INTEGRATED CONTINGENCY PLAN (ICP)

January 10, 2018

DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

Willow Run Wayne County Airport
Ypsilanti, Michigan

Prepared by:

Wayne County Airport Authority
Department of Environment & Sustainability
Berry Administration Building – 2nd Floor
Detroit Metropolitan Airport
Romulus, Michigan

EMERGENCY CONTACTS LIST

1. All Spills - Inform your Supervisor immediately.

2. If Spill is ***GREATER THAN*** Five (5) Gallons (Fuel or Oil) call the Willow Run Airport (YIP) Airfield Rescue and Fire Fighting (ARFF) Department (ARFF is staffed 24-Hours/Day):

ARFF – Emergency - EMERGENCY (24-hrour)	**911**
ARFF – Non-emergency (24-hour)	**(734) 485-6675**

3. Call the Spill Response Coordinator to determine reporting obligations, if any:

Bryan C. Wagoner, P.E., CHMM – WCAA Spill Response Coordinator	
Office Phone:	**(734) 247-3686**
Cell Phone:	**(734) 576-9582**

4. If Spill Response Coordinator is not available, contact the Environmental Operations Manager:

James Cullen – WCAA Senior Environmental Operations Manager	
Office Phone:	**(734) 942-3748**
Cell Phone:	**(734) 968-2166**

5. Other Contacts (inform the Spill Response Coordinator prior to contacting any of the parties below):

Michigan Department of Environmental Quality (MDEQ; formerly MDEQ):

- *Normal Business Hours (8 a.m. to 5 p.m.)*
  Southeast Michigan (Warren) MDEQ District Office (586) 753-3700
- *After Hours or No-Answer at MDEQ District Office*
  MDEQ Spills/Emergency Hotline (24-Hour) (800) 292-4706

National Response Center	(800) 424-8802
Ypsilanti Communities Utilities Association (spills to sanitary sewer)	(734) 213-5107

Limno-Tech, Inc. (Consultant):

Chris Cieciek	
Office Phone:	**(734) 821-3160**
Cell Phone:	**(734) 929-8286**

Marine Pollution Control (Cleanup Contractor)	(800) 521-8232
US Ecology (Cleanup Contractor)	(800) 539-3975

INFORMATION TO BE REPORTED BY CALLER IS LOCATED ON THE NEXT PAGE.

INFORMATION TO BE REPORTED BY CALLER IN EVENT OF SPILL

CALLER SHOULD PROVIDE THE FOLLOWING INFORMATION:

- ADDRESS AND PHONE NUMBER OF THE AIRPORT LOCATION WHERE SPILL OCCURRED;
- Date and time of spill;
- Type of material spilled;
- Estimate of total quantity spilled;
- Source of the spill;
- Cause of spill;
- Media affected or threatened by the spill (i.e., water, land, air);
- Any damages or injuries caused by the spill;
- Actions being taken to stop or mitigate the spill;
- Whether an evacuation may be needed;
- Weather conditions at the incident location;
- The names of individuals or organizations who have also been contacted;
- Any other information that may help emergency personnel respond appropriately.

MINOR SPILL

A "minor" spill is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor spills are generally those where:

- The quantity of product spilled is small (e.g., involves less than 5 gallons of oil);
- The spill is easily contained and controlled;
- The spill is localized near the source;
- The spilled material is not likely to reach surface waters;
- There is little risk to human health or safety; and
- There is little risk of fire or explosion.

WCAA personnel can usually address **MINOR** spills. The following guidelines apply:

- Immediately notify the **WCAA Supervisor** on duty in the Department involved;
- Call the Spill Response Coordinator to report the spill and determine who else should be notified;
- Under direction of the Supervisor, contain the spill with spill response materials and equipment; Place discharge debris in properly labeled waste containers. Contact the Spill Response Coordinator if you have any questions regarding the proper measures to be followed;
- Notify the **Spill Response Coordinator** if there are questions regarding the spill following clean up.

ADDITIONAL INFORMATION LOCATED ON THE NEXT PAGE.

INFORMATION TO BE REPORTED BY CALLER IN EVENT OF SPILL (CONTINUED)

MAJOR SPILL

A "major" spill is defined as one that cannot be safely controlled or cleaned up by facility personnel, such as:

- The spill is large enough to spread beyond the immediate spill area;
- The spilled material enters on-site storm and/or sanitary sewers;
- The spill requires special equipment or training to clean up;
- The spilled material poses a hazard to human health or safety; or
- There is a danger of fire or explosion.

In the event of a **MAJOR** spill, the following guidelines apply:

- Notify your Supervisor immediately;
- Call 911 to report the spill to the WCAA Airfield Rescue and Fire Fighting Department;
- If spill is flammable and if possible and safe to do so, eliminate potential spark sources;
- If possible and safe to do so, identify and shut down the source of the spill;
- Evacuate the discharge site and move to a safe distance from the spill;
- Call the **Spill Response Coordinator** to report the spill and determine who else should be notified;
- The **Spill Response Coordinator** will call the **Emergency Response Contractor** listed in the ***Emergency Contacts*** list (Page i of this Plan), if necessary;
- The **Spill Response Coordinator** will contact the **MDEQ** and the **National Response Center** (numbers shown on Page i of this Plan), if necessary;
- The **Spill Response Coordinator** will keep a record of all calls;
- The **Spill Response Coordinator** will coordinate cleanup and remediation following the spill, as required.

If the **Spill Response Coordinator** is not available at the time of the spill, the **Environmental Operations Manager** will assume responsibility for Spill Response Coordinator activities.

Wastes resulting from a minor spill response will be collected in appropriate impervious containers. The **Spill Response Coordinator** will characterize the waste for proper disposal.

Wastes resulting from a major spill response will be removed and disposed of by a cleanup contractor in accordance with applicable regulatory requirements.

A COMPLETE COPY OF THE INTEGRATED CONTINGENCY PLAN (ICP) IS MAINTAINED AT THE WCAA OFFICES LOCATED ON THE THIRD FLOOR OF HANGAR #1 AT WILLOW RUN WAYNE COUNTY AIRPORT AND IN THE ENVIRONMENTAL UNIT OFFICE OF THE WCAA LOCATED ON THE MAIN LEVEL OF THE L.C. SMITH TERMINAL, PER 40 CFR 112.3(e)(1).

INTEGRATED CONTINGENCY PLAN CERTIFICATION

FACILITY

Willow Run Wayne County Airport (YIP)
Wayne County Airport Authority (WCAA)
801 Willow Run Airport
Ypsilanti, Michigan 48198
(734) 485-6666

FACILITY MANAGEMENT CERTIFICATION (40 CFR 112.7)

This Integrated Contingency Plan (ICP) will be implemented as described herein.

