pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Application Type	**Renewal**	Application No.	**PAS803501**
Facility Type	**Storm Water**	APS ID	**14187**
Major / Minor	**Minor**	Authorization ID	**1300845**

Applicant and Facility Information

Applicant Name	**Susquehanna Area Region Airport Authority**	Facility Name	**Harrisburg International Airport**
Applicant Address	1 Terminal Drive Suite 300	Facility Address	1 Terminal Drive Suite 300
	Middletown, PA 17057-5045		Middletown, PA 17057-5045
Applicant Contact	Jessica Silcox	Facility Contact	Jessica Silcox
Applicant Phone	(717) 948-3900	Facility Phone	(717) 948-3900
Client ID	206361	Site ID	452258
SIC Code	4581	Municipality	Lower Swatara Township
SIC Description	Trans. & Utilities - Airports, Flying Fields, And Services	County	Dauphin
Date Application Received	December 24, 2019	EPA Waived?	Yes
Date Application Accepted	January 8, 2020	If No, Reason	
Purpose of Application	NPDES Renewal.		

Summary of Review

Note: Due to an error in the limits table, this Draft Fact Sheet replaces the previous Draft Fact Sheet signed on 1/18/2024 (and emailed 1/18/24).

This is a renewal for an Individual NPDES Permit to Discharge Stormwater Associated with Industrial Activities.

Harrisburg International Airport (HIA) is classified as an aviation facility supporting aviation related activities to include aircraft maintenance, aircraft fueling, and deicing operations.

Nature of the industrial activity that may come into contact with stormwater: Aviation activities to include aircraft deicing, runway deicing, and aircraft fueling.
Total Area of Site: 34,848,000 sf. Pervious: 14,348,949 sf (41%). Impervious: 20,499,051 sf (59%)

HIA has 13 stormwater outfalls. Outfalls 001-008 and 013 discharge to the Susquehanna River. Outfalls 009-012 discharge to Post Run (an UNT to the Susquehanna River).

This permit also covers internal monitoring point (IMP), IMP 105 (manhole 123), which discharges to Outfall 005. IMP 105 receives groundwater, which may be contaminated with trace amounts of solvents, from four 30-inch diameter dewatering wells outside the north basement area of the terminal facility to depress the local water table.

Figure 1: Site Layout Map which includes a list of the site operator for the buildings. (Source: *Environmental Contingency Plan for HIA, November 2022, Appendix A, Figure 2*).

- **Figure 1A: Site Layout Map zoomed** in to show more detail of the western portion

Approve	Deny	Signatures	Date
x		*Brenda J Fruchtl* Brenda J. Fruchtl, P.G. / Licensed Professional Geologist	January 8, 2024
x		*Scott M Arwood* Scott M. Arwood, P.E. / Environmental Engineer Manager	1/22/2024

Summary of Review

- **Figure 1B: Site Layout Map zoomed** in to show more detail of the eastern portion
- **Figure 1C: Site Layout Map zoomed** in on list of site operators/Location and Building Number.

Figure 2: Stormwater Collection and Discharge Plan shows the Outfall locations as well as the storm collection areas (Source: *Environmental Contingency Plan for HIA, November 2022, Appendix A, Figure 3*).

- **Figures 2A, 2B, and 2C breaks Figure 2 into smaller areas to show more detail**.
- *Note: numbers on map correspond to Storm Collection and Discharge areas (See Table 1 referencing the Storm Collection areas draining to each outfall).*

Figure 3: Material and Waste Storage Inventory Map shows the locations of the deicers including the type and amount stored. (Source: *Environmental Contingency Plan for HIA, November 2022, Appendix A, Figure 4*).

- **Figure 3A: Material and Waste Storage Inventory Map zoomed** in view of northwestern portion
- **Figure 3B: Material and Waste Storage Inventory Map zoomed** in view of southwestern portion
- **Figure 3C: Material and Waste Storage Inventory Map zoomed** in view of southeastern portion
- **Figure 3D: Material and Waste Storage Inventory Map zoomed** in view of northeastern portion

Figure 4. Drainage Area Map shows the location of IMP 105 (aka MH 105) circled in red. (*Source: 2020 National Pollutant Discharge Elimination System Annual Storm Water Outfall Sampling and Evaluation Report for SARAA, Dated January 27, 2021, Figure "Drainage Area Map"*).

Table 1: Summary of Outfall Information including % impervious; Type(s) of industrial Activity; Associated Storm Collection Area(s) (Figure 2); Associated Oil and Water Separator (if applicable); and Copermittee(s) within Drainage Area going to the Outfall.

PPC Plan: The last revision of HIA's Environmental Contingency Plan (ECP) is dated November 2022 that contains three separate documents:

1. PPC to comply with the NPDES Industrial Stormwater Permit
2. SPCC to comply with the federal and state storage tank regulations. HIA has an aggregate of AST fuel storage that requires a SPCC plan.
3. Dauphin County's Emergency Off-Site Response Plan

Changes from the 2015 permit:

- Outfall 013 (also labeled 006a) was added as a stormwater outfall.
- Change in the list of parameters to be sampled at Outfalls 001-012.
- Storm Collection and Discharge areas delineated on the Storm Collection and Discharge Plan (taken from *Environmental Contingency Plan for HIA, November 2022, Appendix A, Figure 3)* differ slightly from the Storm Collection and Discharge Plan used for the 2015 renewal.
- Part C Stormwater Requirements were updated to reflect changes in the PAG-03 General Permit including different forms for reporting stormwater sampling information and an updated Annual Report.
- Part C List of copermittees was updated.
- Part C Best Management Practices section was updated and expanded to include both the general and Appendix G BMPs found in the March 23, 2023 PAG-03 General Permit
- Part C Stormwater Requirements were updated and expanded to include Benchmark Values; a section on Corrective Action Plans; and other updates to reflect changes in the PAG-03 General Permit.

Timeline of Application.

Currently, the facility is covered under NPDES Permit No PAS803501, which expired on March 31, 2020.

December 14, 2019 - The renewal application was received late (it was due October 3, 2019).

January 9, 2020 – Application was accepted as complete.

October 15, 2020 – DEP sent an Administrative Extension letter indicating the application was not submitted at least 180 days prior to the existing permit's expiration date and prior permission was not granted for submission at a later

Summary of Review

date, in violation of DEP's regulations at 25 Pa. Code § 92a.75(a). DEP grants that permission by this letter. If an enforcement action will be pursued for the late application, you will be notified in writing.
In the event that DEP cannot reissue the permit prior to the expiration date, in accordance with 25 Pa. Code § 92a.7, the terms and conditions of your permit will be administratively extended. [**Attachment A** – saved as a PDF]

October 16, 2020 - PADEP sent a Technical Deficiency (TD) email including request for a more complete application, additional sampling to follow the application instructions, and additional information on IMP 105. [**Attachment B** – saved as a PDF]

April 20, 2021 – A revised application dated March 30, 2021 was received to address some of the TDs.

October 4, 2023 – PADEP sent an email requesting a response to questions not addressed in the 3/30/2021 revised application, specifically questions about IMP 105 and an updated list of copermittees. [**Attachment C** – saved as a PDF]

October 6, 2023 – PADEP received responses to the October 4, 2023 email. [**Attachment C** – saved as a PDF]

December 4, 2023 – PADEP sent an email with a request for additional information including an electronic version of the Storm Collection and Discharge Plan, more details about the outfalls, and information about the deicers used at the airport. [**Attachment C** – saved as a PDF]

December 15, 2023 – PADEP received an electronic version of the Storm Collection and Discharge Plan as requested on 12/4/2023 (see Figure 2).

December 19, 2023 – PADEP received the additional details about the outfalls as requested on 12/04/2023. [**Attachment C** – saved as a PDF]

December 22, 2023 – PADEP received the information about the deicers used at the airport as requested on 12/04/2023. [**Attachment C** – saved as a PDF]

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 50"	Longitude	-76º 46' 34"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783794	RMI	63.65
Drainage Area	24400 sq mi	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 2,131,591 sq. ft. (approximate 49 acres) including the west end of runway, Taxiway A, and Taxiway B

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a Spill, Prevention, Control and Countermeasure Plan (SPCC) and a Pollution, Prevention and Contingency Plan (PPC).

Includes **Storm Collection and Discharge Area 1** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 43"	Longitude	-76º 46' 16"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783794	RMI	63.25
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 2,458,995 sq. ft (approximate 56 acres) including Taxiway A and Building Nos. 601, 602, 603, 604 and their aprons.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

- Avflight Bldg HIA-Oil/Water Separator (OWS) #11 located on apron of Building 603.
- Leading Edge Bldg HIA-OWS #12 located on apron of Building 602.

Includes **Storm Collection and Discharge Area 2** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 37"	Longitude	-76º 46' 01"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783794	RMI	63.10
Drainage Area	24400 sq mi	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 1,151,630 sq. ft. (approximate 26 acres) including Taxiway C and Building No. 517.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Storm drains are equipped with an oil water separator prior to the outfall that is installed on the apron.

- SARAA – OWS #001 located on apron of Building 517.

Includes **Storm Collection and Discharge Area 3** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 35"	Longitude	-76º 45' 56"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783794	RMI	63.00
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Name		
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 1,608,501 sq. ft. (approximate 37 acres) including Building Nos. 513, 514, and 520.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Storm drains are equipped with an oil water separator prior to the outfall that is installed on the apron.

- SARAA – OWS #002 located on apron of Building 514.
- SARAA – OWS #003 located on apron of Building 513.

Includes **Storm Collection and Discharge Area 4** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	005	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 33"	Longitude	-76º 45' 51"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783794	RMI	62.85
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	USGS StreamStats PA. 12/1/2023
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 4,715,234 sq. ft. (approximate 108 acres) including Taxiway D and old terminal air carrier ramp and parking area.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Storm drains are equipped with an oil water separator or hooded inlets that are installed on the apron.

Includes **Storm Collection and Discharge Area 5** from Storm Collection and Discharge Plan (see Figure 2)

Receives water from Internal Monitoring Point, IMP 105 (Manhole 123)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 29"	Longitude	-76º 45' 40"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783800	RMI	62.70
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 2,604,535 sq. ft. (approximate 60 acres) including Taxiway G and terminal ramp.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Storm drains are equipped with an oil water separator or hooded inlets that are installed on the apron.

Includes **Storm Collection and Discharge Area 7** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	013 (aka 006a). New Outfall	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 19"	Longitude	-76º 45' 16"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783800	RMI	62.30
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: NEW OUTFALL.

Other Comments: Information from the application:

Drains 1,815,842 sq. ft. (approximate 42 acres) including the east end of runway, Taxiway A, TW F, and Taxiway G.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Storm drains are equipped with an oil water separator.

Includes **Storm Collection and Discharge Area 11** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 19"	Longitude	-76º 45' 16"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783800	RMI	62.30
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 1,263,366 sq. ft. (approximate 29 acres) including the east end of runway, Taxiway A, TW F, and Taxiway G.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Includes **Storm Collection and Discharge Area 11** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	008	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 15"	Longitude	-76º 45' 4"
Wastewater Description:	Stormwater		
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	06685
NHD Com ID	133783800	RMI	62.10
Drainage Area	24400 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2690	Q_{7-10} Basis	USGS StreamStats PA. 12/1/2023
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 1,118,072 sq. ft. (approximate 26 acres) including Southeast end of runway.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Includes **Storm Collection and Discharge Area 13** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	009	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 17"	Longitude	-76º 44' 43"
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Susquehanna River (WWF, MF)	Stream Code	10088
NHD Com ID	133783838	RMI	0.18
Drainage Area*	0.35	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	<0.1	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	HABITAT ALTERATIONS, HABITAT ALTERATIONS, SILTATION, SILTATION		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

*USGS PA StreamStats (12/12/2023)

Changes Since Last Permit Issuance: none

Other Comments: Information from the application:

Drains 698,121 sq. ft. (approximate 16 acres) including Taxiway F and southeast end of runway.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Includes **Storm Collection and Discharge Area 12** from Storm Collection and Discharge Plan (see Figure 2)

Discharge, Receiving Waters and Water Supply Information

Outfall No.	010	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 24"	Longitude	-76º 44' 41"
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Susquehanna River (WWF, MF)	Stream Code	10088
NHD Com ID	133783838	RMI	0.32
Drainage Area*	0.29	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	<0.1	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	HABITAT ALTERATIONS, HABITAT ALTERATIONS, SILTATION, SILTATION		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

*USGS PA StreamStats (12/12/2023)

Changes Since Last Permit Issuance:

- Previously Outfall 010 corresponded with Storm Collection and Discharge Area 10 because the Storm Collection and Discharge Areas have been slightly modified since 2015 (see Figure 1).

Other Comments: Information from the application:

Drains 359,344 sq. ft. (approximate 8 acres) including air cargo and PAANG (Pennsylvania Air National Guard) ramp.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Includes **Storm Collection and Discharge Area 9** from Storm Collection and Discharge Plan (see Figure 2)

Corresponds to PAANG NPDES Permit No. PAG033958 (formerly PAR803601) Outfall 001

Discharge, Receiving Waters and Water Supply Information

Outfall No.	011	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 28"	Longitude	-76º 44' 38"
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Susquehanna River (WWF, MF)	Stream Code	10088
NHD Com ID	133783838	RMI	0.4
Drainage Area*	0.28	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	<0.1	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	HABITAT ALTERATIONS, HABITAT ALTERATIONS, SILTATION, SILTATION		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

*USGS PA StreamStats (12/12/2023)

Changes Since Last Permit Issuance:

- Previously Outfall 011 corresponded with Storm Collection and Discharge Area 9 because the Storm Collection and Discharge Areas have been slightly modified since 2015 (see Figure 1), specifically Storm Collection and Discharge Area 8 encompasses what was previously Storm Collection and Discharge Area 9.

Other Comments: Information from the application:

Drains 675,570 sq. ft. (approximate 15 acres) including air cargo and PAANG (Pennsylvania Air National Guard) buildings and parking lot.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Includes **Storm Collection and Discharge Area 8** from Storm Collection and Discharge Plan (see Figure 2)

Corresponds to PAANG NPDES Permit No. PAG033958 (formerly PAR803601) Outfall 002

Discharge, Receiving Waters and Water Supply Information

Outfall No.	012	Design Flow (MGD)	n/a (Stormwater only)
Latitude	40º 11' 31"	Longitude	-76º 44' 38"
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Susquehanna River (WWF, MF)	Stream Code	10088
NHD Com ID	133783838	RMI	0.46
Drainage Area*	0.27	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	<0.1	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	HABITAT ALTERATIONS, HABITAT ALTERATIONS, SILTATION, SILTATION		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Columbia Water Company, Columbia Boro, Lancaster Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	3800
PWS RMI	42.5	Distance from Outfall (mi)	19.2

*USGS PA StreamStats (12/12/2023)

Changes Since Last Permit Issuance:

- Latitude and Longitude were updated per the revised March 30, 2021 Application. Previously 40° 11’ 32” / 76° 44’ 37”.
- Previously Outfall 012 corresponded with Storm Collection and Discharge Areas 6 and 8 because the Storm Collection and Discharge Areas have been slightly modified since 2015 (see Figure 1), specifically Storm Collection and Discharge Area 6 now encompasses what was previously split out into Storm Collection and Discharge Areas 6 and 8.

Other Comments: Information from the application:

Drains 1,897,498 sq. ft. (approximate 43 acres) including Taxiway T, Northeast terminal building ramp, and PAANG (Pennsylvania Air National Guard) buildings.

Potential Pollutants and Sources: Oil and Grease, Suspended Solids, Potassium Acetate, Propylene Glycol, and Pesticides.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Includes **Storm Collection and Discharge Area 6** from Storm Collection and Discharge Plan (see Figure 2)

Corresponds to PAANG NPDES Permit No. PAG033958 (formerly PAR803601) Outfall 004

Discharge, Receiving Waters and Water Supply Information

Outfall No.	105	Design Flow (MGD)	
Latitude	40º 11' 47"	Longitude	-76º 45' 20"
Wastewater Description:			
Receiving Waters	Susquehanna River (WWF, MF)	Stream Code	
NHD Com ID	133783800	RMI	63.5400
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Changes Since Last Permit Issuance: none

Other Comments: Samples are to be in compliance at Manhole 123 (IMP 105). Source of discharge is groundwater from four 30-inch diameter dewatering wells outside the north basement area of the terminal facility to depress the local water table.

Potential Pollutants: Volatile Organic Compounds: Total Suspended Solids, Benzene, Vinyl Chloride, Trichloroethylene, and Cis 1,2 Dichloroethylene. The sources of the pollutants in the groundwater being pumped are from when the military occupied the site as Olmstead Airforce Base.

