts to Tier II waters, i.e., an alternative site or strategic design, (2) a minimization alternatives analysis to limit associated water quality degradation, and potentially (3) a mitigation analysis to account for net loss of vital resources such as forest cover. If there is no assimilative capacity within the Tier II watershed identified above, additional social and economic justification for unavoidable impacts is required. No assimilative capacity means that new water quality data indicates that the Tier II stream segment has degraded below Tier II standards.

To ensure that essential information is provided to MDE when conducting the Tier II Review, MDE has developed forms to assist applicants in completing the no-discharge alternatives analysis, minimization analysis, and mitigation analysis. Adequate completion of these forms and accompanying Tier II report is required to successfully satisfy the Review and is necessary

Response Code: R-1

for State permitting and other approvals. A Tier II report template, which uses the information from the completed forms, is also available to help with document formatting and information organization. There are some activities that may require MDE permitting and approval but may not warrant additional Tier II review. Applicants are encouraged to review the Tier II Determination of No Additional Review Form and its applicability to the project before proceeding with the more detailed review analysis explained below.

Determination of No Additional Tier II Review Form V1.1[1]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(1)) states that "If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II water body (no-discharge alternative). The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives".

2. This form is for the evaluation of land disturbing activities such as those requiring a nontidal wetlands or waterways construction permit, or a general stormwater construction permit (NOI), to demonstrate that:

a. the project is exempt from the no-discharge alternatives analysis; and

b. the project consists of minor, unavoidable impacts to on-site streams, including stream buffers averaging 100'; and

c. the project will not cause net forest loss in the affected Tier II watershed, or loss will be less than 1 acre; and

d. all impervious surfaces associated with the project are treated with environmental site design practices, with existing structures with remaining capacity.

Tier II No-Discharge Analysis Form V1.2:[2]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(1)) states that "If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II water body (no-discharge alternative).

[1] https://mde.maryland.gov/programs/water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_NoAdditionalReview_v1.1.pdf

[2] https://mde.maryland.gov/programs/water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_NoDischargeAnalysis_Form.pdf

Response Code: R-1
The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives".

2. For land disturbing projects that result in permanent land use change, this 'no discharge' analysis specifically evaluates the reasonability of other sites or alternate routes which could be developed to meet the project purpose, but are located *outside* of the Tier II watershed. Reasonability considerations, as applicable, may take into account property availability, site constraints, natural resource concerns, size, accessibility, and cost to make the property suitable for the project.

3. This analysis shall be performed regardless of whether or not the applicant has ownership or lease agreements to a preferred property or route.

Tier II Minimization Alternative Analysis Form V1.1:[3]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(3)) states that "If the Department determines that the alternatives that do not require direct discharge to a Tier II water body are not cost effective, the applicant shall: (a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the water body".

2. This form helps to ensure that water quality impacts due to the proposed project are comprehensively identified and minimized.

3. To demonstrate that appropriate minimization practices have been considered and implemented, applicants must identify any minimization practices used when developing the project, calculate major Tier II resource impacts, consider alternatives for impacts, and adequately justify unavoidable impacts.

Tier II Mitigation Analysis Form V1.0:[4]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(3)) states that "If the Department determines that the alternatives that do not require direct discharge to a Tier II water body are not

[3] https://mde.maryland.gov/programs/water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Minimization_Form.pdf

[4] https://mde.maryland.gov/programs/water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Mitigation_Form_v1.0.pdf

Response Code: R-1

cost effective, the applicant shall: (a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the water body".

2. No net change in Tier II water quality is the overarching goal of the Tier II Review, and mitigation is an essential part the analysis process to reduce cumulative degradation prior to justification of unavoidable impacts.

3. This form helps to ensure that alternatives to mitigate or offset unavoidable impacts to Tier II watersheds and streams are identified and properly implemented.

4. Mitigation and offsets are required before MDE can evaluate any social and economic justifications.

Construction Stormwater Antidegradation Checklist - Version 1.1 :[5]

1. To complete the checklist, applicants are required to coordinate with the County or appropriate approval authority when developing construction plans and stormwater management plans.