Name:	Bryan C. Wagoner, P.E. , CHMM
Title:	Director – WCAA Department of Environment & Sustainability
Signature:	Bryan C. Wagoner
Date:	011018

PROFESSIONAL ENGINEER CERTIFICATION STATEMENT (40 CFR 112.3(d))

By means of this certification, I attest that I am familiar with the requirements of provisions of 40 CFR Part 112, that I have visited and examined the facility, that the SPCC plan elements of this ICP have been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of 40 CFR Part 112, that procedures for required inspections and testing have been established and that this Plan is adequate for the facility.

Engineer: Bryan C. Wagoner
(Print Name)

Signature: Bryan C. Wagoner

Title: Director – Department of Environment & Sustainability

Company: Wayne County Airport Authority

Registration Number: Michigan - 41051 Date: 01/10/18

CERTIFICATION OF THE SWPPP

I certify under penalty of law that the SWPPP elements of this ICP have been developed in accordance with good engineering practices. To the best of my knowledge and belief, the information submitted is true, accurate, and complete. In addition, at the time this Plan was completed, no unauthorized discharges were present. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Bryan C. Wagoner
(Certified Operator Signature)

A-li: I-01921, A-ld: W-6151
(Certification Number)

Bryan C. Wagoner, P.E., CHMM
(Printed Name)

01 10 18
(Date)

Bryan C. Wag
(Designated Authorized Signature)

01 10 18
(Date)

Bryan C. Wagoner
(Printed Name)

Director - WCAA Dept. of Environment & Sustainability.
(Title)

A copy of this certification is to be retained with this Plan. The copy with the original signatures is to be submitted to the district MDEQ office.

CERTIFICATION OF APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA (40 CFR 112.3(d))

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Willow Run Wayne County Airport (Wayne County Airport Authority)
FACILITY ADDRESS: Willow Run Airport, 801 Willow Run Airport, Ypsilanti, Michigan 48198

1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No X

2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes _____ No X

3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix K, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix K, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes _____ No X

4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?

Yes _____ No X

5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X

CERTIFICATION

I certify that under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Bryan C. Wagoner, P.E., CHMM
Name (please type or print)

Bryan C. Wag
Signature

Director – Department of Environment & Sustainability
Title

01 10 18
Date

INTEGRATED CONTINGENCY PLAN REVIEW SUMMARY

In accordance with 40 CFR 112.5 (b) A complete review and evaluation of the ***Spill Prevention, Control and Countermeasures (SPCC) Plan*** portion of this ***Integrated Contingency Plan (ICP)*** must be conducted at least once every five (5) years.

In accordance with the Michigan Part 5 Rules, a review and evaluation of the ***Pollution Incident Prevention Plan (PIPP)*** portion of this ICP must be conducted at least once every three (3) years.

In accordance with the requirements of Part I.A of Michigan's National Pollutant Discharge Elimination System (NPDES) Permit No. MIS 420000 for stormwater discharges issued to YIP under Certificate of Coverage MIS 420032 on October 1, 2013, a review and evaluation of the ***Stormwater Pollution Prevention Plan (SWPPP)*** portion of this ICP shall be conducted at least once a year.

In accordance with the requirements of Part I.B.3 of Michigan's National Pollutant Discharge Elimination System (NPDES) Permit No. MIG619000 for stormwater discharges from municipal separate storm sewer systems issued to YIP on November 5, 2004, a review of the ***Stormwater Pollution Prevention Initiative (SWPPI)*** portion of this ICP shall be conducted at least once every two years.

The ICP review documentation is recorded below.

Reviewer (Sign)	Reviewer (Print)	Planning Requirements Reviewed: SPCC, PIPP, SWPPP, or ALL)	Date	Comments (Will/Will Not Amend Plan?)	P.E. Certification
	Bryan C. Wagoner, P.E.	SWPPP	10/31/10	Will	No. 41051
	Bryan C. Wagoner, P.E.	SPCC	10/31/10	Will	No. 41051
	Bryan C. Wagoner, P.E.	PIPP	10/31/10	Will	No. 41051
	Bryan C. Wagoner, P.E.	SWPPP, PIPP, SWPPI	10/31/12	Will	No. 41051
	Bryan C. Wagoner, P.E.	SWPPP, PIPP, SWPPI	07/15/15	Will	No. 41051
Bryan C. Wag 01 10 18	Bryan C. Wagoner, P.E.	SWPPP, PIPP, SWPPI	01/10/18	Will	No. 41051

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LIST OF ABBREVIATIONS

AARF – Air Rescue and Firefighting Division (of Wayne County Airport Authority)

ADF – Aircraft Deicing Fluid

API – American Petroleum Institute

AST – Above-ground storage tank

BMPs – Best Management Practices

BOD – Biological Oxygen Demand

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CFR – Code of Federal Regulations

DMRs – Daily Monitoring Reports

EPA – Environmental Protection Agency

FBO – Fixed-Base Operator

GSE – Ground Support Equipment

ICP – Integrated Contingency Plan

MDEQ – Michigan Department of Environmental Quality

MPC – Marine Pollution Control

MSDS – Material Safety Data Sheet

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

PG – Propylene Glycol (deicing fluid)

PIPP – Pollution Incident Prevention Plan

POTW – Publicly-owned treatment works

SADR – Spent Aircraft Deicing Runoff

SPCC – Spill Prevention Control and Countermeasures

STI – Steel Tank Institute

SWPPI – Stormwater Pollution Prevention Initiative

SWPPP – Stormwater Pollution Prevention Plan

UST – Under-ground storage tank

VBT – Van Buren Township

WCAA – Wayne County Airport Authority

YCUA – Ypsilanti Communities Utilities Association

YIP – Willow Run Airport

1.0 Introduction/Summary of Regulatory Requirements

Willow Run Wayne County Airport (YIP), operated by the Wayne County Airport Authority (WCAA) stores significant materials in excess of regulated quantities and therefore has developed a plan to prevent, contain, and respond to releases under the following regulations:

- Part 112 (Oil Pollution Prevention) Title 40, Code of Federal Regulations (40 CFR) – Spill Prevention Control and Countermeasure Plan (SPCC);
- Michigan Part 5 Spillage of Oil and Polluting Materials Rules (MI Part 5) pursuant to Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451 - Pollution Incident Prevention Plan (PIPP);
- Michigan Act 451 – NPDES Permit MIS420000 – Industrial Stormwater Pollution Prevention – Stormwater Pollution Prevention Plan (SWPPP).
- Michigan Act 451 – NPDES Permit MIG619000 – Municipal Separate Storm Sewer System (MS4) General Watershed Permit – Stormwater Pollution Prevention Initiative (SWPPI).