Description of Treatment or BMPs in Drainage Area to Control Pollutants to Stormwater: Vegetated area and paved areas are monitored by airport personnel under best management practices and Environmental Contingency Plan (ECP). The ECP includes a SPCC and PPC Plan.

Samples are taken at the manhole located in front of terminal building along the loop road.

Compliance History	
Summary of DMRs:	DMRs are up to date through the 3rd Quarter 2023 (quarterly reports) and 1st half of 2023 (for semi-annual reporting. **Table 2: Sample Results Summary for Stormwater Outfalls 001-012 (2018 to 2023).** **Table 3: Additional Stormwater Sampling Information** including the date the sample was collected, date of storm event (being sampled), amount of precipitation of the storm event, the days between the sample event and the storm event, and Outfalls not sampled. • This table illustrates that stormwater samples were often not taken during a storm event as required by Part C. II. E. Stormwater Sampling Requirements of the existing NPDES Permit No PAS803501 (Eff 4/1/2015). See additional comments in the Summary of Annual Reports section below. It is important the permittee attempt to sample their stormwater outfalls closer to a storm event. **Table 4: Sample Results Summary for IMP 105 (2018 to 2023).**
Summary of Annual Reports:	**2016** Annual Storm Water Outfall Sampling and Evaluation Report. Dated 1/26/2017. Received 10/26/2017. (OB Clean Water). **2018** Annual Storm Water Outfall Sampling and Evaluation Report. Dated 1/23/2019. Submitted 01/29/2019 as an attachment to eDMR. • *In reference to the 1 day between the 3/28/2018 storm event and the 3/29/2018 Sampling Event: Includes a statement that "Due to Due to the facility's hours of operation and airport security restrictions, the collection of the water samples within the first 30 minutes to one hour of a 0.1-inch precipitation event was not practical. Therefore, water samples were collected from existing flow at the ten referenced outfalls.* • *In reference to the 3 days between the 12/2/2018 storm event and the 12/5/2018 Sampling Event: Due to the facility's hours of operation and airport security restrictions, the collection of the water samples within the first 30 minutes to one hour of a 0.1-inch precipitation event was not practical. Therefore, water samples were collected from existing flow at the nine referenced outfalls.* **2019** Annual Storm Water Outfall Sampling and Evaluation Report. Dated 1//23/2020. Submitted 02/24/2020 as an attachment to eDMR. • *In reference to the 9 days between the 11/12/2019 storm event and the 11/21/2019 Sampling Event: Due to the facility's hours of operation and airport security restrictions, the collection of the water samples within the first 30 minutes to one hour of a 0.1-inch precipitation event was not practical. Therefore, water samples were collected from existing flow at the seven referenced outfalls.* **2020** Annual Storm Water Outfall Sampling and Evaluation Report. Dated 1/27/2021. Received 3/30/2021. Submitted 02/03/2021 as an attachment to eDMR. **2021** Annual Storm Water Outfall Sampling and Evaluation Report. Dated 1/4/2022. (OB Clean Water). • *No explanation was provided for the 31 days between the November 13, 2021 storm event and the December 14, 2021 sampling event.* **2022** Annual Storm Water Outfall Sampling and Evaluation Report. Dated 1/4/2023. (Hard Copy). • *No explanation was provided for the 10 days between the February 4, 2022 storm event and the February 15, 2022 sampling event.*

Summary of Inspections:	**November 8 and 21, 2019. SW Inspection.** Last Compliance evaluation inspection occurred on 11/8/2019. Violations Noted. A NOV was sent April 24, 2020. **January 24, 2018. Admin Inspection. Violations.** Annual Stormwater Reports Review. 2016 Annual Stormwater Report was received by DEP on October 26, 2017. Report was due by January 28, 2017. The 2017 Annual Stormwater Report (due January 28, 2018) has not been received as of the date of this inspection. **July 22, 2016. SW Inspection. No Violations.** Recommendations: Improve housekeeping at the trash compactor; Make Updates to the PPC Plan; and Provide Information requested. **April 11, 2017. eDMR Use Requirement.** Failure to meet the December 21, 2016 deadline to submit the required forms. Provide forms within 15 days from the date of this letter.
Summary of Violations:	**April 24, 2020 Notice of Violation (NOV).** 2019 DEP Stormwater Inspection. Sent in follow up to the November 8 and 21, 2019 site inspection requesting records that were not immediately available for review during the inspection including: PPC Plans for copermittees; Location of Spill Kits, Spill response training documentation from copermittees; and incident report from deicing fluid spill at FedEx on January 23, 2019. **December 6, 2019 NOV**. NPDES Permit Renewal Application Not Received. Application required 180 days prior to permit expiration date of March 31, 2020. Recommended submission of application by December 30, 2019. **No Open Violations as of 1/7/2024.**
Non-Compliance:	Effluent Non-Compliance: none Unauthorized Discharges Non-Compliance: None **Other Permit Non-Compliance: Late DMRs:** • Quarterly Sampling: 3Q2023; 2Q2023; 3Q2022; 2Q2022; 4Q2021; 3Q2021; 4Q2020; 3Q2020; 1Q2020; 4Q2019; 3Q2019; 2Q2019; 4Q2018. • 2/year sampling: 2nd half 2022; 2nd half 2020; 2nd half 2019; 2nd half 2018 (issues with eDMR).
Annual Fees:	**2023 –** Received 1/9/2023 (due 4/1/2023) **2022** – no record of receipt in Facilities Upload File **2021** – **LATE**. Received 5/20/2021 (due 4/1/2021) • **May 4, 2021. Late Annual Fee.** Annual Fee due April 1, 2021 has not been received. Please pay the Amount Due within 15 days from date of this letter. **2020** – Renewal Application due this year. No Annual Fee. **2019** – Received 1/25/2019 (Due 4/1/2019) **2018** – Received 1/22/2018 (Due 4/1/2018) **2017** – Received 2/16/2017 (Due 4/1/2017) **2017** – Received 1/27/2016 (Due 4/1/2016)
eDMR User Changes:	**12/6/2022 – Updated Certifier. UPS PAMDT.** **5/2/2022 - Updated Certifier. UPS PAMDT.**

Development of Effluent Limitations

Outfall No. IMP 105 (MH 123) **Design Flow (MGD)** 0.37 MGD
Latitude 40° 11' 45.97" **Longitude** 76° 45' 22.77"
Wastewater Description: Groundwater from dewatering wells

During construction of the new terminal, a temporary discharge approval was granted by the Department on February 20, 2003 for a temporary discharge from basement excavation and sumps at the new terminal building. The temporary approval listed Maximum Contaminant Levels (MCLs) as the effluent limitations for Benzene, Vinyl Chloride, Trichloroethylene, and cis-1,2-Dichloroethylene and 75 mg/l for Total Suspended Solids.

On December 28, 2005, following terminal construction, HIA submitted a request to discharge groundwater from four 30-inch diameter dewatering wells outside the north basement area of the terminal facility to depress the local water table. These four wells would replace the five sumps currently installed in the terminal facility basements. Based upon data from pump tests conducted on-site, the pumps will cycle on and off 7-11 times per hour and produce an average discharge rate of approximately 260 gallons per minute. The water from these dewatering wells would flow to Outfall 005. The five sumps will be used as a back-up system should the volume of groundwater exceed the capacity of the dewatering wells. Effluent from the sumps would also be discharged storm sewer manholes and ultimately to the Susquehanna River at Outfall 005. In the event of a power outage, an emergency generator would supply back-up power for all the dewatering pumps.

The discharge of the effluent to the man holes functions as a de facto treatment by aerating the water which facilitates volatilization of the VOCs. As the effluent flows through the storm drain system to the ultimate compliance point at the Susquehanna River, additional volatilization occurs, further reducing the VOC concentrations.

In 2008, effluent limits for groundwater pumped from these four dewatering wells to a nearby storm sewer inlet connected to Outfall 005 were included in the permit. MCLs were used for the Average monthly limits for the parameters of concern, since these were the limits listed in the February 2003 Temporary Discharge Approval. The instantaneous maximum is 2.5 times the Average Monthly. The limits are applicable at Manhole 123, referred to in the permit as IMP 105 (Internal Monitoring Point for Outfall 005). The samples are to be taken on a quarterly basis when not influenced by stormwater.

There have been no changes to the MCLs since 2008 and there have been no exceedances of the existing limits. It is recommended the limits for IMP 105 remain the same as originally added to the 2008 permit. The limits were updated from Average Monthly to Average Quarterly to reflect 1/quarter monitoring.

Discharge Limitations for IMP 105					
	Concentrations (mg/L)			Monitoring Requirements	
Parameter	Ave. Quarterly	Daily Max	Inst Max	Frequency	Type
TSS	75	xxx	187	1/quarter	Grab
Benzene	0.005	xxx	0.0125	1/quarter	Grab
Vinyl Chloride	0.002	xxx	0.005	1/quarter	Grab
Trichloroethylene	0.005	xxx	0.0125	1/quarter	Grab
Cis-1,2-Dichloroethylene	0.07	xxx	0.175	1/quarter	Grab

Development of Effluent Limitations

Outfall Nos. 001-013 **Design Flow (MGD)** n/a (Stormwater Only)
Wastewater Description: Stormwater associated with a large airport.

Information on Deicers

Effluent Limitations Guidelines (ELG). 40 CFR Chapter I Subchapter N. Part 449 – Airport Deicing Point Source Category. Subpart A Airport Deicing Category.

449.1 Applicability. This part applies to discharges of pollutants from deicing operations at Primary Airports.

449.2 General Definitions.

Aircraft deicing fluid (ADF) means a fluid (other than hot water) applied to aircraft to remove or prevent any accumulation of snow or ice on the aircraft. This includes deicing and anti-icing fluids.

449.10 Effluent limitations representing the best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source with at least 1,000 annual non-propeller aircraft departures must comply with the following requirements representing the degree of effluent reduction attainable by the application of BAT. The BAT requirements for point sources with less than 1,000 annual non-propeller aircraft departures are beyond the scope of this regulation and shall be determined by the permit authority on a site-specific basis.

(a) *Airfield pavement deicing*. There shall be no discharge of airfield pavement deicers containing urea. To comply with this limitation, any existing point source must certify annually that it does not use airfield deicing products that contain urea or alternatively, airfield pavement discharges at every discharge point must achieve the numeric limitations for ammonia in Table I, prior to any dilution or commingling with any non-deicing discharge.

Table I—BAT Limitations

Wastestream	Pollutant	Daily maximum
Airfield Pavement Deicing	Ammonia as Nitrogen	14.7 mg/L.

Type of Deicers: The Airport does not use any urea type deicers on their campus, the only deicers used are propylene glycol (PG) and potassium acetate. HIA uses Type 1 and 4 propylene glycol (PG). Ethylene glycol is prohibited at HIA.

Storage Locations:

- SARAA Facility Maintenance / ARFF Location: 1 – 9,000-gallon Potassium Acetate Tank
- SARAA Grounds Maintenance: 3 – 9,000-gallon Potassium Acetate
- American Airlines / Piedmont: 5,000-gallon PG
- Delta Airlines: Type 1 – 6,000 gallons; Type 4 – 5,000 gallons; 1,450 gallons PG
- United Airlines: 8,000 gallons PG
- FEDEX: 10,000 gallons Type 1 and totes
- UPS: 8,500-gallon Type 1, 6,000-gallon Type IV and totes
- PAANG: 5,000-gallon Type 1 PG

Usage Locations: The majority of the deicing activities takes place around the ramp area of the Terminal Building. The planes are pushed back from their respective jet bridge and deiced. The majority of the deicer is on the pavement evaporates and doesn't make it into the storm drain system unless it's raining or snowing. The stormwater from the airfield runs off into the Airport's stormwater conveyance system as shown on Figure 1 Stormwater Collection and Discharge Plan. The new cargo apron will have a deicing collection system installed to collect deicers on the new apron. The stormwater from the new cargo apron will be conveyed to outfall 013.

Monitoring Requirements

The prior permit included twice per year grab samples for CBOD5, Chemical Oxygen Demand, Oil and Grease, pH, Total Suspended Solids (TSS), Total Glycol, and Total Iron, which were based on the Appendix G.1 parameters in the PAG-03 permit in effect at the time the permit was written. (see Table below)

Summary of changes to parameters, benchmarks, and timing of sampling since the permit was last issued on March 12, 2015:

- The PAG-03 NPDES Permit has been reissued twice, once on September 24, 2016 and most recently on March 24, 2023.
  - The following parameters were removed from Appendix G of the PAG-03 General Permit since NPDES Permit PAS803501 was last issued 4/1/2015: CBOD5, Oil and Grease, Total Glycol, and Total Iron.
    - It is **proposed to remove CBOD5 and Total Iron** from the Draft NPDES Permit No PAS803501 based on this change to Appendix G of the PAG-03 General Permit.
    - It is **proposed to keep Oil and Grease** in the Draft NPDES Permit No PAS803501 due to the high volume of traffic (both commercial and private) at the facility. And to **add a benchmark of 30 mg/L for Oil and Grease** in the Draft NPDES Permit No PAS803501 based on the benchmark for Oil and Grease found in Appendix L (Land Transportation) of the 3/24/2034 PAG-03 General Permit
    - It is **proposed to keep Total Glycol** in the Draft NPDES Permit No PAS803501 since propylene glycol is the primary ingredient used in the deicing materials.
  - The following parameters were added to Appendix G since NPDES Permit PAS803501 was last issued 4/1/2015: BOD5, Ammonia-nitrogen, TDS, Total Nitrogen, and Total Phosphorus.
    - It is proposed to **add BOD5, Ammonia-nitrogen, TDS, Total Nitrogen, and Total Phosphorus** to the Draft NPDES Permit No PAS803501 to be in sync with the current PAG-03 General Permit App G (eff 3/24/23).
  - The following benchmarks were added to Appendix G since NPDES Permit PAS803501 was last issued 4/1/2015: 120 mg/l for COD; 9.0 SU for pH; 100 mg/L for TSS; and 30 mg/L for BOD5.
    - It is proposed to **add these benchmarks for COD, pH, TSS, and BOD5** to Part C of the Draft NPDES Permit No PAS803501 to be in sync with the current PAG-03 General Permit App G (eff 3/24/23).
- The sampling frequency for the PAG-03 General Permit has remained at 1/6 months for parameters listed with variations to the footnotes, see Footnotes (1),(2),(3),(4) below the table.
  - **It is proposed to add Footnote (4)** (from App G of the 3/24/23 PAG-03 General Permit with some modifications to make it relevant) to monitoring requirements listed in Part A of the Draft NPDES Permit No PAS803501.
- The Table below summarizes the changes to the sampling parameters and the Benchmark Values in both the PAG-03 General Permit Appendix G and NPDES Permit PAS803501 (for stormwater).

Parameters	**PAS803501.** Eff 4/1/2015 (1) *(no Benchmark Values)*	**PAG-03 Permit. App G. 1** Eff 12/5/2010.(2) *(no Benchmark Values)*	**PAG-03 Permit. App G**(3) Eff 9/24/2016. **Benchmark Value**	**PAG-03 Permit. App G**(4) Eff 3/24/2023. **Benchmark Value**	**PAS803501. Proposed DRAFT.** (4) **Benchmark Value**
CBOD5 (mg/L)	YES	YES	---	---	---^
COD (mg/L)	YES	YES	YES 120 mg/L	YES 120 mg/L	YES 120 mg/L^
Oil and Grease (mg/L)	YES	YES	---	---	YES* 30 mg/L^
pH (SU)	YES	YES	YES none	YES 9.0 SU	YES 9.0 SU^
TSS (mg/L)	YES	YES	YES 100 mg/L	YES 100 mg/L	YES 100 mg/L^
Glycol, Total mg/L	YES	YES	---	---	YES*
Iron, Total (mg/L)	YES	YES	---	---	---^
BOD5 (mg/L)	---	---	YES. NEW 30 mg/L	YES. 30 mg/L	YES^ 30 mg/L^
Ammonia-Nitrogen (mg/L)	---	---	YES. NEW none	YES none	YES^ none
TDS (mg/L)	---	---	YES. NEW none	YES none	YES^ none
Total Nitrogen (mg/L)	---	---	---	YES. NEW none	YES^ none
Total Phosphorus (mg/L)	---	---	---	YES. NEW none	YES^ none

*Indicates that the parameter and/or Benchmark value differs from the requirements established in App G of the PAG-03 General Permit, Eff 3/24/2023

^Indicates a change to the parameter and/or Benchmark value compared to the NPDES Permit No PAS803501, Effective 4/1/2015

(1) Monitoring of Outfalls 001-012 must be conducted during the winter season (January through March and October through December), while deicing operations are occurring. (PAS803501 Eff 4/1/2015 Part C. I. A.)