2. Applicants are required to provide this form when seeking a NOI/DOI for coverage under the General Permit for Stormwater Associated with Construction.

3. Applicants are required to submit a Tier II Letter of Completion before coverage under the General Permit for Stormwater Associated with Construction is granted.

St Mary's River 1 and McIntosh Run 2, which are located within the vicinity of the Project, have been designated as Tier II streams. The Project is within the Catchment (watershed) of the segment. (See attached map).

Currently, there is assimilative capacity in this watershed; therefore at this time, no detailed social and economic justification is needed.

[5] https://mde.maryland.gov/programs/water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/Antidegradation-Checklist.pdf

MDE Comments for Environmental Clearinghouse Project MD20230824-0730

Response Code: R-1

Planners should be aware of legal obligations related to Tier II waters described in the Code of Maryland Regulations (COMAR) 26.08.02.04 with respect to current and future land use plans. Information on Tier II waters can be obtained online at:
http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04.htm

and policy implementation procedures are located at
http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm

Planners should also note as described in the Code of Maryland Regulations (COMAR) 26.08.02.04-1(C), "Compilation and Maintenance of the List of High Quality Waters", states that "When the water quality of a water body is better than that required by water quality standards to support the existing and designated uses, the Department shall list the water body as a Tier II water body. *All readily available information may be considered to determine a listing. The Department shall compile and maintain a public list of the waters identified as Tier II waters*."

Additional Tier II resources are available on the Maryland's High Quality Waters (Tier II) website:

https://mde.maryland.gov/programs/water/tmdl/waterqualitystandards/pages/antidegradation_policy.aspx.

The public list is available in PDF from the following MDE website:
http://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf.

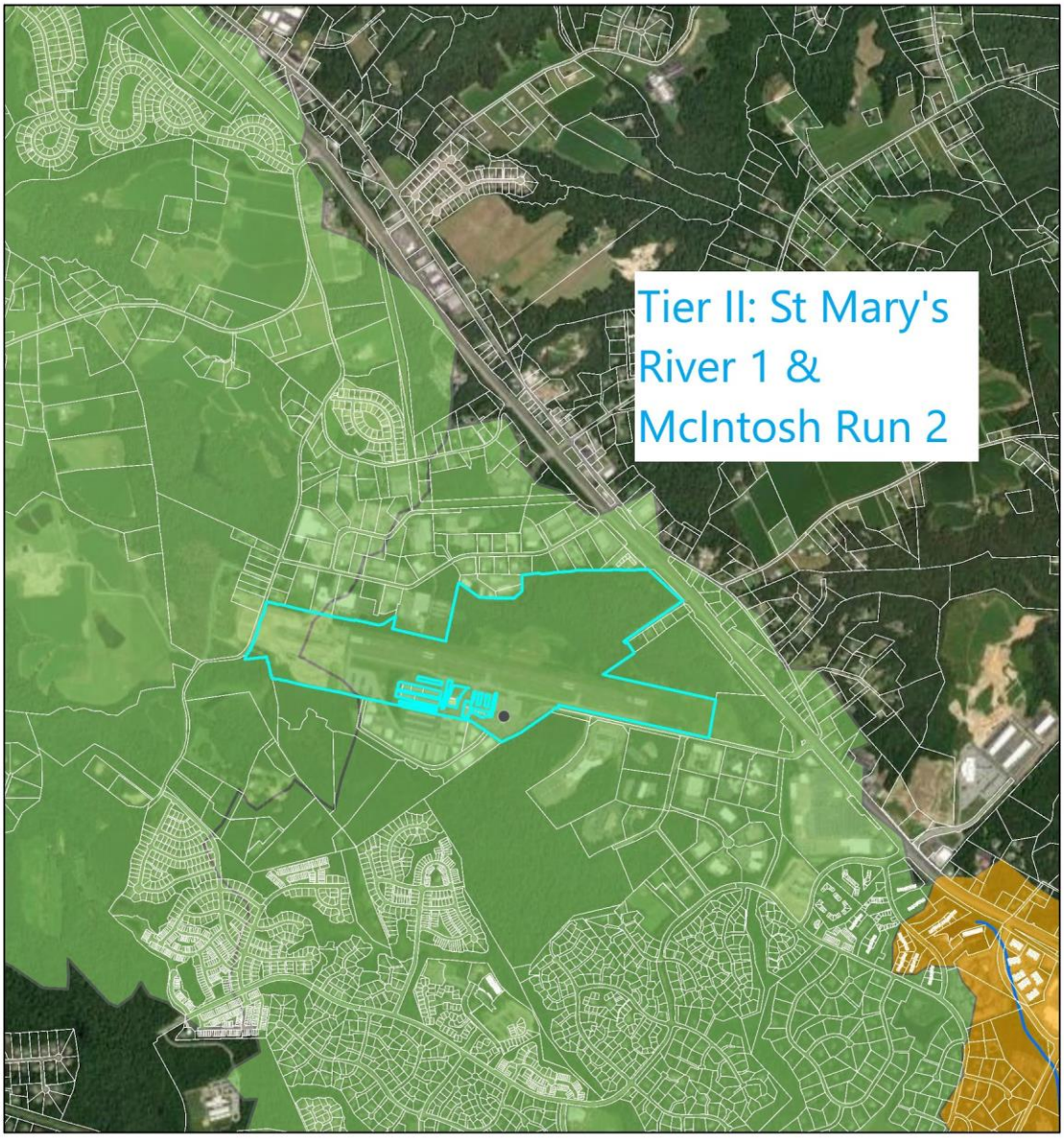
The interactive Tier II webmap is located at the following website:
(https://mdewin64.mde.state.md.us/WSA/TierIIWQ/index.html).