This plan is an Integrated Contingency Plan (ICP) that consolidates the requirements of the four applicable regulations to provide one comprehensive spill prevention and response plan. The ICP contains a discussion of the regulatory requirements applicable to YIP and includes a matrix table that lists the applicable regulatory requirements and indicates where that requirement is covered in this Plan.

This ICP has been created to describe the procedures, methods, and equipment to be used at YIP to prevent oil, other polluting materials and hazardous waste from impacting surface and ground waters through spills, seepage, discharge, and/or runoff from YIP.

A *YIP Site Location Map* (FIGURE 1) of the YIP area is included in the *FIGURES* Section of this Plan. A *YIP Site Buildings Map* (FIGURE 2), indicating locations of WCAA operations, as well as YIP tenants, is included in the in the *FIGURES* Section of this Plan. The *YIP Drainage System Map* (FIGURE 3) is also included in the *FIGURES* Section of this Plan.

This Integrated Contingency Plan for YIP was prepared in accordance with the following requirements:

- United States Environmental Protection Agency (EPA), pursuant to Code of Federal Regulations (CFR), 40 CFR Part 112, governing Spill Prevention Control and Countermeasure (SPCC) planning requirements; and
- State of Michigan General Rules Part 5, Spillage of Oil and Polluting Materials, enforced by the MDEQ (formerly MDEQ) pursuant to Rules (R) 324.2001 to R 324.2009 governing Pollution Incident Prevention Plan (PIPP) requirements; and
- U.S. EPA, pursuant to Code of Federal Regulations (CFR), 40 CFR Part 122-124, governing Stormwater Pollution Prevention Plan (SWPPP) requirements; and
- State of Michigan requirements of Part I. A of Michigan's National Pollutant Discharge Elimination System (NPDES) Permit No. MIS 420000 for stormwater discharges [requiring an Industrial Stormwater Pollution Prevention Plan (SWPPP)]. NPDES Permit No. MIS 420000 is included in APPENDIX A.
- State of Michigan requirements of Parts I. A&B of Michigan's National Pollutant Discharge Elimination System (NPDES) Permit No. MIG619000 for stormwater discharges from municipal separate storm sewer systems as described in the Stormwater Pollution Prevention Initiative (SWPPI) for YIP. NPDES Permit No. MIG 610000 is included in APPENDIX B. The YIP SWPPI is included in APPENDIX C.

NOTE: The SPCC/PIPP information contained in this Plan pertains to the storage and handling of oil and other polluting materials owned by WCAA only. The WCAA requires its tenants to comply with applicable local, state and federal regulations through the use of lease language. As such, each tenant is responsible for development of a Spill Management Plan, SPCC, PIPP or combination thereof for its own oil and/or polluting material storage and handling, if applicable. The associated tenant plans are included in *Tenant Spill Prevention Containment and Countermeasure / Pollution Incident Prevention Plans* (APPENDIX K) of this ICP for reference purposes only.

1.1 SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)

YIP exceeds the Federal 1,320-gallon oil storage threshold requiring the preparation of a Spill Prevention Control and Countermeasure Plan (SPCC).

This Integrated Contingency Plan contains the required elements of the YIP ***Spill Prevention Control and Countermeasure (SPCC) Plan*** that has been prepared in accordance with Part 112 (Oil Pollution Prevention) Title 40, Code of Federal Regulations (40 CFR) as revised, and proposed to become effective November 10, 2010. The purpose of the SPCC Plan is to establish procedures, methods, equipment, and other measures to prevent the discharge of oil to navigable waters.

In accordance with 40 CFR 112.5 (b) A complete review and evaluation of the Spill Prevention, Control and Countermeasures (SPCC) Plan portion of this ICP will be conducted at least once every five (5) years.

1.2 STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

This Integrated Contingency Plan contains the information required by National Pollutant Discharge Elimination System (NPDES) Permit No. MIS 420000, Part I.C, issued to YIP by The Michigan Department of Environmental Quality (MDEQ), for a ***Stormwater Pollution Prevention Plan (SWPPP)***. YIP is the sole-permittee on this permit. This permit is included in APPENDIX A.

The SWPPP elements of this ICP describes the YIP facility, identifies significant material storage areas, recommends appropriate non-structural and structural controls to reduce the discharge of pollutants in stormwater runoff, and provides for periodic review of the SWPPP. This SWPPP has been developed to:

- Identify existing and potential sources of significant materials[1] in YIP stormwater discharges;
- Describe best management practices (BMPs) to reduce the quantity of significant materials entrained in YIP stormwater discharges, including the use of both non-structural (inspections, spill response procedures, and employee training programs), and structural controls.

The YIP SWPPP became effective September 20, 2002 and has been updated several times since then.

All Figures referenced in the SWPPP portion of this ICP are included in the *FIGURES* Section; Tables are included in the *TABLES* Section.

1.2.1 Non-Structural Control Implementation Schedule

All non-structural controls specified in this ICP have been implemented.

1.2.2 Structural Control Implementation Schedule

All structural controls specified in this ICP have been implemented.

1.2.3 Plan Update Schedule

The following actions will be taken to keep this SWPPP current:

- The SWPPP portion of this ICP will be reviewed once every year and amended as needed to comply with the terms and conditions of the YIP stormwater discharge permit. Specifically, the ICP will be amended to reflect the implementation of additional non-structural and structural control measures.
- The ICP will be updated or amended whenever use of significant materials at YIP increases the potential for exposure of significant materials to stormwater.

[1] A significant material is defined by the State of Michigan as any material which could degrade or impair water quality, including, but not limited to: raw materials; fuels; salt, solvents, detergents, and plastic pellets; finished materials, such as metallic products; hazardous substances designated under Section 101 (14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (See 40 CFR 372.65); any chemical the facility is required to report pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); polluting materials as identified under the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code); Hazardous Wastes as defined in Part 111 of the Michigan Act; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges.

1.3 POLLUTION INCIDENT PREVENTION PLAN (PIPP)

Willow Run Wayne County Airport is an on-land facility that stores oil and other polluting materials above threshold management quantities, and therefore is also required by the State of Michigan to maintain a Pollution Incident Prevention Plan (PIPP).

This Integrated Contingency Plan includes the required elements of the ***Pollution Incident Prevention Plan (PIPP)***, which has been prepared in accordance with the Michigan Part 5 Spillage of Oil and Polluting Materials (MI Part 5) rules pursuant to Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as revised effective August 31, 2001.