(2) Monitoring must be conducted during the winter season (December through March), while de-icing operations are occurring, and so that a time span of 3 to 4 weeks separates the monitoring event. (PAG-03 Permit Eff 12/5/2010 App G.1 Footnote (5))

(3) The permittee shall monitor the listed parameters only at those outfalls that receive runoff from areas where deicing activities occur. The permittee shall conduct the required monitoring during the deicing season, which is defined for the purpose of this appendix as the period from October 1 – March 31. One sample must be collected during the period October 1 – December 31 (to be submitted on a DMR due January 28) and one sample must be collected during the period January 1 – March 31 (to be submitted on a DMR due July 28). Additional monitoring outside of the deicing season is optional. (PAG-03 Permit Eff 9/24/2016 App G Footnote (1))

(4) The permittee shall monitor the listed pollutants only at those outfalls that receive runoff from areas where vehicle maintenance, equipment cleaning, or deicing activities occur. The permittee shall conduct the required monitoring during the deicing season, which is defined for the purpose of this appendix as the period from October 1 – March 31. One sample must be collected during the period October 1 – December 31 (to be submitted on a DMR due January 28) and one sample must be collected during the period January 1 - March 31 (to be submitted on a DMR due July 28). Additional monitoring outside of the deicing season is optional. (PAG-03 Permit Eff 3/24/2023 App G Footnote (1))

BMPs

Effluent limitations for stormwater discharges associated with industrial activity are established in the form of implemented BMPs such as PPC plans, Erosion and Sedimentation Control Plans, and other industry-specific BMPs, which restrict the rates and quantities of pollutants discharged into surface waters of the Commonwealth.

- Part C will include the sector specific BMPs listed in Appendix G (Air Transportation Facilities) of the 3/24/2023 PAG-03 General Permit
- Part C will include the BMPs Applicable to all Permittees listed in Part C.II. of the 3/24/2023 PAG-03 General Permit

PART C – SPECIAL CONDITIONS:

I. **Stormwater Outfalls and Authorized Non-Stormwater Discharges** has been updated and expanded to mimic the PAG-03 NPDES General Permit (eff 3/24/2023) *(compared to Part C.II.A. of the 2015 permit)*

II. **Best Management Practices (BMPs)** has been updated and expanded to include General BMPs as well as site and sector specific BMPs from the PAG-03 NPDES General Permit (eff 3/24/2023). *(compared to Part C.II.C. of the 2015 permit)*

III. **Stormwater Monitoring Requirements** has been updated and expanded and now includes Benchmarks and Corrective Action Plan section to mimic Part C of the PAG-03 General Permit (eff 3/24/2023). *(compared to Part C.II.E. of the 2015 permit)*

IV. **Routine Inspections** has been updated and expanded to mimic the PAG-03 NPDES General Permit (eff 3/24/2023) *(compared to Part C.II.D. of the 2015 permit)*

V. **Preparedness, Prevention and Contingency (PPC) Plan** has been updated and expanded to mimic the PAG-03 NPDES General Permit (eff 3/24/2023) *(compared to Part C.II.D. of the 2015 permit)*

VI. **Other Requirements**

A. (*modified from Part C.I.A. of the 2015 permit*) The permittee shall conduct the required monitoring during the deicing season, which is defined for the purpose of Outfalls 001-013 as the period from October 1 – March 31. One sample must be collected during the period October 1 – December 31 (to be submitted on a DMR due January 28) and one sample must be collected during the period January 1 - March 31 (to be submitted on a DMR due July 28). Additional monitoring outside of the deicing season is optional.

B. (*copied from Part C.I.B. of the 2015 permit*) Storm water discharges associated with aircraft deicing activities shall be controlled to prevent, or minimize to the maximum extent feasible, deicing materials from flowing or being carried by storm water runoff into waters of the Commonwealth.

C. (*copied from Part C.I.C. of the 2015 permit*) Owners or operators of storm water discharges from airport runways and taxiways subject to deicing operations shall develop and implement a program of BMPs designed to minimize the runoff of deicing and anti-icing materials from airport runways and taxiways to the waters of the Commonwealth.

D. (*modified from Part C.I.D. of the 2015 permit*) *2015 permit*) *Airfield pavement deicing*. There shall be no discharge of airfield pavement deicers containing urea. To comply with this limitation, any existing point source must certify annually that it does not use airfield deicing products that contain urea or alternatively, airfield pavement discharges at every discharge point must achieve the numeric limitations for ammonia in Table I, prior to any dilution or commingling with any non-deicing discharge. (40 CFR 449.10)

Table I—BAT Limitations

Wastestream	Pollutant	Daily maximum
Airfield Pavement Deicing	Ammonia as Nitrogen	14.7 mg/L.

a. *Aircraft deicing fluid (ADF)* means a fluid (other than hot water) applied to aircraft to remove or prevent any accumulation of snow or ice on the aircraft. This includes deicing and anti-icing fluids. (40 CFR 449.2)
b. Airfield pavement means all paved surfaces on the airside of an airport. (40 CFR 449.2)
c. *Airside* means the part of an airport directly involved in the arrival and departure of aircraft, including runways, taxiways, aprons, and ramps. (40 CFR 449.2)
d. *Deicing* mean procedures and practices to remove or prevent any accumulation of snow or ice on:
    (1) An aircraft; or
    (2) Airfield pavement. (40 CFR 449.2)

E. (*copied from Part C.I.E. of the 2015 permit*) The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

F. (*copied from Part C.I.F. of the 2015 permit*) Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater and stormwater treatment.

G. (*copied from Part C.I.G. of the 2015 permit*) If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.

VII. COPERMITTEES *(updated from C.2.F. of the 2015 permit)*

The following companies, as tenants of the Harrisburg International Airport, are the copermittees jointly and severally responsible for compliance with the terms, conditions, and requirements in this permit:

Company	Address
American	One Terminal Drive Middletown, PA 17057
Allegiant	One Terminal Drive Middletown, PA 17057
Avflight Harrisburg	603 and 517 Airport Drive 3 Terminal Drive Middletown, PA 17057
Delta	One Terminal Drive Middletown, PA 17057
Federal Express	100 Airport Drive Middletown, PA 17057
Frontier	One Terminal Drive Middletown, PA 17057
Hershey Leading Ops	605 Airport Drive Middletown, PA 17057
MI Windows	604 Airport Drive Middletown, PA 17057
Piedmont Airlines	601 Airport Drive Middletown, PA 17057
United Airlines	One Terminal Drive Middletown, PA 17057
UPS	100 Airport Drive Middletown, PA 17057

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001-013, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum (1), (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
BOD5	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: At the Outfall

Footnotes

(1) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

(2) Outfalls 001 to 013. The permittee shall conduct the required monitoring during the deicing season, which is defined for the purpose of Air Transportation Facilities (Industrial Stormwater only) as the period from October 1 – March 31. One sample must be collected during the period October 1 – December 31 and one sample must be collected during the period January 1 - March 31. Additional monitoring outside of the deicing season is optional.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 105, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (1) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	75.0	XXX	187	1/quarter	Grab
Benzene	XXX	XXX	XXX	0.005	XXX	0.0125	1/quarter	Grab
1,2-cis-Dichloroethylene	XXX	XXX	XXX	0.07	XXX	0.175	1/quarter	Grab
Trichloroethylene	XXX	XXX	XXX	0.005	XXX	0.0125	1/quarter	Grab
Vinyl Chloride	XXX	XXX	XXX	0.002	XXX	0.005	1/quarter	Grab

Compliance Sampling Location: Internal Monitoring Point (IMP). At Manhole 123 when not affected by stormwater.

Other Comments: Sampling should occur when not affected by stormwater.

Footnotes

(1) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment **n/a**)
☐	Toxics Management Spreadsheet (see Attachment **n/a**)
☐	TRC Model Spreadsheet (see Attachment **n/a**)
☐	Temperature Model Spreadsheet (see Attachment **n/a**)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: SOP for New and Reissuance Industrial Waste and Industrial Stormwater Individual NPDES Permit Applications
☐	Other:

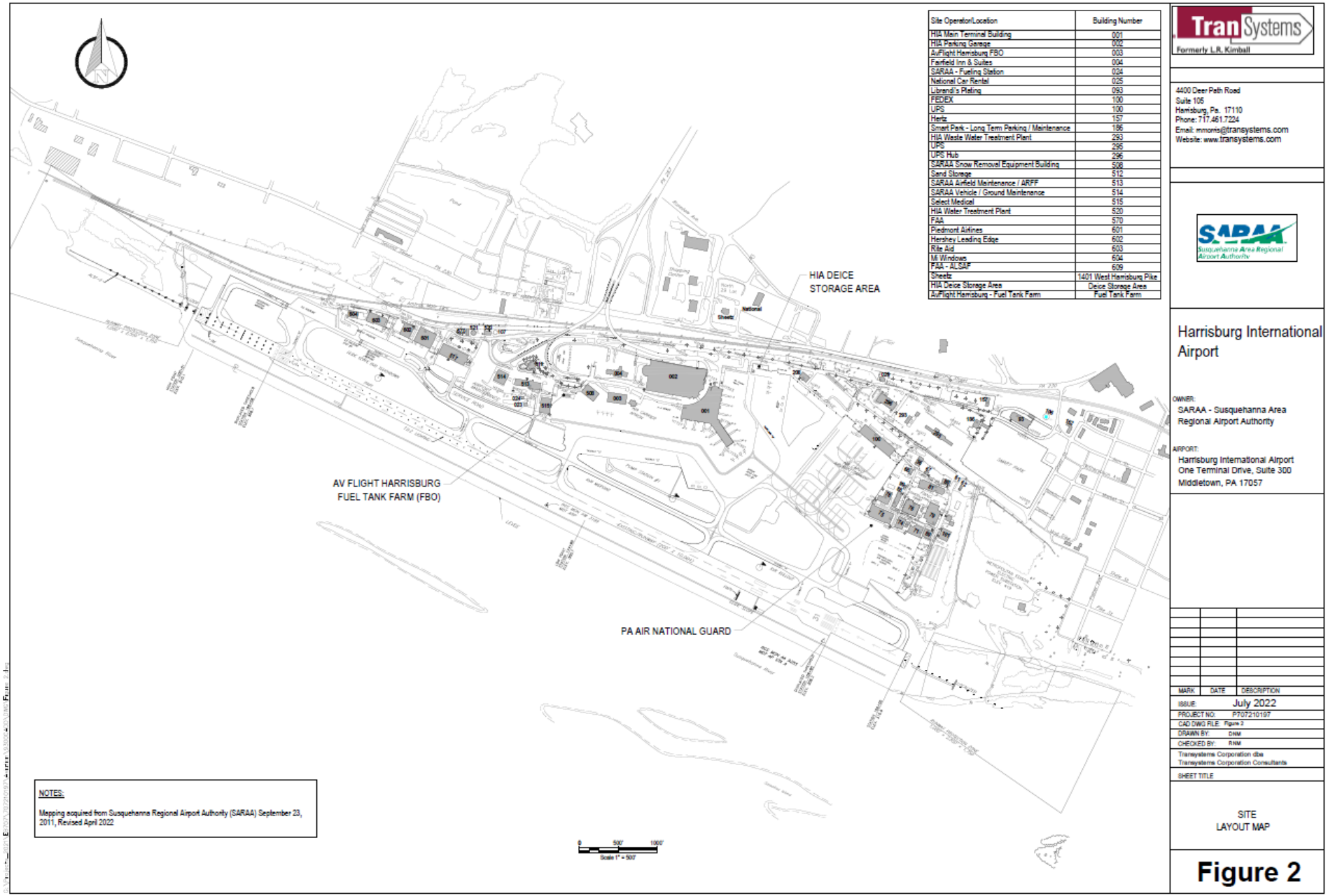


Figure 1: Site Layout Map which includes a list of the site operator for the buildings. (Source: *Environmental Contingency Plan for HIA, Rev September 2022, Appendix A, Figure 2*).

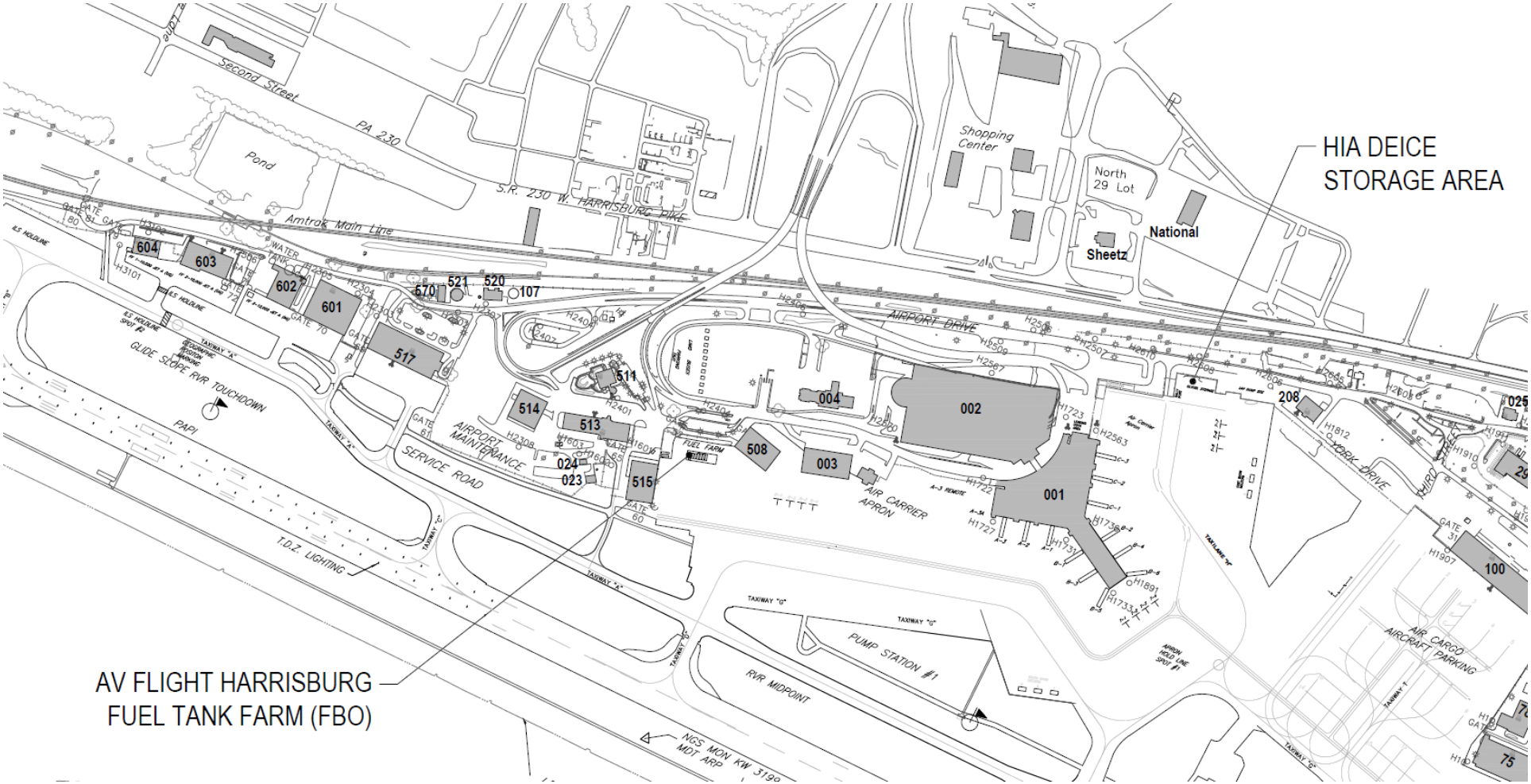


Figure 1A: **Site Layout Map** zoomed in to show more detail of the western portion

Figure 1B: Site Layout Map zoomed in to show more detail of the eastern portion

Site Operator/Location	Building Number
HIA Main Terminal Building	001
HIA Parking Garage	002
AvFlight Harrisburg FBO	003
Fairfield Inn & Suites	004
SARAA - Fueling Station	024
National Car Rental	025
Librandi's Plating	093
FEDEX	100
UPS	100
Hertz	157
Smart Park - Long Term Parking / Maintenance	186
HIA Waste Water Treatment Plant	293
UPS	295
UPS Hub	296
SARAA Snow Removal Equipment Building	508
Sand Storage	512
SARAA Airfield Maintenance / ARFF	513
SARAA Vehicle / Ground Maintenance	514
Select Medical	515
HIA Water Treatment Plant	520
FAA	570
Piedmont Airlines	601
Hershey Leading Edge	602
Rite Aid	603
Mi Windows	604
FAA - ALSAF	609
Sheetz	1401 West Harrisburg Pike
HIA Deice Storage Area	Deice Storage Area
AvFlight Harrisburg - Fuel Tank Farm	Fuel Tank Farm

Figure 1C: Site Layout Map zoomed in on list of site operators/Location and Building Number.