Direct any questions regarding the Antidegradation Review to Angel Valdez via email at angel.valdez@maryland.gov, or by phone at 410-537-3606.

MDE Comments for Environmental Clearinghouse Project MD20230824-0730

Response Code: R-1

MD20230824-0730



9/14/2023, 7:37:47 AM

1:29,491

0 0.2 0.4 0.8 mi

0 0.3 0.6 1.2 km

MD_ParcelBoundaries - Parcel Boundaries

Tier II AC Catchments 2022

- Assimilative Capacity Remaining
- No Assimilative Capacity Remaining
- Tier II Stream Segments 2022
- Tier II Baseline Stations 2022
- Maryland County Boundaries

Earthstar Geographics, Creator: Maryland Department of the Environment, Water and Science Administration (MDE WSA), MDE

Web AppBuilder for ArcGIS

Maxar | MDE | Creator: Maryland Department of the Environment, Water and Science Administration (MDE WSA) | MD iMAP, MDP, SDAT |

Mary Ashburn Pearson

From: Mary Ashburn Pearson
Sent: Tuesday, October 3, 2023 3:34 PM
To: Angel Valdez -MDE-
Cc: myra.barnes@maryland.gov; jessica.andritz@stmaryscountymd.gov
Subject: RE: Review and Recommendation of Clearinghouse Project: MD20230824-0730

Angel,

Nothing needed from you, we are simply closing the loop on that comment.

Thanks to you all!

Mary Ashburn

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
P. 804.955.4556 | WWW.DELTAAIRPORT.COM

From: Angel Valdez -MDE- <angel.valdez@maryland.gov>
Sent: Tuesday, October 3, 2023 3:32 PM
To: Mary Ashburn Pearson <mapearson@deltaairport.com>
Cc: myra.barnes@maryland.gov; jessica.andritz@stmaryscountymd.gov
Subject: Re: Review and Recommendation of Clearinghouse Project: MD20230824-0730

Mary,

Did you need me to provide something, or do you still have your copies of the forms and Tier II Report?