In accordance with the Michigan Part 5 Rules, a review and evaluation of the Pollution Incident Prevention Plan (PIPP) portion of this ICP must be conducted at least once every three (3) years.

1.4 STORMWATER POLLUTION PREVENTION INITIATIVE (SWPPI)

This Integrated Contingency Plan contains the information required by National Pollutant Discharge Elimination System (NPDES) Permit No. MIG 619000, Parts I. A. & B., issued to YIP by The Michigan Department of Environmental Quality (MDEQ). This permit is for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) Subject to Watershed Plan Requirements. The element of this permit included in this ICP is a ***Stormwater Pollution Prevention Initiative (SWPPI)***. This permit and the YIP SWPPI are included in APPENDIX B. The YIP SWPPI is included in APPENDIX C.

The SWPPI elements of this ICP describes: how the WCAA will participate in the Lower One Subwatershed Plan (Association of Rouge Communities); measures that will be implemented to ensure new construction by the WCAA and YIP tenants comply with soil erosion requirements and post-construction runoff restrictions; and Illicit Discharge Elimination and Public Education Plan implementation.

The YIP SWPPI became effective October 23, 2007. Annual reports have been submitted annually since then. SWPPI reports are due every two years effective October 1, 2012.

1.5 COMPLIANCE WITH APPLICABLE REQUIREMENTS

This section discusses the various regulations covered in this ICP.

1.5.1 SPCC Regulations

Facility drainage at YIP is designed to meet the requirements under 112.8(b)(3) using secondary containment structures to retain oil at the facility in the event of an uncontrolled spill. The operational and emergency oil storage capacity of the dike that surrounds the Fuel Farm, all secondary containment equipment, and the three oil/water separator systems at YIP are sufficient to contain spills of oil from WCAA owned oil tanks, drums, and handling equipment while preventing a discharge to navigable waters.

Non-destructive integrity evaluations are performed on the 50,000-gallon, 30,000-gallon, and 3,000-gallon ASTs in the fuel farm, but not on smaller shop-built tanks and 55-gallon storage drums. All 55-gallon storage drums located in Maintenance Building #2620 are stored on spill containment pallets. All drums are visible, and facility personnel would detect any leak before they can cause a discharge to navigable waters or adjoining shorelines during routine inspections. Corrosion poses minimal risk of failure because drums are single-use and remain on site for a relatively short period of time (less than one year). This is in accordance with accepted industry practice for drum storage and provides an effective means of verifying container integrity, as noted by EPA in the preamble to the SPCC rule at 40 CFR 47120.

All drainage from developed areas within the YIP property boundary flows to one of six stormwater collection systems. One of these collection systems is served by an oil water separator system which affords a potential collection location for oil and other floating contaminants. The remaining five collection systems discharge directly to surface water as shown on FIGURE 3.

In the event a large oil spill from WCAA or tenant operations reaches a stormwater catch basin, the responding WCAA personnel (Airfield Rescue and Fire Fighting or Operations Departments) notify the WCAA SPCC Coordinator. Following this notification, any oil/water separator system that may be involved will be identified and monitored to determine if significant quantities of oil have collected in the separator. If collectable quantities of oil are present in the separator, clean up procedures will be conducted. If a spill occurs in any YIP stormwater collection systems not served by a separator, the procedures discussed earlier for minor and major discharge responses will be employed immediately.

1.5.2 SWPPP / PIPP Regulations

All existing non-stormwater discharges that currently occur at YIP are authorized by NPDES Permit No. MIS 420000 (APPENDIX A). Unauthorized stormwater discharges are prevented through the use of one or a combination of the following steps:

- Facility site inspection;
- Interview with facility maintenance personnel;
- Inspection of facility storm drain piping schematics;
- Dye test of facility floor drains and/or plumbing fixtures.

Non-stormwater discharges occurring at YIP which are authorized by Part I.D.3 of the YIP NPDES permit include the following: fire-fighting activities, fire hydrant flushing, air conditioning condensate discharges, and foundation or footing drains discharges. Except for occasional fire-fighting activities, stormwater is not impacted by the above non-stormwater discharges.

Certification of the absence of unauthorized non-stormwater discharges is located on Page vii of this Plan.

1.5.3 SWPPI Regulations

All existing

- ;
- ;;
-
- Dye test of facility floor drains and/or plumbing fixtures.

1.5.4 AST Regulations

All ASTs at YIP requiring state registration are properly registered and all required annual inspection fees are paid. All required overfill protection is in place and functional on all regulated ASTs.

1.6 REGULATORY CROSS-REFERENCE MATRIX

This Integrated Contingency Plan (ICP) addresses the regulatory requirements associated with the SPCC, SWPPP, PIPP, and SWPPI. The matrix included in this section identifies specific individual plan elements, their regulatory reference, and the section and page number where these elements can be located within this ICP. The matrix below, *Regulatory Reference Table*, outlines the requirements for the SPCC, PIPP, SWPPP, and SWPPI plans, respectively. SPCC Regulatory References note the Federal Register; SWPPP Regulatory References note National Permit Discharge Elimination System Permit No. MIS 420000; PIPP Regulatory References note the Michigan Statute Administrative Rules; and SWPPI References note National Permit Discharge Elimination System Permit No. MIG 619000.

REGULATORY REFERENCE TABLE – SPCC, SWPPP, PIPP, & SWPPI REQUIREMENTS

SPCC REQUIREMENTS			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Certification	40 CFR 112.3(d)	-	v
SPCC plan amendment	40 CFR 112.4(a-f) and 112.5(a-c)	3.6	3.4, 3.5
SPCC plan review	40 CFR 112.5(b)	3.6	3.4, 3.5
SPCC evaluation log	40 CFR 112.5(b)	-	viii
Management approval	40 CFR 112.7	-	Iv
Conformance with 40 CFR 112.7	40 CFR 112.7(a)(1)	1.4	1.4
Deviation from applicable requirements of 40 CFR 112.7	40 CFR 112.7(a)(2)	1.4	1.4
Facility information	40 CFR 112.7(a)(3)	4.0	4.1
Facility description	40 CFR 112.7(a)(3)	4.1	4.1
Bulk storage tanks	40 CFR 112.7(a)(3)(i)	5.5	5.1.2
Discharge prevention measures	40 CFR 112.7(a)(3)(ii)	6.0 / 7.0	6.1 – 7.6
Discharge controls	40 CFR 112.7(a)(3)(iii)	6.0 / 7.0	6.1 – 7.6
Countermeasures	40 CFR 112.7(a)(3)(iv)	3.2	3.1
Methods of disposal	40 CFR 112.7(a)(3)(v)	3.2.4	3.4
Contact list	40 CFR 112.7(a)(3)(vi)	-	I
Discharge reporting procedures	40 CFR 112.7(a)(4)	3.4	3.3
Emergency response procedures	40 CFR 112.7(a)(5)	3.0	3.1
Potential spill predictions, volumes, rates and controls	40 CFR 112.7(b)	TABLES	TABLE A
Containment and diversionary structures	40 CFR 112.7(c)(1)(i-vi)	8.3	8.1
Location of spill response equipment	40 CFR 112.7(c)(1)(vii)	3.2	3.3
Secondary containment systems	40 CFR 112.7(c)(1)(i)	7.0	7.4 – 7.6
Demonstration of practicability	40 CFR 112.7(d)	8.6	8.2
Inspections and records	40 CFR 112.7(e)	2.2	2.2
Training	40 CFR 112.7(f)(1-3)	6.2	6.2
Personnel instructions	40 CFR 112.7(f)(1)	-	i, ii, iii