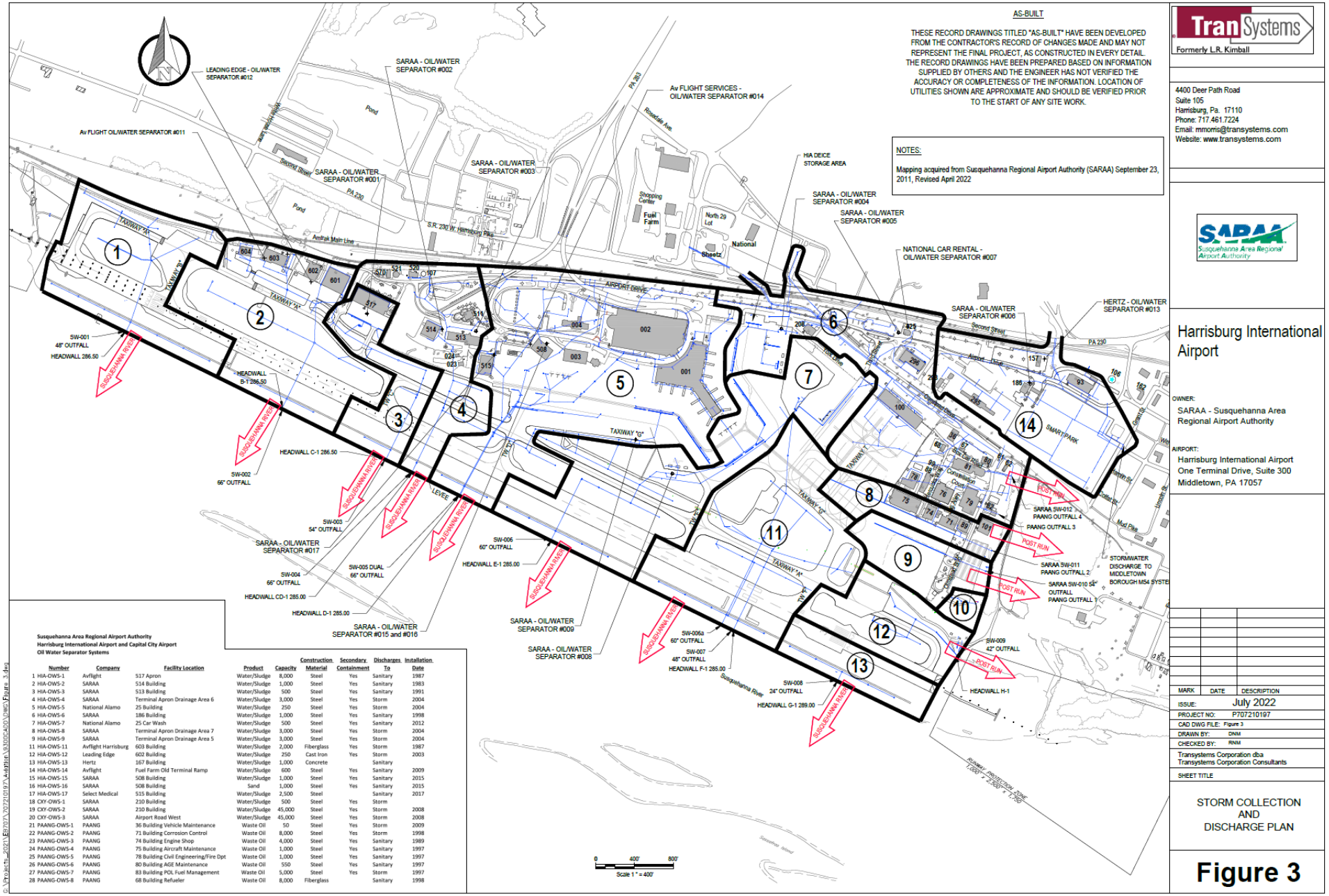


Figure 2. Storm Collection and Discharge Plan. (Source: *Environmental Contingency Plan for HIA, November 2022, Appendix A, Figure 3*).
Note: numbers on map correspond to drainage areas not Outfalls (See Table 1 referencing the Storm Collection area draining to each outfall).

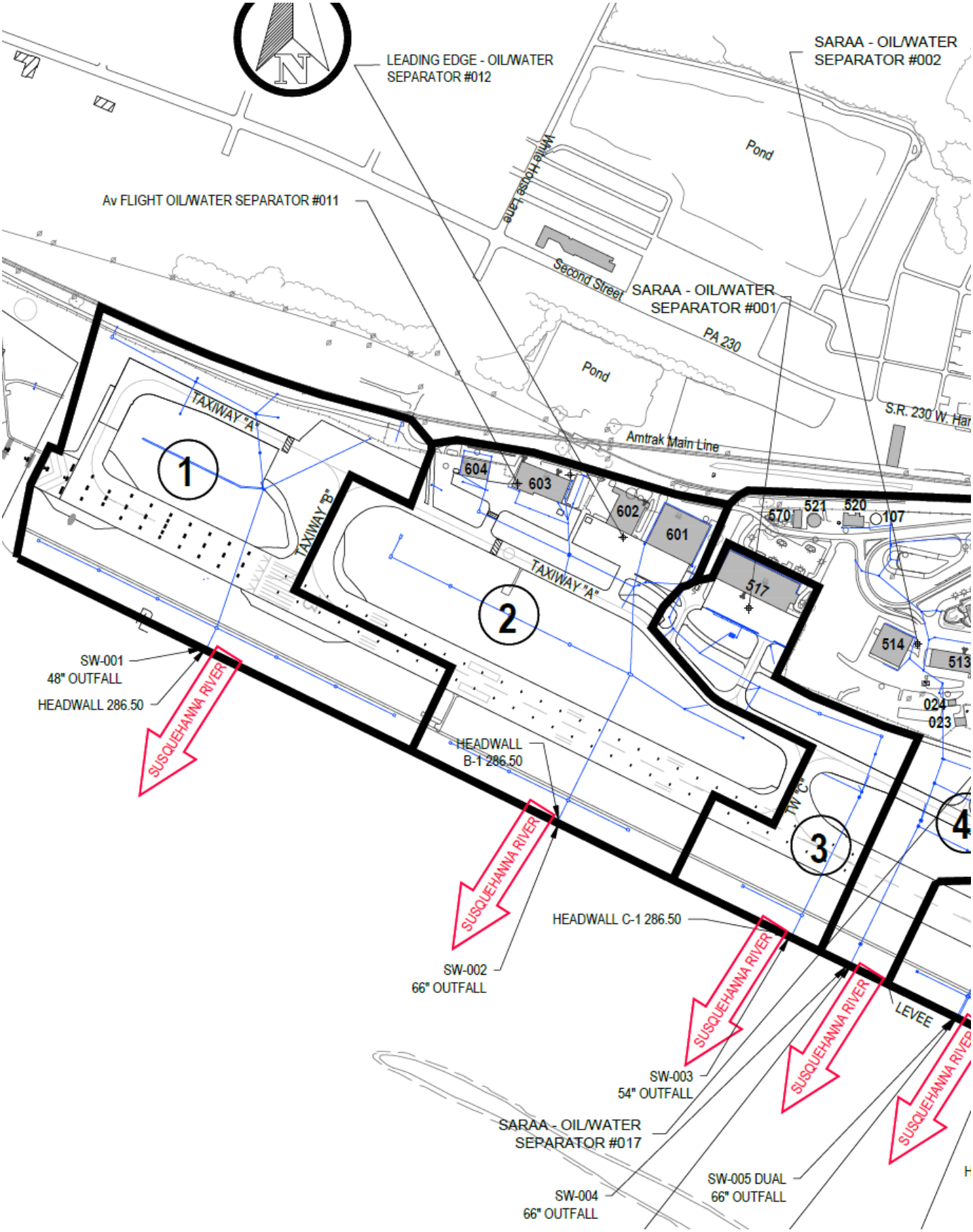


Figure 2A. Storm Collection and Discharge Plan. Zoomed in view of the Storm Collection and Discharge Plan.

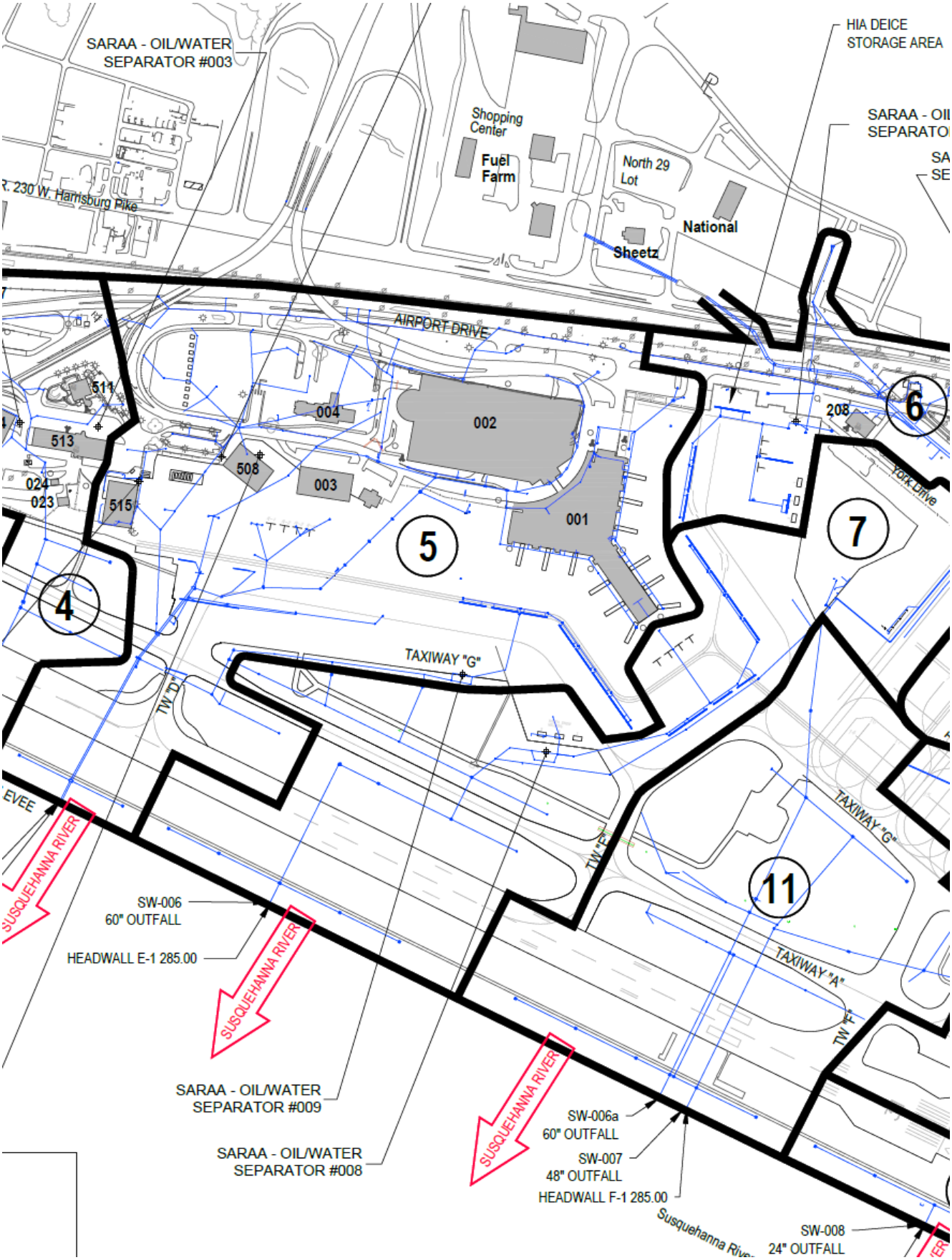


Figure 2B. Storm Collection and Discharge Plan. Zoomed in view of the Storm Collection and Discharge Plan.

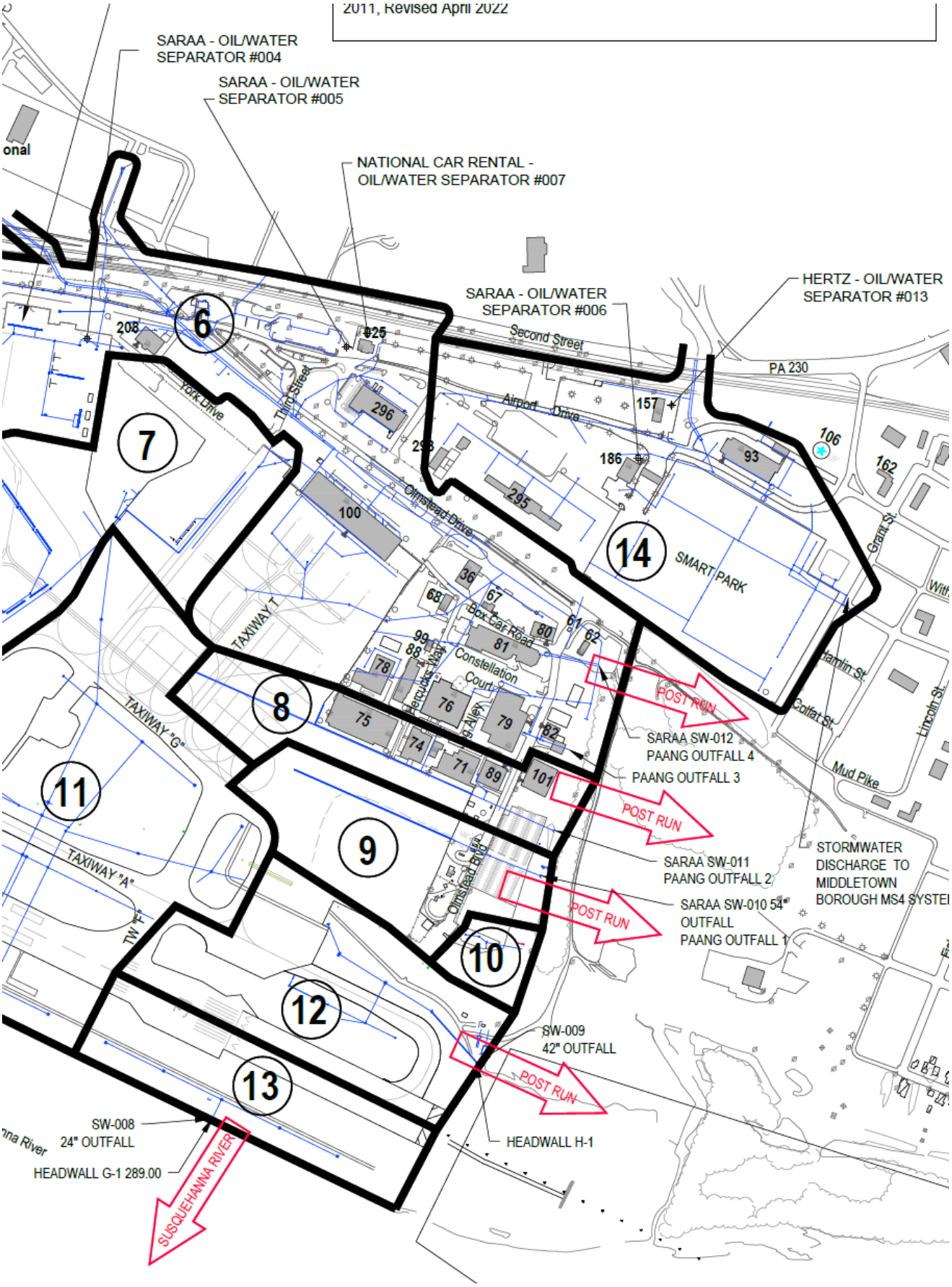


Figure 2C. Storm Collection and Discharge Plan. Zoomed in view of the Storm Collection and Discharge Plan.