Angel

On Tue, Oct 3, 2023 at 3:07 PM Mary Ashburn Pearson <mapearson@deltaairport.com> wrote:

> Thank you Myra! It appears that MDE is asking for a Tier II form and justification. We actually prepared this previously for this project- see attached. The trash removal does not change the footprint or final condition of the overall project.
>
> Mary Ashburn
>
> **Mary Ashburn Pearson, AICP**
> Project Manager
> DELTA AIRPORT CONSULTANTS, INC.
> P. 804.955.4556 | WWW.DELTAAIRPORT.COM

From: myra.barnes@maryland.gov <myra.barnes@maryland.gov>
Sent: Tuesday, October 3, 2023 2:28 PM
To: Mary Ashburn Pearson <mapearson@deltaairport.com>
Cc: myra.barnes@maryland.gov; jessica.andritz@stmaryscountymd.gov
Subject: Review and Recommendation of Clearinghouse Project: MD20230824-0730

Hello Ms. Mary Ashburn Pearson,

The following link below includes the State Clearinghouse Review and Recommendation letter for your project, Draft Environmental Assessment (EA) FONSI: St. Mary's County Regional Airport .

Click this link to view the letter, **https://apps.planning.maryland.gov/EMIRC_Files/MD20230824-0730.zip** . This is a 34 MB file.

Thank you.

Myra Barnes, Lead Clearinghouse Coordinator
myra.barnes@maryland.gov

Please take our customer service survey.

--

Angel D. Valdez
Antidegradation Implementation Coordinator
Water and Science Administration
Maryland Department of the Environment
1800 Washington Blvd, Suite 540
Baltimore, MD 21230-1718
Phone: 410-537-3606
Fax: 410-537-3998
angel.valdez@maryland.gov
Website | Facebook | Twitter

Click here to complete a three question customer experience survey.

Click here to complete a three question customer experience survey.

January 5, 2021

RE: Saint Mary's Regional Airport

To whom it may concern,

This letter shall serve as documentation that the Applicant has adequately addressed avoidance and minimization alternatives analysis, including an acceptable social and economic justification for unavoidable impacts to Tier II resources, as required by Code of Maryland Regulations (COMAR) 26.08.02.04-1, and therefore has satisfied the Antidegradation Tier II Review.

Summary of Tier II Review

This development project will impact Tier II watersheds of McIntosh River 2, and Saint Marys River 1, the latter of which has no remaining assimilative capacity.

Avoidance analysis: This project is exempt from the no-discharge alternatives analysis as it is located within a State identified Priority Funding Area (PFA). It is also an upgrade of the existing airport, so relocating the project in another location is not feasible.

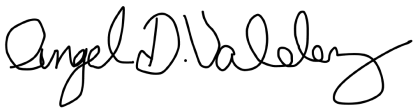
Minimization Analysis: On-site, in-kind mitigation was not considered as reforestation would represent a safety hazard to airport operations. As the Applicant is Saint Mary's County, the in-kind mitigation analysis property search was limited to those owned by the county or state. While the Applicant identified over 200 potential properties, they were unable to identify any feasible properties for in-kind mitigation due to cost, and limitations on property size within either Saint Marys River 1 and McIntosh River 2. The Maryland Department of Natural Resources determined that state-owned land could not be used for project mitigation. The Applicant also considered reduction of forest clearing along with removing the tops of remaining trees. These additional alternatives were not feasible for funding through the either the Federal Aviation Administration or the county. Stormwater management practices include Environmental Site Design while maintaining operational safety.

Social and Economic Justification (SEJ): The Applicant provided an acceptable SEJ on November 20, 2020. Primary justification includes the following:

- The project is located within a State Priority Funding Area. While the Tier II review seeks to mitigate changes in the affected Tier II watersheds, this mitigation should not impact state designated planned growth and development areas.
- The project will improve safety conditions at the airport and surrounding areas.
- The project will provide additional jobs and tax revenue for the county and state. This includes during construction, as well as indirect jobs generated through events and businesses associated with the airport.
- Additional social benefits include providing a transportation hub, gathering place for community events, and as a place to coordinate with emergency response agencies.

The Applicant shall provide this cover letter, along with all other Tier II Review documentation (i.e. Tier II Report and SEJ) used by the Department to support the satisfactory determination for future State approvals, reviews, and permitting, where necessary. There are no further Tier II comments. Additional comments may be provided if there is a major modification to the project, as stipulated by COMAR 26.08.02.04-1(F). Applicants may still have to update the Antidegradation Review Checklist for each set of approved construction plans when applying for coverage or transfers under the General Construction Permit.

Best regards,



Angel Valdez

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