SPCC REQUIREMENTS (CONTINUED)			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Designated person accountable for spill prevention	40 CFR 112.7(f)(2)	2	2.1
Spill prevention briefings	40 CFR 112.7(f)(3)	6.2.1	6.3
Security	40 CFR 112.7(g)(1-5)	4.1.3	4.2
Fencing	40 CFR 112.7(g)(1)	4.1.4	4.2
Flow valves locked	40 CFR 112.7(g)(2)	Not Applicable to WCAA	
Starter controls locked	40 CFR 112.7(g)(3)	Not Applicable to WCAA	
Pipeline loading/unloading connections securely capped	40 CFR 112.7(g)(4)	Not Applicable to WCAA	
Lighting	40 CFR 112.7(g)(5)	4.1.2	4.2
Facility tank car and truck loading/unloading operations	40 CFR 112.7(h)(1-3)	5.3	5.5
Secondary containment in tank truck unloading areas	40 CFR 112.7(h)(1)	5.3	5.5
Warning system for tank truck unloading	40 CFR 112.7(h)(2)	5.6	5.6
Examination of tank trucks following unloading	40 CFR 112.7(h)(3)	5.3	5.5
Above ground Inspection	40 CFR 112.7(i)	8.11.4	8.3
Compliance with applicable state requirements	40 CFR 112.7(j)	1.4	1.4
Qualified oil-filled operational equipment	40 CFR 112.7(k)	8.9	8.2
Conformance with general requirements	40 CFR 112.8(a)	1.4	1.4
Facility drainage	40 CFR 112.8(b)(1.5)	4.4	4.4
Drainage from diked storage areas	40 CFR 112.8(b)(1)	8.12	8.3
Valves used on diked storage areas	40 CFR 112.8(b)(2)	8.3.4	8.2
Plant drainage systems from undiked areas	40 CFR 112.8(b)(3)	7.12	7.4
Final discharge of drainage	40 CFR 112.8(b)(4)	7.13	7.4
Facility drainage systems and equipment	40 CFR 112.8(b)(5)	7.14	7.4
Bulk storage containers	40 CFR 112.8(c)(1-11)	5.5	5.6
Tank compatibility with contents	40 CFR 112.8(c)(1)	8.8.4	8.2
Aboveground storage tanks	40 CFR 112.8(c)(2)	5.2.1	5.4
Precipitation drainage	40 CFR 112.8(c)(3)(i-iv)	8.7	8.2
Underground storage tanks	40 CFR 112.8(c)(4)	Not Applicable to WCAA	
Partially buried storage tanks	40 CFR 112.8(c)(5)	8.8.1	8.2
Aboveground storage tank periodic integrity testing	40 CFR 112.8(c)(6)	6.1.2	6.1
Control of leakage through defective heating coils	40 CFR 112.8(c)(7)	8.8.2	8.2
Tank installation fail safe engineering	40 CFR 112.8(c)(8)	8.8.3	8.2

SPCC REQUIREMENTS (CONTINUED)			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Inspection of effluent treatment facilities	40 CFR 112.8(c)(9)	Not Applicable to WCAA	
Visible discharges	40 CFR 112.8(c)(10)	8.8.6	8.2
Appropriate position of mobile or portable oil storage tanks	40 CFR 112.8(c)(11)	5.4	5.6
Facility transfer operations	40 CFR 112.8(d)(1-5)	8.11	8.3
Buried piping installation, protection, and examination	40 CFR 112.8(d)(1)	8.11.1	8.3
Not in service and standby service terminal connections	40 CFR 112.8(d)(2)	8.11.2	8.3
Pipe support design	40 CFR 112.8(d)(3)	8.11.3	8.3
Aboveground valve and pipeline examination	40 CFR 112.8(d)(4)	8.11.4	8.3
Aboveground piping protection from vehicular traffic	40 CFR 112.8(d)(5)	8.11.5	8.3
PIPP REQUIREMENTS			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Spill prevention and control coordinator	R 324.2006 (1)(a)		i
Facility information	R 324.2006 (1)(a)	4.0	4.1
Facility diagram	R 324.2006 (1)(a), (1)(e)	FIGURES 1,2,3	
24-hour emergency notification numbers	R 324.2006 (1)(b)	-	i
Containment and diversionary structures, including spill response	R 324.2006 (1)(c)(i)	8.3	8.1
Storage inventory	R 324.2006 (1)(d)	5.2	5.3
Storage tank information	R 324.2006 (1)(d)	TABLES	TABLE A
Secondary containment	R 324.2006 (1)(f)	TABLES	TABLE A
Precipitation management	R 324.2006 (1)(f)(v)	7.3.5	7.5
Spill control and cleanup procedures	R 324.2006 (1)(c)	3.2	3.1
Inspections and record keeping	R 324.2006 (1)(f)(vi)	2.2	2.2
Security	R 324.2006 (1)(f)(vi), (1)(h)	4.1.3	4.2
Review and amendments	R 324.2006 (4)	3.6	3.4
SWPPP REQUIREMENTS			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Site Map	PART I, Section C, 1.a.	FIGURES 1,2,3	
Significant polluting materials	PART I, Section C, 1.b.1)-2)	5.1	5.1
Discharge points	PART I, Section C, 1.b.3)	4.4	4.4
Significant spills & leaks – past 3 years	PART I, Section C, 1.c.	3.1	3.1
Stormwater discharge sampling data	PART I, Section C, 1.d.	3.5	3.3
Preventative maintenance program	PART I, Section C, 2.a.	6.1	6.1
Comprehensive site inspection	PART I, Section C, 2.b.	2.2	2.2
Good housekeeping procedures	PART I, Section C, 2.c.	6.1.3	6.2
Material handling & storage procedures	PART I, Section C, 2.d.	6.1.3	6.2