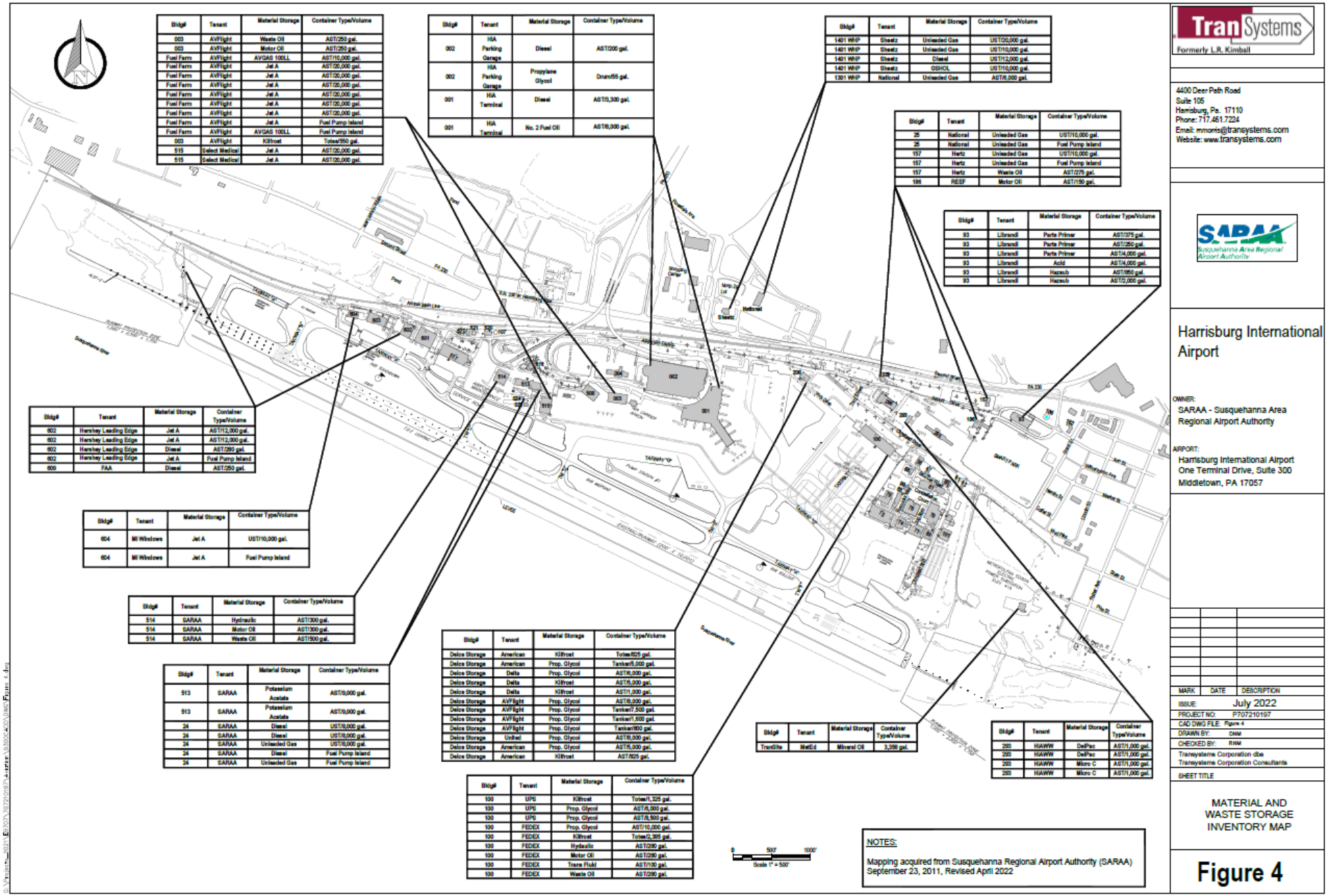


Figure 3: Material and Waste Storage Inventory Map shows the locations of the deicers including the type and amount stored. (Source: *Environmental Contingency Plan for HIA, rev September 2022, Appendix A, Figure 4*).

Bldg#	Tenant	Material Storage	Container Type/Volume
003	AVFlight	Waste Oil	AST/250 gal.
003	AVFlight	Motor Oil	AST/250 gal.
Fuel Farm	AVFlight	AVGAS 100LL	AST/10,000 gal.
Fuel Farm	AVFlight	Jet A	AST/20,000 gal.
Fuel Farm	AVFlight	Jet A	AST/20,000 gal.
Fuel Farm	AVFlight	Jet A	AST/20,000 gal.
Fuel Farm	AVFlight	Jet A	AST/20,000 gal.
Fuel Farm	AVFlight	Jet A	AST/20,000 gal.
Fuel Farm	AVFlight	Jet A	AST/20,000 gal.
Fuel Farm	AVFlight	Jet A	Fuel Pump Island
Fuel Farm	AVFlight	AVGAS 100LL	Fuel Pump Island
003	AVFlight	Kilfrost	Totes/550 gal.
515	Select Medical	Jet A	AST/20,000 gal.
515	Select Medical	Jet A	AST/20,000 gal.

Bldg#	Tenant	Material Storage	Container Type/Volume
002	HIA Parking Garage	Diesel	AST/200 gal.
002	HIA Parking Garage	Propylane Glycol	Drum/55 gal.
001	HIA Terminal	Diesel	AST/3,300 gal.
001	HIA Terminal	No. 2 Fuel Oil	AST/8,000 gal.

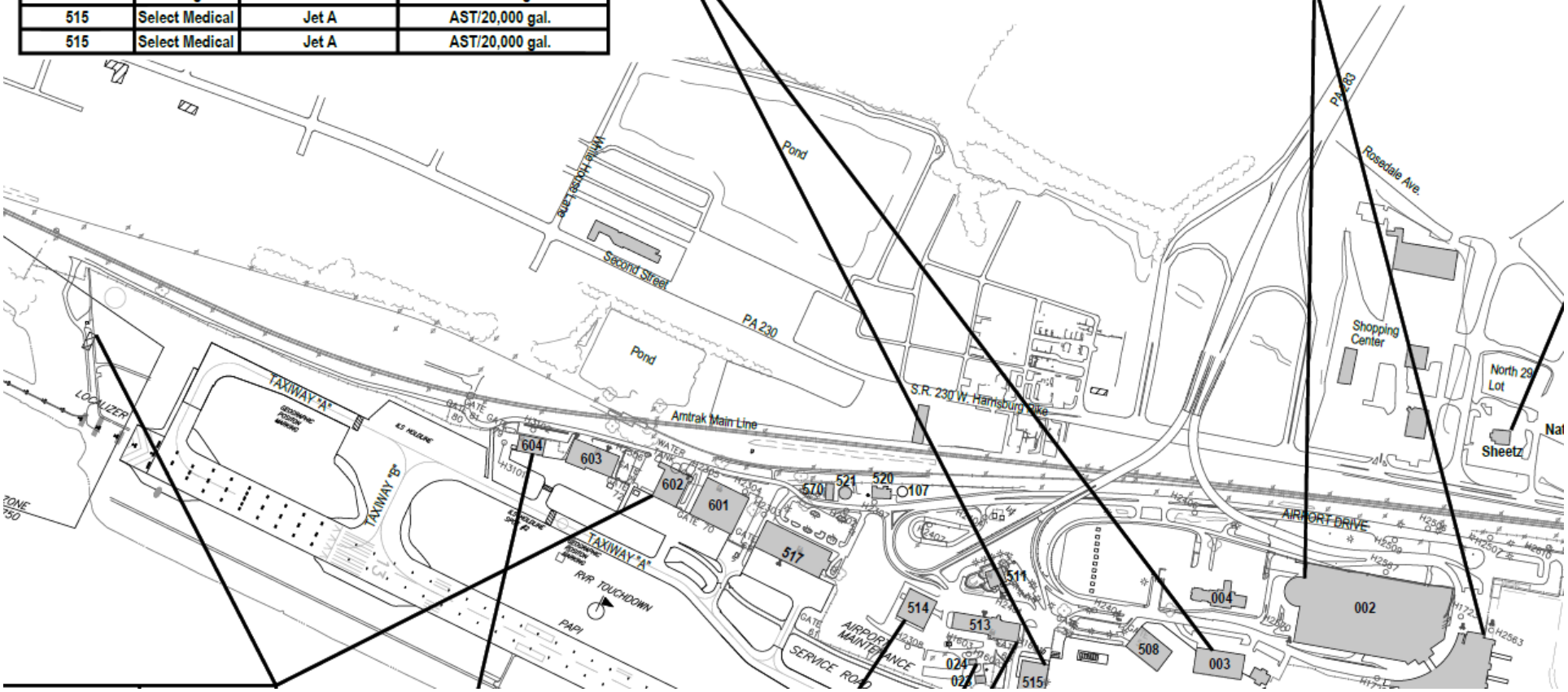
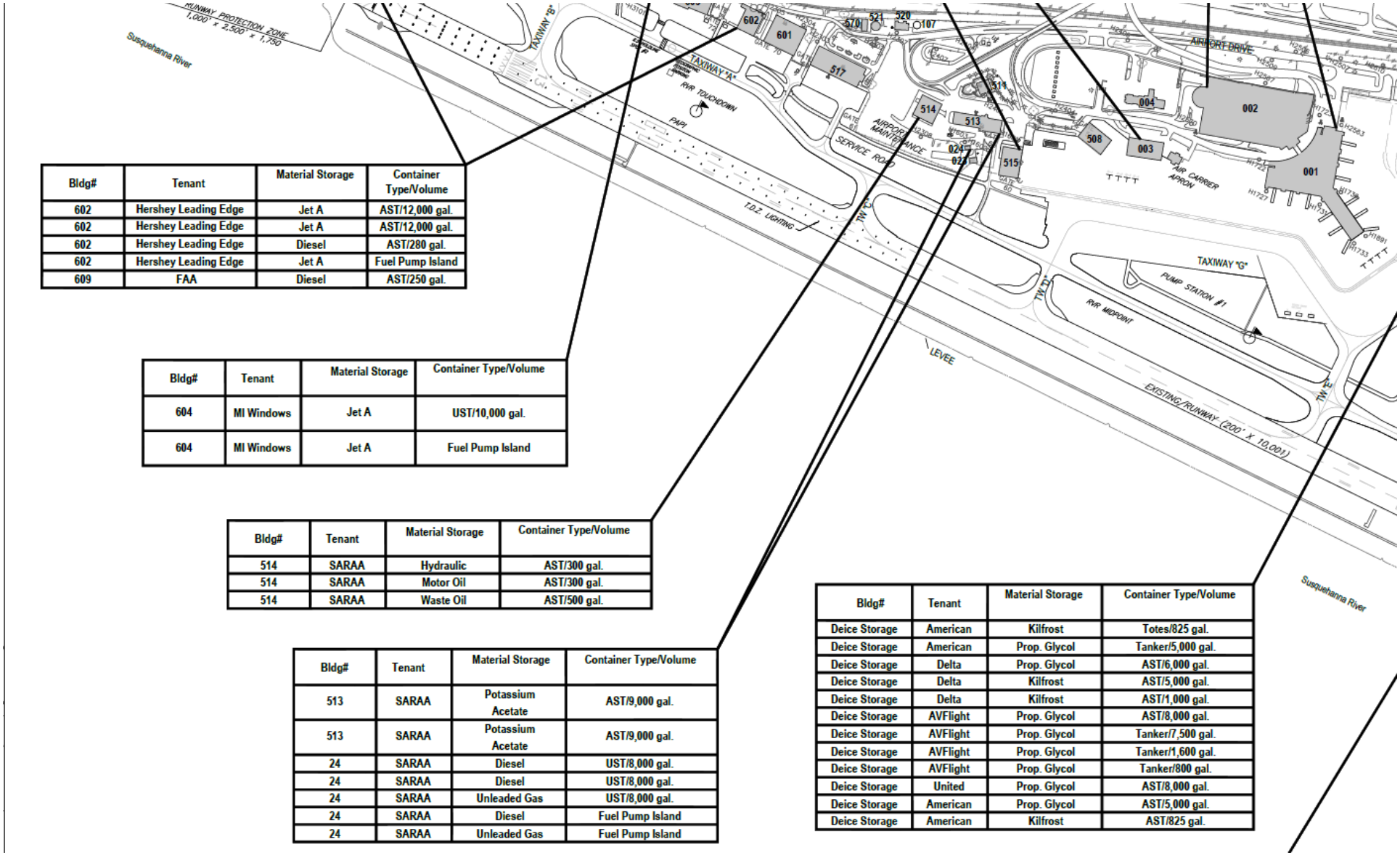


Figure 3A: Material and Waste Storage Inventory Map zoomed in view of northwestern portion



Bldg#	Tenant	Material Storage	Container Type/Volume
602	Hershey Leading Edge	Jet A	AST/12,000 gal.
602	Hershey Leading Edge	Jet A	AST/12,000 gal.
602	Hershey Leading Edge	Diesel	AST/280 gal.
602	Hershey Leading Edge	Jet A	Fuel Pump Island
609	FAA	Diesel	AST/250 gal.

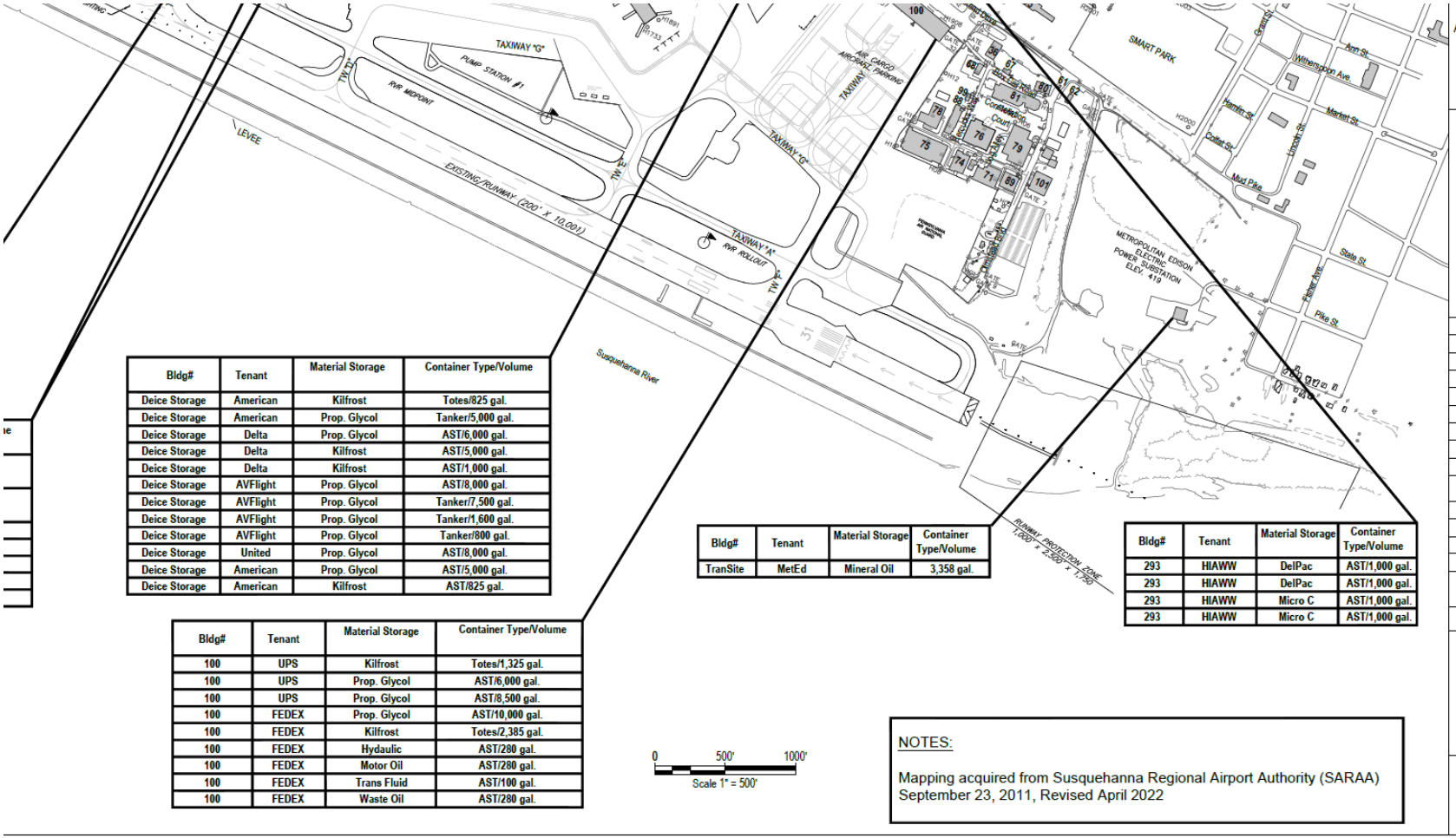
Bldg#	Tenant	Material Storage	Container Type/Volume
604	MI Windows	Jet A	UST/10,000 gal.
604	MI Windows	Jet A	Fuel Pump Island

Bldg#	Tenant	Material Storage	Container Type/Volume
514	SARAA	Hydraulic	AST/300 gal.
514	SARAA	Motor Oil	AST/300 gal.
514	SARAA	Waste Oil	AST/500 gal.