SWPPP REQUIREMENTS (CONTINUED)			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Areas of soil erosion	PART I, Section C, 2.e.	5.8	5.7
Employee training	PART I, Section C, 2.d.	6.2	6.2
Significant material in stormwater	PART I, Section C, 2.f.	5.0	5.1
Structural controls	PART I, Section C, 3 1)-2)	7.0	7.4
Keeping plans current	PART I, Section C, 4. a.-e.	3.6	3.4
Record keeping	PART I, Section C, 5	2.2	2.2
SWPPI REQUIREMENTS			
Requirement	**Regulatory Reference**	**Report Section**	**Page**
Identify all discharge points	PART I, Section A, 2.c.	4.4	4.4
Conduct Illicit Discharge Elimination Program	PART I, Section A, 3.a.	6.2	6.3
Conduct Public Education Program	PART I, Section A, 3.b.	6.2	6.3
Enforce program to address post-construction stormwater runoff	PART I, Section B, 2.b.	7.9	7.3

2.0 Plan Implementation

2.1 YIP STORMWATER POLLUTION PREVENTION TEAM

The YIP Stormwater Pollution Prevention Team is responsible for implementing, maintaining, and revising the SWPPP. The members of the team are familiar with the operation and management of the stormwater system at YIP. Team members are:

YIP STORMWATER POLLUTION PREVENTION TEAM

- Bryan C. Wagoner, P.E., CHMM - Director – Department of Environment & Sustainability, Spill Response Coordinator
  Detroit Metropolitan Wayne County Airport
  Berry Administration Building
  Detroit, Michigan 48242
  (734) 247-3686
- Joseph Galea – YIP Maintenance Department Manager
  Willow Run Wayne County Airport
  Hangar #1 – Third Floor
  Ypsilanti, Michigan 48198
  (734) 485-6672
- Rick Taig – YIP Security/Operations Manager
  Willow Run Wayne County Airport
  Hangar #1 – Fourth Floor
  Ypsilanti, Michigan 48198
  (734) 485-6675
- James Cullen, Senior Environmental Operations Manager, Alternate Spill Response Coordinator
  Detroit Metropolitan Wayne County Airport
  Berry Administration Building
  Detroit, Michigan 48242
  (734) 942-3748
- Clay McSparin, Senior Environmental Program Specialist
  Detroit Metropolitan Wayne County Airport
  Berry Administration Building
  Detroit, Michigan 48242
  (734) 247-3621

2.2 INSPECTIONS AND RECORDS

Inspections required under the three elements of this ICP are summarized in the *WCAA-Owned Significant Materials* (TABLE A) and the *YIP Quarterly Comprehensive Facility Inspection Form* (TABLE C). These inspections are documented when they occur in the Environmental Field Notebook, a hardbound lined-paper book that is always carried and in which all observations made by the WCAA Environmental Unit staff are recorded. It is stored in the WCAA Environmental Unit offices during off-hours and copies of individual pages are made weekly and archived in a separate storage location. All records collected because of this ICP are maintained for seven (7) years, unless otherwise indicated.

2.3 PLAN AVAILABILITY

This Integrated Contingency Plan is not required to be filed with any regulatory agency; however, a copy is available for on-site review, inspection and copying by agency representatives during regular business hours. The ICP Plan will be submitted to the US EPA Region 5 Regional Administrator (RA) and the Michigan Department of Environmental Quality (MDEQ) upon request. A written notification of update of the PIPP and certification that the facility complies with the Part 5 rules is submitted to the MDEQ District office every three (3) years.

The Integrated Contingency Plan will be reviewed annually, and if either of the following occurs:

1. The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the United States in a single spill event; OR
2. The facility discharges oil into or upon the navigable waters of the United States in quantities greater than 42 gallons in each of two (2) separate spill events within any twelve-month period.

The following information will be submitted to the EPA Regional Administrator and MDEQ within 60 days if either of the above thresholds is reached, in accordance with 112.4(a):

1. Facility name.
2. Name of individual submitting information.
3. Facility location.
4. Maximum storage/handling capacity of the facility, including normal daily throughput.
5. Corrective actions and countermeasures taken, including descriptions of any equipment repairs or replacements.
6. A description of the facility, including maps as necessary.
7. An analysis of the cause of such spill(s).
8. Descriptions of additional preventative measures taken to minimize the possibility of recurrence.
9. Any other such information as may be reasonably required by the RA or MDEQ.

2.4 LOCATION OF ICP PLAN

A complete copy of this Plan is maintained in the WCAA Environmental Office located on the 2nd floor of the Berry Administration Building at Detroit Metropolitan Wayne County Airport and in the YIP Administrative Offices located on 3rd Floor of Hangar #1.

3.0 Spill Notification & Response Procedures

3.1 SPILL EXPERIENCE/HISTORY

Spills and leaks of significant materials at YIP are recorded by the WCAA Air Rescue and Fire Fighting Division (AARF). AARF Department response records for spills occurring between June 1, 2016 to June 1, 2018 are included as the *YIP Historical Spill Record* (APPENDIX D). Significant spills are documented using the generic *MDEQ Spill or Release Report Form* (APPENDIX E).

YIP Historical Spill Record (APPENDIX D), includes information collected by the YIP ARFF Department. This record represents a response to all spills, or reported spills, including those that turn out to be negligible or false alarms. These spills are not all reported to the WCAA Environmental Unit.

- Date of spill incident;
- Estimated amount of material released;
- Corrective action taken and positive impact on natural resources (if any);
- Preventative measures taken.

3.2 COUNTERMEASURES FOR DISCHARGE DISCOVERY, RESPONSE, AND CLEANUP

This section describes the response and cleanup procedures to be followed in the event of an oil spill. The uncontrolled discharge of oil to groundwater, surface water, or soil is prohibited by State and Federal laws. Immediate action must be taken to control, contain, and recover discharged product. In general, the following steps are taken:

- If possible and safe to do so, identify and shut down source of the spill to stop the flow;
- Eliminate potential spark sources;
- Contain the spill with sorbents, berms, fences, trenches, sandbags, or other material;
- Contact the YIP Airfield Rescue and Firefighting Department (24-hour) at 911/734-485-6660 if spill is greater than 5 gallons;
- Contact the YIP Spill Response Coordinator;
- Contact an emergency response company, if necessary;
- Collect and dispose of recovered products according to applicable regulations.

3.2.1 Minor Spill Response

A "minor" spill is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor discharges are generally those where:

- The quantity of product spilled is small (e.g., may involve less than 5 gallons of oil);
- Spilled material is easily contained and controlled at the time of the discharge;
- Spill is localized near the source;
- Spilled material is not likely to reach water;
- There is little risk to human health or safety; and
- There is little risk of fire or explosion.