Bldg#	Tenant	Material Storage	Container Type/Volume
513	SARAA	Potassium Acetate	AST/9,000 gal.
513	SARAA	Potassium Acetate	AST/9,000 gal.
24	SARAA	Diesel	UST/8,000 gal.
24	SARAA	Diesel	UST/8,000 gal.
24	SARAA	Unleaded Gas	UST/8,000 gal.
24	SARAA	Diesel	Fuel Pump Island
24	SARAA	Unleaded Gas	Fuel Pump Island

Bldg#	Tenant	Material Storage	Container Type/Volume
Deice Storage	American	Kilfrost	Totes/825 gal.
Deice Storage	American	Prop. Glycol	Tanker/5,000 gal.
Deice Storage	Delta	Prop. Glycol	AST/6,000 gal.
Deice Storage	Delta	Kilfrost	AST/5,000 gal.
Deice Storage	Delta	Kilfrost	AST/1,000 gal.
Deice Storage	AVFlight	Prop. Glycol	AST/8,000 gal.
Deice Storage	AVFlight	Prop. Glycol	Tanker/7,500 gal.
Deice Storage	AVFlight	Prop. Glycol	Tanker/1,600 gal.
Deice Storage	AVFlight	Prop. Glycol	Tanker/800 gal.
Deice Storage	United	Prop. Glycol	AST/8,000 gal.
Deice Storage	American	Prop. Glycol	AST/5,000 gal.
Deice Storage	American	Kilfrost	AST/825 gal.

Figure 3B: Material and Waste Storage Inventory Map zoomed in view of southwestern portion



Bldg#	Tenant	Material Storage	Container Type/Volume
Deice Storage	American	Kilfrost	Totes/825 gal.
Deice Storage	American	Prop. Glycol	Tanker/5,000 gal.
Deice Storage	Delta	Prop. Glycol	AST/6,000 gal.
Deice Storage	Delta	Kilfrost	AST/5,000 gal.
Deice Storage	Delta	Kilfrost	AST/1,000 gal.
Deice Storage	AVFlight	Prop. Glycol	AST/8,000 gal.
Deice Storage	AVFlight	Prop. Glycol	Tanker/7,500 gal.
Deice Storage	AVFlight	Prop. Glycol	Tanker/1,600 gal.
Deice Storage	AVFlight	Prop. Glycol	Tanker/800 gal.
Deice Storage	United	Prop. Glycol	AST/8,000 gal.
Deice Storage	American	Prop. Glycol	AST/5,000 gal.
Deice Storage	American	Kilfrost	AST/825 gal.

Bldg#	Tenant	Material Storage	Container Type/Volume
100	UPS	Kilfrost	Totes/1,325 gal.
100	UPS	Prop. Glycol	AST/6,000 gal.
100	UPS	Prop. Glycol	AST/8,500 gal.
100	FEDEX	Prop. Glycol	AST/10,000 gal.
100	FEDEX	Kilfrost	Totes/2,385 gal.
100	FEDEX	Hydaulic	AST/280 gal.
100	FEDEX	Motor Oil	AST/280 gal.
100	FEDEX	Trans Fluid	AST/100 gal.
100	FEDEX	Waste Oil	AST/280 gal.

Bldg#	Tenant	Material Storage	Container Type/Volume
TranSite	MetEd	Mineral Oil	3,358 gal.

Bldg#	Tenant	Material Storage	Container Type/Volume
293	HIAWW	DelPac	AST/1,000 gal.
293	HIAWW	DelPac	AST/1,000 gal.
293	HIAWW	Micro C	AST/1,000 gal.
293	HIAWW	Micro C	AST/1,000 gal.

NOTES:

Mapping acquired from Susquehanna Regional Airport Authority (SARAA) September 23, 2011, Revised April 2022

AIRPORT:
Harrisburg International Airpor
One Terminal Drive, Suite 300
Middletown, PA 17057

MARK	DATE	DESCRIPTION

ISSUE: July 2022
PROJECT NO: P707210197
CAD DWG FILE: Figure 4
DRAWN BY: DNM
CHECKED BY: RNM

Transystems Corporation dba
Transystems Corporation Consultants

SHEET TITLE

MATERIAL AND WASTE STORAGE INVENTORY MAP

Figure 4

Figure 3C: Material and Waste Storage Inventory Map zoomed in view of southeastern portion

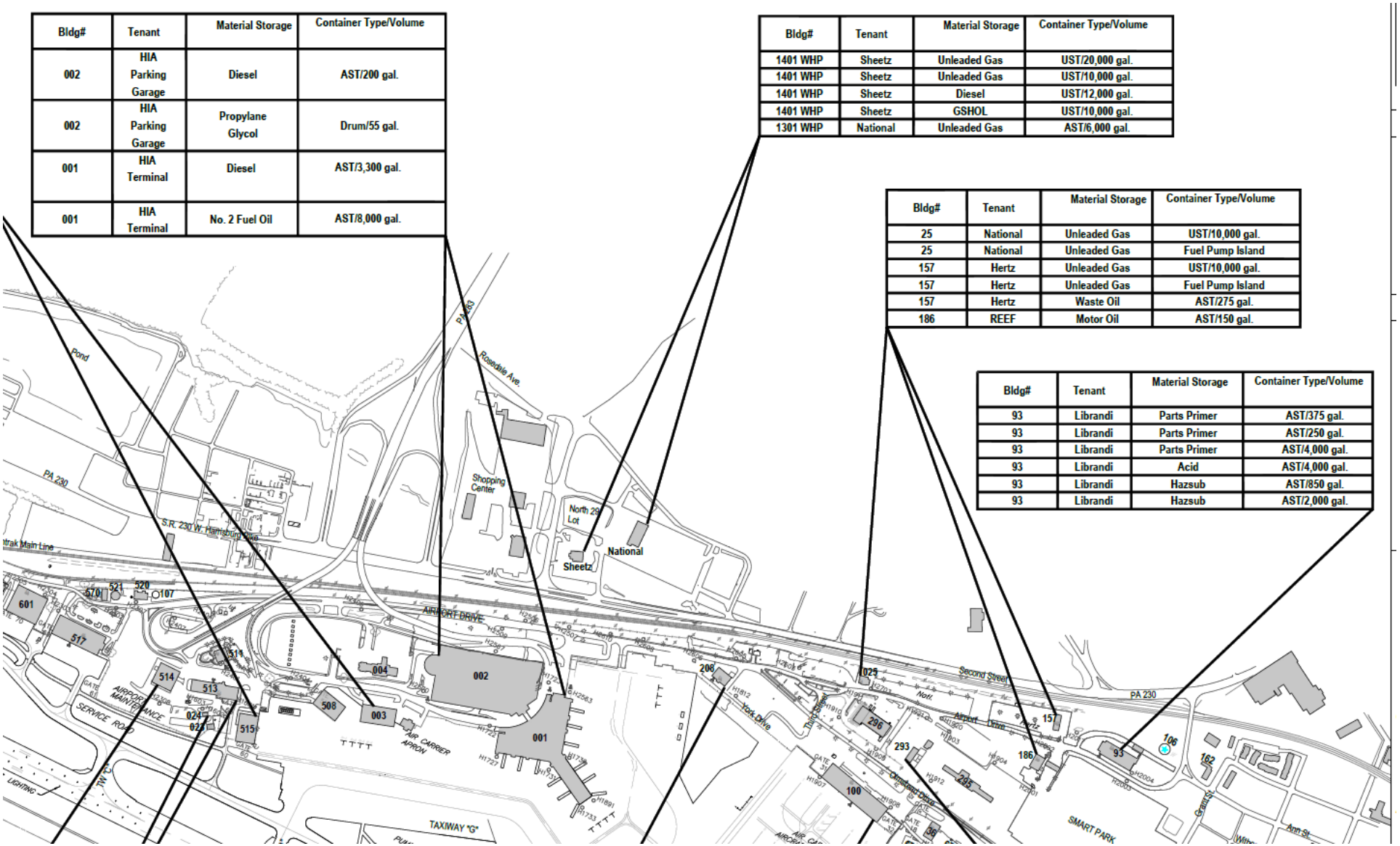


Figure 3D: Material and Waste Storage Inventory Map zoomed in view of northeastern portion

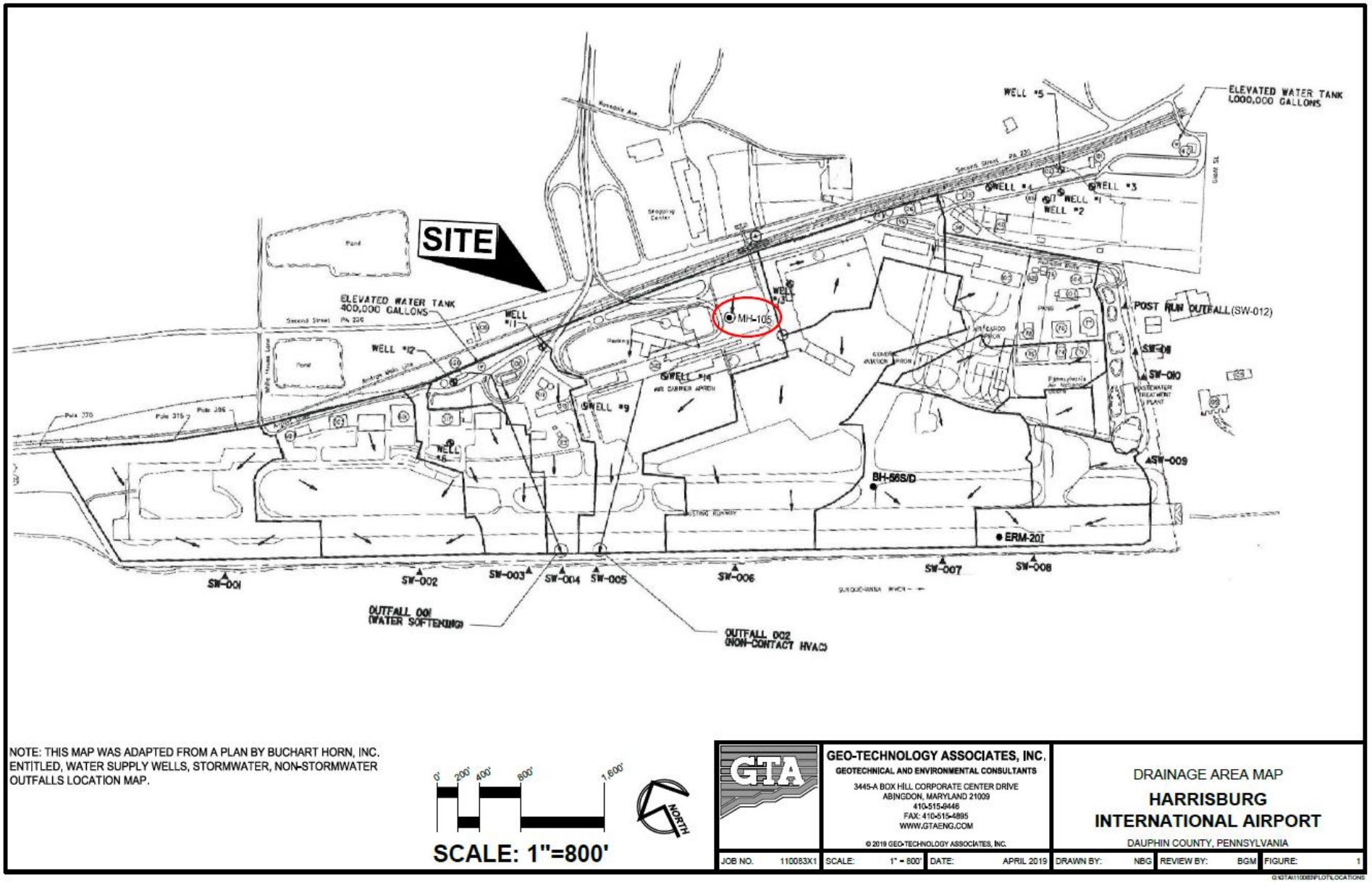


Figure 4. Drainage Area Map shows the location of IMP 105 (aka MH 105) circled in red. (*Source: 2020 National Pollutant Discharge Elimination System Annual Storm Water Outfall Sampling and Evaluation Report for SARAA, Dated January 27, 2021, Figure "Drainage Area Map"*).

Table 1: Summary of Outfall Information (Source: Information received via email on 12/19/2023 from SARAA-HIA and *Environmental Contingency Plan for HIA, November 2022, Appendix A, Figure 3: Storm Collection and Discharge Plan*).

Outfall No	% Impervious	Type(s) of industrial Activity.	Associated Storm Collection Area (from Figure 1: Storm Collection and Discharge Plan)	Associated Oil and Water Separator (if applicable)	Copermittee(s) within Drainage Area going to the Outfall
001	60%	None	1	None	None
002	75%	Fueling / Deicing	2	Av Flight HIA-OWS #011. Bldg 603 Leading Edge HIA-OWS #012. Bldg 602	MI Windows Avflight Leading Edge Piedmont
003	80%	Fueling / Deicing	3	SARAA HIA-OWS #001. Bldg 517	Avflight
004	80%	Only fueling on the landside. No industrial activity on the airside.	4	SARAA HIA-OWS #002. Bldg 514 SARAA HIA-OWS #003. Bldg 513	Landside – SARAA Fueling only
005	75%	Fueling and Deicing	5	SARAA HIA-OWS #009 SARAA HIA-OWS #015 and #016. Bldg 508 SARAA HIA-OWS #017. Bldg 515	Avflight, American, Delta, Fontier/Allegiant, United
006	60%	Fueling and Deicing	7	SARAA HIA-OWS #008	American, Delta, United
013 (006a)	50%	None at this point until the entire cargo apron expansion project is complete and there will be deicing and fueling on the new cargo apron.	11		2025- UPS and FEDEX
007	60%	None at this point until the entire cargo apron expansion project is complete and there will be deicing and fueling on the new cargo apron	11		2025 - UPS and FEDEX
008	60%	None	13		None
009	50%	None	12		None
010	50%	Fueling and Deicing	9	PAANG Building 83 PAANG-OWS #007	PA Air National Guard
011	50%	Fueling and Deicing	8		PA Air National Guard
012	75%	Fueling and Deicing	6	SARAA HIA-OWS #004. SARAA HIA-OWS #005. National Car Rental HIA-OWS #007. Bldg 025	PAANG, UPS, American, Delta, Allegiant/Frontier, United, Avflight

Table 2: Sample Results Summary for Stormwater Outfalls 001-012 (2018-2023).
Sampling Frequency = 2/year.

Reporting Period	SW Outfall	CBOD5 [2] (mg/L)	COD [3] (mg/L)	Oil and Grease [4] (mg/L)	pH (S.U.)	TSS [5] (mg/L)	Total Iron (mg/L)	Glycol, Total [6] (mg/L)
Benchmark [1]		*30*	*120*	*30*		*100*		
1st Half 2018	**001**	2.6	7	< 0.1	7.94	< 5.0	< 0.03	< 10
	002	3.1	< 7.0	< 1.9	7.84	< 5.0	0.033	< 10
	003	64	114	2.3	7.9	< 5.0	0.19	**38.1**
	004	2.4	35	3	7.67	13	0.061	< 10
	005	13.4	26	3.1	8.06	5	2.9	< 10
	006	21.5	51	< 2.1	8.05	11	1.6	< 10
	007	**122**	**177**	< 2.0	8.07	< 5.0	0.38	< 10
	008	---	---	---	---	---	---	---
	009	**193**	**213**	2.7	7.97	18	3.2	**156**
	010	**595**	**586**	2.6	7.85	**418**	6.1	< 10
	011	---	---	---	---	---	---	---
	012	29.2	46	< 1.9	8.39	13	< 0.66	< 10
2nd Half 2018	**001**	< 2.0	< 15.0	< 2.1	7.89	< 5.0	< 0.03	< 10
	002	2.6	< 15.0	< 2.0	7.81	< 5.0	< 10	< 10
	003	< 2.0	< 15.0	< 2.0	7.84	72	0.28	< 10
	004	2.3	**228**	< 2.1	7.61	29	0.088	< 10
	005	9.60	< 15	< 2.0	7.99	11	1.5	< 10
	006	2.7	< 15.0	< 2.0	8.01	< 5.0	0.11	< 10
	007	< 2.0	< 15.0	< 2.0	8.03	< 5.0	0.27	< 10
	008	---	---	---	---	---	---	---
	009	---	---	---	---	---	---	---
	010	2.9	< 15.0	< 2.1	7.79	33	0.66	< 10
	011	---	---	---	---	---	---	---
	012	2.5	< 15.0	< 1.9	8.29	< 5.0	0.18	< 10
1st Half 2019	**001**	14.8	34	< 3.8	8.06	< 5	< 0.03	< 10
	002	2.30	< 15	**15**	7.29	5	0.074	< 10
	003	10.1	36	< 3.8	7.26	21	0.55	< 10
	004	9.6	32	< 3.9	7.51	28	0.72	< 10
	005	9.2	22	< 3.9	7.37	43	2.8	< 10
	006	3.3	< 15	< 3.9	7.36	16	0.4	< 10
	007	4.4	28	< 3.9	7.79	15	1.8	< 10
	008	---	---	---	---	---	---	---
	009	---	---	---	---	---	---	---
	010	**33.7**	64	< 3.8	7.3	26	0.3	**18.4**
	011	---	---	---	---	---	---	---
	012	10.2	45	< 3.8	7.4	79	1.3	< 10
2nd Half 2019	**001**	< 2.3	< 15	< 3.8	7.12	< 5.0	< 0.03	< 10
	002	< 2.0	< 15	< 3.8	7.19	< 5.0	< 0.030	< 10
	003	< 2.0	< 15	< 3.8	7.08	< 5.0	0.058	< 10
	004	< 2.0	< 15	< 3.8	7.57	7	0.12	< 10
	005	< 2.0	< 15	< 3.9	7.33	7	1.9	< 10
	006	2	15	< 3.9	7.44	< 5	0.098	< 10
	007	---	---	---	---	---	---	---
	008	---	---	---	---	---	---	---
	009	---	---	---	---	---	---	---
	010	---	---	---	---	---	---	---
	011	---	---	---	---	---	---	---
	012	< 2	< 15	< 3.8	7.5	< 8	0.31	< 10

Table 2: Sample Results Summary for Stormwater Outfalls 001-012 (2018-2023).
Sampling Frequency = 2/year.

Reporting Period	SW Outfall	CBOD5 (2) (mg/L)	COD (3) (mg/L)	Oil and Grease (4) (mg/L)	pH (S.U.)	TSS (5) (mg/L)	Total Iron (mg/L)	Glycol, Total (6) (mg/L)
Benchmark (1)		*30*	*120*	*30*		*100*		
1st Half 2020	**001**	< 2.0	< 15	< 3.8	7.54	< 5.0	< 0.03	< 10
	002	11.6	< 15	< 3.8	7.45	10	0.36	< 10
	003	4.10	< 15	< 3.9	7.33	22	0.36	< 10
	004	< 2.0	46	3.8	7.64	33	0.12	< 10
	005	2.5	< 15	< 3.9	7.44	< 5	1.6	< 10
	006	< 2.0	< 15	< 3.9	7.3	5	1.2	< 10
	007	< 2.0	< 15	3.9	7.91	5	0.11	< 10
	008	*E*	*E*	*E*	*E*	*E*	*E*	*E*
	009	< 2.0	< 15	< 3.9	7.08	17	6.1	< 10
	010	**34.10**	36	< 3.9	7.22	5	0.078	< 10
	011	*E*	*E*	*E*	*E*	*E*	*E*	*E*
	012	2.4	< 15	< 3.9	7.21	9	0.46	< 10
2nd Half 2020	**001**	3.6	21	< 4.0	6.54	12	0.2	< 10.0
	002	3.1	< 15	< 4.0	6.09	9	0.25	< 10.0
	003	2.4	< 15	< 4.0	6.55	5	0.14	< 10.0
	004	2.9	< 15	< 3.8	6.24	17	0.22	< 10.0
	005	4.1	< 15	< 4.0	6.67	< 5	0.21	< 10.0
	006	2.80	< 15	< 4.0	6.81	8	0.12	< 10.0
	007	3.2	15	3.9	6.91	18	0.27	< 10.0
	008	< 2.0	< 15	< 4.0	6.61	73	0.65	< 10.0
	009	18	< 15	< 3.9	6.59	39	0.19	< 10.0
	010	< 2.0	< 15	< 4.0	6.32	6	< 0.30	< 10.0
	011	*E*	*E*	*E*	*E*	*E*	*E*	*E*
	012	2.2	< 15	4	6.11	8	0.83	< 10.0
1st Half 2021	**001**	8.1	28	< 3.9	7.21	48	0.85	< 10
	002	2.7	< 15	< 4.0	7.49	11	0.088	< 10
	003	8.5	30	< 3.9	7.51	66	0.56	< 10
	004	2.7	17	< 3.9	7.71	47	0.34	< 10
	005	5.2	< 15	< 4.0	7.82	47	2.4	< 10
	006	3.6	19	< 4.2	6.8	32	0.73	< 10
	007	---	---	---	---	---	---	---
	008	---	---	---	---	---	---	---
	009	3	22	< 4.1	7.79	7	0.99	< 10
	010	**42.6**	**280**	< 3.9	7.29	9	0.11	< 10
	011	---	---	---	---	---	---	---
	012	14.4	61	< 3.9	7.47	18	0.48	< 10
2nd Half 2021	**001**	2.1	< 15	< 3.9	8.26	5	0.03	< 10
	002	2.7	< 15	< 3.8	6.57	13	0.54	10
	003	---	---	---	---	---	---	---
	004	---	---	---	---	---	---	---
	005	5.2	< 15	< 3.8	8.07	12	1.7	< 10
	006	3.2	< 15	< 3.9	8.65	26	0.16	< 10
	007	---	---	---	---	---	---	---
	008	---	---	---	---	---	---	---
	009	---	---	---	---	---	---	---
	010	---	---	---	---	---	---	---
	011	---	---	---	---	---	---	---
	012	< 2.0	< 15	< 3.9	7.32	< 5.0	0.53	< 10

Table 2: Sample Results Summary for Stormwater Outfalls 001-012 (2018-2023).
Sampling Frequency = 2/year.

Reporting Period	SW Outfall	CBOD5 (2) (mg/L)	COD (3) (mg/L)	Oil and Grease (4) (mg/L)	pH (S.U.)	TSS (5) (mg/L)	Total Iron (mg/L)	Glycol, Total (6) (mg/L)
Benchmark (1)		*30*	*120*	*30*		*100*		
1st Half 2022	**001**	< 2.0	< 15	< 3.9	7.33	9	< 0.0030	**11.6**
	002	---	---	---	---	---	---	---
	003	---	---	---	---	---	---	---
	004	---	---	---	---	---	---	---
	005	---	---	---	---	---	---	---
	006	< 40.36	**1580**	< 4.0	7.28	30	6	**591**
	007	---	---	---	---	---	---	---
	008	---	---	---	---	---	---	---
	009	2.2	< 4.1	< 4.1	7.44	24	5.6	< 10.0
	010	4.4	56	< 3.9	8.12	8	0.81	< 10.0
	011	---	---	---	---	---	---	---
	012	3.7	27	< 4.0	7.88	19	0.17	< 10.0
2nd Half 2022	**001**	< 15	< 15	< 3.9	E	< 5	< 0.030	< 10
	002	---	---	---	---	---	---	---
	003	< 2.0	< 15	< 3.9	8.06	< 5	< 0.030	< 10
	004	---	---	---	---	---	---	---
	005	---	---	---	---	---	---	---
	006	---	---	---	---	---	---	---
	007	10.3	19	< 3.8	8.32	< 16	0.42	< 10
	008	---	---	---	---	---	---	---
	009	< 2.0	< 15	< 4.0	8.16	8	1.3	< 10
	010	6.7	< 15	< 3.9	7.88	< 5	< 0.030	< 10
	011	---	---	---	---	---	---	---
	012	---	---	---	---	---	---	---
1st Half 2023	**001**	< 2.0	< 15	< 3.9	7.77	< 5	< 0.030	< 10
	002	< 2.0	< 15	< 3.9	7.79	37	0.35	< 10
	003	< 2.0	< 15	< 3.6	7.79	< 15	< 0.030	< 10
	004	2	< 15	< 4.0	7.75	**101**	2.2	< 10
	005	< 2.0	< 15	< 4.6	8.32	7	15	< 10
	006	2.00	22	< 3.9	8.32	10	1	< 10
	007	3.70	< 15	< 3.9	8.37	16	0.1	< 10
	008	---	---	---	---	---	---	---
	009	2	< 15	< 4.0	8.25	11	4.6	< 10
	010	< 2.0	< 15	< 3.8	9	9	0.42	< 10.0
	011	---	---	---	---	---	---	---
	012	4.7	< 15	< 3.8	8.14	7	0.22	< 10

Footnotes:

(1) This row shows the benchmark values proposed for the Draft NPDES Permit No PAS803501

(2) Numbers in **bold red** exceed the proposed Benchmark Value of 30 mg/L for BOD5 *(taken from Appendix G of the PAG-03 General Permit, Eff 3/24/2023).*

(3) Numbers in **bold red** exceed the proposed Benchmark Value of 120 mg/L for COD *(taken from Appendix G of the PAG-03 General Permit, Eff 3/24/2023).*

(4) There were no exceedances of the proposed Benchmark Value of 30 mg/L for Oil and Grease *(taken from Appendix L of the PAG-03 General Permit, Eff 3/24/2023).*

(5) Numbers in **bold red** exceed the proposed Benchmark Value of 100 mg/L for TSS *(taken from Appendix G of the PAG-03 General Permit, Eff 3/24/2023).*

(6) Numbers in **bold blue** indicate Total Glycol *(Diethylene Glycol, Ethylene Glycol, and Propylene Glycol)* was detected above the detection limits.

Table 3: Additional Stormwater Sampling Information

Reporting Period	Monitoring Start Date	Monitoring End Date	DMR Received Date	Date Sampled	Date of Storm event	Amount of precipitation (in)	Days between sample event and storm event	Outfalls NOT sampled (no flow)
1st Half 2018	01/01/2018	06/30/2019	01/29/2019	03/29/2018	03/29/2018 (03/28/2018)	0.03 (0.11)	0 (1)	008, 011
2nd Half 2018	07/01/2018	12/31/2018	01/29/2019	12/05/2018	12/02/2018	0.37	3	008, 009, 011
1st Half 2019	01/01/2019	06/30/2019	06/11/2019	3/21/2019	3/21/2019	2.11	0	008, 009, 011
2nd Half 2019	07/01/2019	12/31/2019	02/24/2020	11/21/2019	11/12/2019	0.22	9	007, 008, 009, 010, 011
1st Half 2020	01/01/2020	06/30/2020	05/06/2020	03/23/2020	03/23/2020	0.37	0	008, 011
2nd Half 2020	07/01/2020	12/31/2020	02/03/2021	11/30/2020	11/30/2020	1.06	0	011
1st Half 2021	01/01/2021	06/30/2021	07/26/2021	03/18/2021	03/18/2021	0.11	0	007, 008, 011
2nd Half 2021	07/01/2021	12/31/2021	01/27/2022	12/14/2021	11/13/2021	0.19	31	003, 004, 007, 008, 009, 010, 011
1st Half 2022	01/01/2022	06/30/2022	04/19/2022	02/15/2022	02/4/2022	1.22	10	002, 003, 004, 005, 007, 008, 011
2nd Half 2022	07/01/2022	12/31/2022	03/23/2023	11/18/2022	11/18/2022 (11/15/2022)	Trace (<0.1)	0 (3)	002, 004, 005, 006, 008, 011, 012
1st Half 2023	01/01/2023	06/30/2023	04/13/2023	*unknown*	*unknown*	*unknown*	*unknown*	008, 011
2nd Half 2023	07/01/2023	12/31/2023	**Not Due until 1/28/2024**					

Table 4. Summary of IMP 105 (4Q2018 to 3Q2023).

Sampling Frequency = 1/quarter.

Sampling Event	DMR Received	Date Sampled	TSS (mg/L)	Benzene (mg/L)	Vinyl Chloride (mg/L)	Trichloroethene (mg/L)	Cis-1,2-dichloroethene (mg/L)
***Permit Limit** (Mo. Avg.)*			***75***	***0.005***	***0.002***	***0.005***	***0.07***
Permit Limit (IMAX)			*187*	*0.0125*	*0.005*	*0.0125*	*0.175*
1Q2018	*unknown*	03/29/2018	< 5	< 0.001	< 0.001	< 0.001	0.0014
2Q2018	*unknown*	05/16/2018	9	< 0.001	< 0.001	< 0.001	0.0011
3Q2018	*unknown*	10/10/2018	< 5	< 0.001	< 0.001	< 0.001	0.0018
4Q2018	01/29/2019	12/05/2018	17	< 0.001	< 0.001	< 0.001	0.0013
1Q2019	06/11/2019	03/21/2019	6.0	< 0.001	< 0.001	< 0.001	0.001
2Q2019	08/07/2019	06/18/2019	6.0	< 0.001	< 0.001	< 0.001	0.001
3Q2019	11/13/2019	08/27/2019	6.0	< 0.0001	< 0.0005	0.00074	0.0013
4Q2019	02/19/2020	11/21/2019	11	0.0001	< 0.001	0.001	0.0013
1Q2020	05/06/2020	03/23/2020	< 5	< 0.001	< 0.001	< 0.001	0.0012
2Q2020	06/16/2020	05/21/2020	11	< 0.005	< 0.001	< 0.001	0.0015
3Q2020	11/13/2020	08/11/2020	40	< 0.001	< 0.0010	< 0.0010	0.0012
4Q2020	02/03/2021	11/30/2020	11	< 0.001	0.001	< 0.001	0.0011
1Q2021	04/23/2021	03/18/2021	14	< 0.001	< 0.001	< 0.001	<0.001
2Q2021	07/26/2021	05/20/2021	13	< 0.005	< 0.0005	0.00082	0.0014
3Q2021	11/01/2021	08/31/2021	5	< 0.001	< 0.001	< 0.001	0.0012
4Q2021	01/31/2022	12/14/2021	12	< 0.0005	< 0.0005	0.00077	0.0012
1Q2022	04/25/2022	02/15/2022	5	< 0.001	< 0.001	0.002	0.0011
2Q2022	08/02/2022	05/20/2022	9	< 0.001	< 0.001	< 0.001	0.0012
3Q2022	12/01/2022	08/31/2022	6	< 0.0005	< 0.0005	0.00062	0.0011
4Q2022	03/23/2023	11/18/2022	5	< 0.001	< 0.001	< 0.001	0.0012
1Q2023	04/13/2023	*unknown*	10	< 0.005	< 0.002	< 0.005	0.0011
2Q2023	08/01/2023	*unknown*	< 5	< 0.005	< 0.002	< 0.005	0.0012
3Q2023	10/30/2023	*unknown*	8	< 0.005	< 0.002	0.00053	0.0012
4Q2023	**Not due until 1/28/2024**						

Note: The permit limits for MH105 were not exceeded between the 4Q2018 and 3Q2023.

Attachment A.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

October 15, 2020

VIA ELECTRONIC MAIL

Jessica Silcox
Susquehanna Area Region Airport Authority
1 Terminal Dr Suite 300
Middletown, PA 17057-5045

Re: Administrative Extension
Harrisburg International Airport
Application No. PAS803501
Authorization ID No. 1300845
Lower Swatara Township, Dauphin County

Dear Ms. Silcox:

The Department of Environmental Protection (DEP) received your application for an individual NPDES permit on December 24, 2019. DEP has reviewed the application and has determined that it is complete.

However, the application was not submitted at least 180 days prior to the existing permit's expiration date and prior permission was not granted for submission at a later date, in violation of DEP's regulations at 25 Pa. Code § 92a.75(a). DEP grants that permission by this letter. If an enforcement action will be pursued for the late application, you will be notified in writing.

In the event that DEP cannot reissue the permit prior to the expiration date, in accordance with 25 Pa. Code § 92a.7, the terms and conditions of your permit will be administratively extended.

If you have any questions, please contact me at 717.705.4812 or bfruchtl@pa.gov.

Sincerely,

Brenda J Fruchtl

Brenda J. Fruchtl, P.G.
Licensed Professional Geologist
Clean Water Program

Southcentral Regional Office
909 Elmerton Avenue | Harrisburg, PA 17110-8200 | 717.705.4800 | Fax 717.705.4760
www.dep.pa.gov

Attachment B.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

October 16, 2020

VIA ELECTRONIC MAIL

Jessica Silcox
Susquehanna Area Region Airport Authority
1 Terminal Drive Suite 300
Middletown, PA 17057-5045

Re: Technical Deficiencies
Harrisburg International Airport
Application No. PAS803501
Authorization ID No. 1300845
Lower Swatara Township, Dauphin County

Dear Ms. Silcox:

The Department of Environmental Protection (DEP) has initiated its technical review of your application for an individual NPDES permit. We have determined that your application contains technical deficiencies that must be addressed before DEP may resume its technical review. Please address the following deficiencies within 15 business days from the date of this letter:

A. The following technical deficiencies were found in the **NPDES Application for Individual Permit to Discharge Industrial Stormwater** and need addressed:
   1. General Information Section (p.1).
      a. SIC Code information is blank. COMPLETE THIS SECTION

   2. Facility and Discharge Information Section (p.2.).
      a. Total Area of Site is blank. COMPLETE THIS SECTION
      b. Type or Description of Plan. Date of Latest Plan Update is blank and PPC was not attached as indicated. COMPLETE THIS SECTION. SUBMIT A COPY OF THE MOST RECENT PPC PLAN.
      c. Outfall Locations and Receiving Table (Item 7, p.3) needs REVIEWED AND RESUBMITTED as some of the information is incorrect as follows:
         i SW006a. This needs reassigned a 3-digit identification number (numeric only). *See p.5 of the application instructions (eg.013)*
         ii SW012. The latitude and longitude for this outfall need corrected.
         iii MH105. The latitude and longitude for this outfall need corrected.