YIP personnel can usually address minor spills. The following guidelines apply:

- Immediately notify the YIP Supervisor on duty in the Department involved.
- Under direction of the Supervisor, contain the spill with spill response materials and equipment. Place discharge debris in properly labeled waste containers.
- Notify the Spill Response Coordinator if there are questions regarding the spill following clean up.

3.2.2 Major Spill Response

A "major" spill is defined as one that cannot be safely controlled or cleaned up by facility personnel, such as when:

- The spill is large enough to spread beyond the immediate spill area;
- The spilled material enters on-site storm sewers;
- The spill requires special equipment or training to clean up;
- The spilled material poses a hazard to human health or safety; or
- There is a danger of fire or explosion.

In the event of a major spill, the following guidelines apply:

- All workers must immediately evacuate the spill site and move to a safe distance.
- The Supervisor on duty must immediately call 911. The resulting ARFF response will involve:
  - An Incident Commander will take charge of the overall spill site;
  - All sources of ignition will be shut off if the spill is flammable;
  - ARFF staff trained in major hazardous material spill response and/or the Incident Commander will notify the Western Wayne County Hazardous Incident Response Team, if indicated;
  - Drains will be plugged, if necessary;
  - ARFF personnel will remain on site until this spill has been cleaned up and the site is safe.
- Following the 911 call, additional notifications may be necessary. For example, if large quantities of oil reach a sanitary sewer, the Ypsilanti Community Utilities Authority should be notified immediately. The YIP Spill Response Coordinator and/or the WCAA AARF Incident Commander will make these notifications.
- The Spill Response Coordinator will call the spill response and cleanup contractors listed in the Emergency Contacts list (Page i of this Plan), if necessary.
- The Spill Response Coordinator will contact the MDEQ and the National Response Center (numbers shown on Page i of this Plan), if necessary.
- The Spill Response Coordinator will document the call using the *MDEQ Spill or Release Report Form* (APPENDIX E).
- The Spill Response Coordinator will coordinate any remediation following the spill.

If the Spill Response Coordinator is not available at the time of the discharge, the Environmental Operations Manager will assume responsibility for coordinating response activities.

Wastes resulting from a minor spill response will be collected in appropriate impervious containers. The Spill Response Coordinator will characterize the waste for proper disposal.

Wastes resulting from a major spill response will be removed and disposed of by a cleanup contractor in accordance with applicable regulatory requirements.

3.2.3 Spill Cleanup Response Materials

- **Spill Kits**: Dedicated spill kits are located in all YIP areas where oil-containing products are used. Spill response materials include bags of granulated spill sorbent material with disposal bags for soiled sorbent. These controls can be rapidly deployed in the event of a leak or spill to prevent the spill from entering storm sewers.
- **Booms:** Oil absorbent booms of various types and lengths are maintained at numerous locations on the YIP airfield as shown on the *YIP Site Facilities Map* (FIGURE 2).
- **Catchbasin Covers**: YIP AARF Division vehicles are equipped with appropriately-sized catch basin inserts/covers. These covers can be quickly deployed to prevent spills from entering catchbasins

3.2.4 Disposal of Used Sorbent Materials

Used sorbent materials are placed in appropriate containers, labeled, characterized and disposed of in accordance with applicable, federal, state and local regulations.

3.3 CLEAN-UP CONTRACTORS

The WCAA maintains contracts with several environmental clean-up contractors. Contact information for these contractors is provided on Page i of this Plan. These contractors have the necessary equipment to respond to major spills, including floating booms, oil skimmers and pumps.

3.4 REPORTING / CORRESPONDENCE

Significant spills that impact soil or surface waters may need to be reported to one or more regulatory agencies. **The Spill Response Coordinator**, or his Designee, will make the appropriate report(s) to the proper regulatory agencies within the required period following the incident. The Spill Response Coordinator will also prepare and send the necessary follow up letters and reports following a reportable incident.

Copies of correspondence between the WCAA and various regulatory agencies is included in *WCAA Regulatory Release Correspondence Records* (APPENDIX F).

Contact information for reporting a discharge to the appropriate authorities is listed on Page i of this Plan. For the SPCC element of the ICP, 40 CFR 112.4 requires that information be submitted to the United States Environmental Protection Agency (EPA) Regional Administrator and the appropriate state agency in charge of oil pollution control activities whenever the facility discharges (as defined in 40 CFR 112.1(b)) more than 1,000 gallons of oil in a single event, or discharges (as defined in 40 CFR 112.1(b)) more than 42 gallons of oil in each of two discharge incidents to navigable waters within a 12-month period.

3.5 SUMMARY OF AVAILABLE SAMPLING DATA

Stormwater contained in the Fuel Farm Secondary Containment Structure is sampled and analyzed in accordance with the Airport's NPDES permit. The results of these sampling events are available from the Spill Response Coordinator upon request.

3.6 REVIEW & REVISION OF PLAN(S)

3.6.1 Amendment of SPCC Plan by Regional Administrator

The owner or operator must submit facility information to the EPA Regional Administrator within 60 days of any discharge of 1,000 gallons of oil to navigable waters whenever, or within 60 days of two discharges of greater than 42 gallons of oil to navigable waters. The facility information must be submitted with a written description of the spill, corrective action taken, and plans for preventing recurrence. The EPA Regional Administrator may then require SPCC Plan amendments. Pertinent facility information follows in Section 4.0.

3.6.2 Amendment of SPCC/PIP Plan By Owners Or Operators

The SPCC Plan will be amended whenever there is a change in facility design, construction, operation or maintenance, which materially increases the potential for discharge of oil to navigable waters. Such technical amendments shall be incorporated as soon as possible, but not later than six (6) months after such change occurs. Amendments shall be implemented no later than six (6) months following incorporation of the amendment. All technical amendments must be certified by a P.E. in accordance with 40 CFR 112.3.

A complete review and evaluation of the SPCC plan portion of this Plan must be conducted at least once every five (5) years. Documentation of plan review and amendments are included in the ***Integrated Contingency Plan Review Summary*** (Page viii) at the front of this Plan. Documentation shall include a summary of sections reviewed or amended, review date and the signature of the reviewer on a statement as to whether or not the SPCC Plan will be amended.

Administrative changes such as revised names and, telephone numbers should be noted on this ICP by the Spill Response Coordinator (with date and initials). Administrative changes do not require re-certification by a P.E.