   3. Stormwater Sampling Results (p.10 and 11).
      a. Item 1. All outfalls have incomplete sampling results. Total Nitrogen and Total Phosphorus is not reported for any of the outfalls. You must report at least one analysis for each pollutant listed. *See p. 8 of the application instructions*. SUBMIT SAMPLE RESULTS FOR ALL THE REQUIRED POLLUTANTS.

Southcentral Regional Office
909 Elmerton Avenue | Harrisburg, PA 17110-8200 | 717.705.4800 | Fax 717.705.4760
www.dep.pa.gov

b. Item 4. Storm event information is blank. *See p. 8 of the application instructions*. COMPLETE THIS SECTION FOR ALL THE OUTFALLS.
c. All samples must be collected within 30 minutes (or as soon thereafter as practicable) of the discharge resulting from a qualifying storm event. *Refer to page 7 of the application instructions*. VERIFY THAT ALL SAMPLES TAKEN AND REPORTED MET THESE REQUIREMENTS.

B. **Additional information is needed for MH105.** There is no information regarding the source of the VOCs detected in the water at MH105, the treatment, or the ultimate discharge location for MH105. Provide additional information for this Outfall.
1. As a starting point, COMPLETE, MODULE 2 – GROUNDWATER REMEDIATION SYSTEMS, which is part of the NPDES Application for Individual Permit to Discharge Industrial Wastewater.
a. Module 2 and Module 2 Instructions can be found at the following link: http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=3671

2. Provide any additional information that would be helpful for understanding the contamination source, history, and treatment for MH105.

For additional information regarding the above technical deficiencies, please reference the **NPDES Application for Individual Permit to Discharge Industrial Stormwater Instructions found at the following link:**
http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=3670

If you will require more time to respond to these deficiencies, or to discuss the deficiencies, please contact Brenda Fruchtl, P.G. at 717.705.4812 or bfruchtl@pa.gov. If your application is part of DEP's "Permit Decision Guarantee" Policy, the guarantee is considered void.

Sincerely,

Scott Arwood

Scott M. Arwood, P.E.
Environmental Engineer Manager
Clean Water Program

Attachment C.

Fruchtl, Brenda

From: Silcox, Jessica <JessicaS@SARAA.org>
Sent: Friday, December 22, 2023 11:04 AM
To: Fruchtl, Brenda; Dock, Heather
Subject: [External] RE: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.

Follow Up Flag: Follow up
Flag Status: Completed

ATTENTION: This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the Report Phishing button in Outlook.

I updated my calculations, was missing some quantities, we used 25,000 gallons of propylene glycol. My last email for the day.

From: Silcox, Jessica
Sent: Friday, December 22, 2023 10:49 AM
To: Fruchtl, Brenda <bfruchtl@pa.gov>; Dock, Heather <hdock@pa.gov>
Subject: RE: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.

I'm also sending the revised November 2022 ECP on a flashdrive in the mail to you. The file was too large to email. Have a wonderful holiday!

From: Silcox, Jessica
Sent: Friday, December 22, 2023 10:44 AM
To: Fruchtl, Brenda <bfruchtl@pa.gov>; Dock, Heather <hdock@pa.gov>
Subject: RE: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.

At HIA we've used about 9,000 gallons of propylene glycol.

From: Silcox, Jessica
Sent: Tuesday, December 19, 2023 3:45 PM
To: Fruchtl, Brenda <bfruchtl@pa.gov>; Oliver, Heather <Heather.Oliver@saraa.org>
Subject: RE: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.

Hi Brenda,

I am getting the deicing usage for 2023 from all our deicing tenants now and will update my information below. Pls see my responses below. I will also update the deicing table to be more specific to the type of PG used.

1

From: Silcox, Jessica
Sent: Friday, December 15, 2023 11:09 AM
To: Fruchtl, Brenda <bfruchtl@pa.gov>
Cc: Dock, Heather <hdock@pa.gov>
Subject: FW: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.

I sent HIA's Environmental Contingency Plan in its entirety and your email couldn't accept it. I am just attaching Figure 3, HIA Stormwater Discharge Plan.

From: Silcox, Jessica
Sent: Friday, December 15, 2023 9:00 AM
To: 'Fruchtl, Brenda' <bfruchtl@pa.gov>
Cc: Dock, Heather <hdock@pa.gov>
Subject: RE: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.

Good morning Brenda,
I will work on responses for a good part of the day and I'm out the rest of the afternoon. I will work to have complete responses to you by mid-week.
Attached is a PDF of Figure 3, page 60 of the file.
Jessica

From: Fruchtl, Brenda <bfruchtl@pa.gov>
Sent: Friday, December 15, 2023 7:47 AM
To: Silcox, Jessica <JessicaS@SARAA.org>
Cc: Dock, Heather <hdock@pa.gov>
Subject: Status update request. Re: More questions. RE: Technical Review. Renewal. NPDES Permit No PAS803501 HIA.
Importance: High

Good Morning Jessica.

Do you have an ETA for providing me with the additional information I requested on 12/4/2023? I need responses to those 4 items so I can finish my review.

While you gather the other information, please email me a PDF of the "Storm Collection and Discharge Plan Figure 3" so I can zoom in and see the details more easily to work on my review. (I am assuming this is something you most likely already have electronically).

Thank you
Brenda Fruchtl, P.G.
DEP - SCRO | Clean Water Program - Permitting
Ph: 717.705.4812

DEP is now accepting permit and authorization applications, as well as other documents and correspondence, electronically through the OnBase Electronic Forms Upload tool. Please use the link below to view the webpage, get instructions, and submit documents:
https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx

From: Silcox, Jessica <JessicaS@SARAA.org>
Sent: Monday, December 4, 2023 3:55 PM
To: Fruchtl, Brenda <bfruchtl@pa.gov>

Cc: Dock, Heather <hdock@pa.gov>
Subject: [External] Re: More questions. RE: Technical Review. Additional questions. Renewal. NPDES Permit No PAS803501 HIA.

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Hi Brenda, I am unavailable this week for jury duty and will respond to the following week.

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From: Fruchtl, Brenda <bfruchtl@pa.gov>
Sent: Monday, December 4, 2023 12:03:11 PM
To: Silcox, Jessica <JessicaS@SARAA.org>
Cc: Dock, Heather <hdock@pa.gov>
Subject: More questions. RE: Technical Review. Additional questions. Renewal. NPDES Permit No PAS803501 HIA.

Hi Jessica. Thank you for your responses on October 6, 2023.

I have a few more questions / information requests to continue my review of the renewal for PAS803501:

1. Is September 2022, the date of the most recent PPC plan?

The last revision of HIA's Environmental Contingency Plan (ECP) is dated November 2022 that contains three separate documents:

1. PPC to comply with the NPDES Industrial Stormwater Permit
2. SPCC to comply with the federal and state storage tank regulations. HIA has an aggregate of AST fuel storage that requires a SPCC plan.
3. Dauphin County's Emergency Off-Site Response Plan

I will have to mail you a flashdrive unless you want it a paper copy, I can print and someone from PADEP can pick it up from our Administrative Offices.

2. Can you email me the most current "**Figure 3 Storm Collection and Discharge Plan**" from the PPC Plan (so I can zoom in to read it easier)? If it's too large, you could upload it to OnBase and notify when you have completed the upload so I can search for it. It's hard for me to decipher and read the paper copy because it's too small.

I emailed the Figure 3 Storm Collection and Discharge Plan ast week to you and it is included in the ECP as well. LMK if you want me to reattach to this email.

3. Please **Complete the below table.**
   a. For each Outfall, provide the percentage of impervious area draining to that outfall. This information was left blank on the permit application (Table 9).
   b. Provide a brief description of the Type(s) of Industrial Activity draining to each outfall (eg Taxiway A; Bldgs 601 etc; parking lot no; deicing activities; maintenance activities; fueling operations; grassy area; etc). This information was not provided on the permit application, Table 9 only listed the potential pollutants for each Outfall.

c. For each Outfall, provide the Storm Collection Area(s) (that are shown and outlined in bold black in Figure 3) that drain to that outfall. For example, it appears that the entirety of Storm Collection Area 12 drains to Outfall 009 – is this correct?
   i. For Outfall 013 (006a), I can't decipher which Storm Collection Area(s) drain to Outfall 013.
d. Provide the Oil and Water Separator number (if applicable) for each outfall (eg Oil/Water separator #001 – flows to Outfall 001?? – I can't decipher this information from Figure 3)
e. For each Outfall, list the copermittee(s) that contribute stormwater to that Outfall (as applicable). All copermittees listed in your October 6, 2023 email below should be represented.

Outfall No	%Impervious	Type(s) of industrial Activity.	Associated Storm Collection Area(s) (Figure 3)	Associated Oil and Water Separator (if applicable)	Copermittee(s) within Drainage Area going to the Outfall
001	60%	None	1	None	None
002	75%	Fueling / Deicing	2	Avflight Bldg HIA-OWS-11 Leading Edge Bldg HIA-OWS-12	MI Windows Avflight Leading Edge Piedmont
003	80%	Fueling / Deicing	3		Avflight
004	80%	Only fueling on the landside. No industrial activity on the airside.	4		Landside – SARAA Fueling only
005	75%	Fueling and Deicing	5	SARAA HIA-OWS-9	Avflight, American, Delta, Fontier/Allegiant, United
006	60%	Fueling and Deicing	7	SARAA HIA-OWS-8	American, Delta, United
013 (006a)	50%	None at this point until the entire cargo apron expansion project is complete and there will be deicing and fueling on the new cargo apron.	11		2025- UPS and FEDEX
007	60%	None at this point until the entire cargo apron expansion project is	11		2025 - UPS and FEDEX

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		complete and there will be deicing and fueling on the new cargo apron			
008	60%	None	13		None
009	50%	None	12		None
010	50%	Fueling and Deicing	9	PAANG Building 83 PAANG-OWS-7	PA Air National Guard
011	50%	Fueling and Deicing	8		PA Air National Guard
012	75%	Fueling and Deicing	6	SARAA HIA-OWS-4 National HIA-OWS-5	PAANG, UPS, American, Delta, Allegiant/Frontier, United, Avflight

4. **Questions about deicers.**
   a. Please confirm which deicers are used at the airport. Is "Table 2C HIA Deicing and Antifreeze inventory list" in Appendix B of the September 2022 PPC plan up to date?

Yes, Table 2C HIA Deicing and Antifreeze Inventory List that is the plan dated, November 2022 PPC, is the up to date list of deicers at HIA. There is an additional 1 – 9,000 gallon Potassium Acetate Tank that is located at the SARAA Facility Maintenance / ARFF Location.
HIA uses Type 1 and 4 propylene glycol, ethylene glycol is prohibited at HIA and we do not use urea at all.

SARAA Grounds Maintenance – 3 – 9,000 gallon Potassium Acetate
American Airlines / Piedmont – 5,000 gallon PG
Delta Airlines - Type 1 – 6,000 gallons, Type 4 – 5,000 gallons, 1,450 gallons PG
United Airlines – 8,000 gallons PG
FEDEX – 10,000 gallons Type 1 and totes
UPS – 8,500 gallon Type 1, 6,000 gallon Type IV and totes
PAANG – 5,000 gallon Type 1 PG

   b. How much (approximately) deicers are used at the facility?
   c. Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures, subject to effluent limitation guidelines in 40 CFR Part 449. Does the facility (or any of the copermittees) use urea as a deicer? If so, provide additional details such as the Outfalls that may be affected.
The Airport does not use any urea type deicers on our campus, only deicers used are propylene glycol and potassium acetate.

   d. Do all the outfalls have the potential to include deicer runoff in their stormwater?

The majority of the deicing activities takes place around the ramp area of the Terminal Building. The planes are pushed back from their respective jet bridge and deiced. The majority of the deicer is on the pavement evaporates and doesn't make it into the storm drain system unless it's raining or snowing. The stormwater from the airfield runs off into the Airport's stormwater conveyance system as shown on Figure 3 Stormwater Collection and Discharge Plan. The new cargo apron will have a deicing

collection system installed to collect deicers on the new apron. The stormwater from the new cargo apron will be conveyed to outfall 013.

Please provide this information to me within the next 2 weeks so I can continue to work towards getting a permit drafted.

Thank you.
Brenda Fruchtl, P.G.
DEP - SCRO | Clean Water Program - Permitting
Ph: 717.705.4812

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From: Silcox, Jessica <JessicaS@SARAA.org>
Sent: Friday, October 6, 2023 9:50 AM
To: Fruchtl, Brenda <bfruchtl@pa.gov>
Cc: Dock, Heather <hdock@pa.gov>; Arwood, Scott <sarwood@pa.gov>
Subject: [External] RE: Technical Review. Additional questions. Renewal. NPDES Permit No PAS80301 HIA. **RESPONSE REQUIRED**

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Good morning Brenda—thanks for reaching out to me!

Here are my answers in red. Pls LMK if there's any other information you need from me for the renewal. Thanks for your assistance always.

Have a great weekend.
Jessica

From: Fruchtl, Brenda <bfruchtl@pa.gov>
Sent: Wednesday, October 4, 2023 9:49 AM
To: Silcox, Jessica <JessicaS@SARAA.org>
Cc: Dock, Heather <hdock@pa.gov>; Arwood, Scott <sarwood@pa.gov>
Subject: Technical Review. Additional questions. Renewal. NPDES Permit No PAS80301 HIA. **RESPONSE REQUIRED**

Good Morning Jessica.

I am working on the renewal for NPDES Permit No PAS80301 HIA. I have a few questions I need addressed before I can proceed with drafting the permit.

1. **Questions regarding the discharge at MH105** from the permanent dewatering system from the basement of the HIA Terminal building.

    a. Is there a groundwater remediation system attached to this dewatering system? Or is there no remediation system for the groundwater being pumped from the basement?

There are two different things happening here.

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1. There is no groundwater remediation system attached to the dewatering from the basement that goes to MH105. The state PADEP permitted this discharge through the current HIA NPDES Industrial Stormwater permit. We have a grant agreement with PADEP for a treatment design for MH105.

   i. The reason I am asking is because the 3/30/2021 cover letter for the revised renewal application mentioned "HIA continues to operate the groundwater remediation system to treat the VOCs." I am assuming this is referring to the treatment system for the drinking water system, correct?

2. The groundwater remediation system is referring to the drinking water system, correct.

   a. What is the maximum and average discharge rate / flow rate from the dewatering system to MH105?

   Our maintenance department does not meter the discharge / flow rate.

3. Question about the copermittees. Please provide a revised list of the copermittees that will be included in Part C the renewed NPDES Permit.

   The current list of copermittees include:

   American - One Terminal Drive, Middletown, PA 17057
   Allegiant – One Terminal Drive, Middletown, PA 17057
   Delta – One Terminal Drive, Middletown, PA 17057
   Frontier – One Terminal Drive, Middletown, PA 17057
   United Airlines – One Terminal Drive, Middletown, PA 17057
   MI Windows – 604 Airport Drive, Middletown, PA 17057
   Hershey Leading Ops – 605 Airport Drive, Middletown, PA 17057
   Piedmont Airlines – 601 Airport Drive, Middletown, PA 17057
   Avflight Harrisburg – 603, 517 Airport Drive, 3 Terminal Drive, Middletown, PA 17057
   UPS – 100 Airport Drive, Middletown, PA 17057
   FEDEX – 100 Airport Drive, Middletown, PA 17057

Please provide a response to the above questions by the end of next week, Friday, October 13, 2023. Feel free to reach out if you will need more time.

Brenda Fruchtl, P.G. | Licensed Professional Geologist
Department of Environmental Protection | Clean Water Program
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909 Elmerton Avenue | Harrisburg, PA 17110
Phone: 717.705.4812 | Fax: 717.705.4760
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24-hour toll free Emergency Response number for SCRO: 1-800-541-2050

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