The PIPP sections of this ICP must be evaluated every three (3) years or after any release that required implementation of the plan, whichever is more frequent. Submit only a written notification of update of the PIP Plan and a certification the facility is in compliance with the Part 5 rules to the district office. A copy of the Plan is not required to be submitted unless requested to do so.

In accordance with Michigan Administrative Code R324.2007, within ten (10) days after the release of oil, salt, or polluting materials occurred, a written follow-up emergency notice report (Pollution Incident Report) shall be prepared detailing the incident and submitted to:

Michigan Department of Environmental Quality (MDEQ)
Water Division Chief
PO Box 30273
Lansing, Michigan 48909-7773.

The written report shall be on company letterhead and include the cause of the release, details regarding the discovery of the release, response measures taken to remove the released material from the water of the state, and preventative measures taken to prevent recurrence.

4.0 FACILITY INFORMATION

Willow Run Wayne County Airport (YIP)
801 Willow Run Airport
Ypsilanti Michigan 48198
Phone Number: (734) 485-6666

Facility Owner: The County of Wayne, Michigan.

Facility Operator / FAA Operating Certificate holder: The Wayne County Airport Authority

Designated person accountable for oil spill prevention and control, emergency procedures, reporting, record-keeping, and employee training:

Director – Department of Environment & Sustainability: Bryan C. Wagoner, P.E.

Phone Number: (734) 247-3686; cell (734) 576-9582

Certified Stormwater Operator: Bryan C. Wagoner, P.E.

Certification Nos. I 01921 and W 6151

Standard Industrial Classification (SIC) Code: 4581

Other Personnel: Approximately 10 Wayne County Airport Authority employees performing various activities related to maintenance, management and operation of the airfield.

4.1 LOCATION AND DESCRIPTION

Willow Run Wayne County Airport (YIP) is bordered to the north by Ecorse Road, to the south by Interstate 94, to the east by Beck Road, and to the west by Willow Run Airport Drive. Approximate coordinates are 83° 32'30" longitude, 42° 15' latitude. A site location map of the YIP area is shown in the *YIP Site Location Map* (FIGURE 1).

Willow Run Airport is a general aviation airfield, with all associated facilities, providing service for several air cargo, freight, and charter airlines, as well as some flying schools. YIP encompasses approximately 2,600 acres.

The airport operates 24 hours a day, 7 days a week, with the majority of personnel being present between 7:00 AM and 3:30 PM. Airport Rescue and Fire Fighting (ARFF) personnel and Police are on continuous duty at YIP. Operations/Security staff is on duty between 8:00 AM and 4:00 PM Monday through Friday. Operations Department staff from Detroit Metropolitan Airport also conduct an airfield inspection once per day, seven days a week. Maintenance staff is on duty Monday through Friday 7:00 AM to 3:30 PM and at other times, if necessary. A site plan of the facility, indicating WCAA staff locations as Airport tenants, is presented in the *YIP Site Facilities Map* (FIGURE 2).

The WCAA is responsible for the overall operation and maintenance of the Airport, including: building maintenance; runway and taxiway maintenance (including snow removal); public safety (Police and Fire); airfield security; and Airport administration. The airport also acts as a lessor to numerous tenants, including major airlines, airline support companies (performing baggage handling, aircraft fueling and maintenance, etc.), car rental agencies, and federal agencies.

4.1.1 Physical Layout of the Facility

YIP is located on approximately 2,600 acres of land. Access to the facility is from Beck Road from the east, Tyler Road from the west, or Ecorse Road from the north. The various buildings located at YIP are listed in, *YIP Site Facilities Map* (FIGURE 2). YIP's drainage sub basins, detention ponds, outfalls and primary storm sewers are shown in *YIP Drainage System Map* (FIGURE 3). Building location, volume and contents of bulk storage containers at YIP are shown in the *WCAA-Owned Significant Materials* (TABLE A).

4.1.2 Lighting

Both pole-mounted and building-mounted lights illuminate most YIP facilities during hours of darkness. The lighting is sufficient to facilitate the discovery of spills or releases by WCAA personnel and Vendors/Tenants and to deter acts of vandalism. Additionally, flashlights are carried by all WCAA Staff during hours of darkness.

4.1.3 Security

Security at YIP is strictly controlled. The airfield and fuel farm are fully fenced, with only authorized personnel having access. The emergency generator is located in a locked building accessible only to authorized YIP staff, in an area that is fully lit during the evening hours. The Maintenance Facility building interior is lit during normal hours of operation.

All drummed oil-storage areas at YIP are located inside buildings that are occupied Monday through Friday from 7:00 am to 3:30 pm. and are locked whenever they are unoccupied. Wayne County Airport Authority Police routinely patrol the entire grounds area 365 days per year.

4.1.4 Fencing

The YIP airfield is enclosed by an eight-foot fence. Primary access points are electronically controlled and require a YIP Security Badge to gain access.

4.1.5 Facility Discharge or Drainage Prevention Measures and Controls

Exterior Facility Areas

YIP relies on a number of measures to aid in the prevention of oil discharges within the Facility property line. Discharge prevention measures include secondary containment (double-walled tanks, concrete tank enclosures, spill pallets, etc.), supervision of load/unload operations, routine inspections and inventory tracking for vehicle fuels. The type and use of each prevention measure is discussed further in the latter sections of this plan [112.7(e)(f)(g)(h)(i)(j), 112.8(b)(c)].

Interior Facility Areas

Building floor drains in WCAA-owned facilities discharge to the Ypsilanti Community Utilities Authority (YCUA) Treatment Facility in Ypsilanti, Michigan. Floor drains in buildings where significant quantities of oil are stored are either protected by oil/water separators or secondary containment.

Oil that is stored or used inside WCAA-owned buildings in bulk tanks, 55-gallon drums or mobile containers is conducted such that any spillage from these sources would be contained in the following manner:

- Properly sized secondary containment structures
- Spill-containment pallets
- Spill kits

4.2 WCAA ACTIVITIES OVERVIEW

The Wayne County Airport Authority is responsible for the following activities that could impact stormwater runoff quality at YIP:

- Fuel Storage
- Significant Material Storage
- Vehicle Maintenance
- Vehicle Fueling
- Vehicle/Equipment Cleaning
- Equipment Maintenance
- Sanitary / Storm Sewer System Maintenance
- Equipment Fueling
- Vehicle and Equipment Storage
- Runway/Taxiway Maintenance / Rubber Removal
- Building and Grounds Maintenance
- Pavement Deicing
- Pesticide/Herbicide Storage and Application
- Spent Aircraft Deicing Fluid Runoff (SADR) Management

Locations of Significant Materials owned and stored by the WCAA are shown in the *WCAA-Owned Significant Materials* (TABLE A). TABLE A includes the location (building number and drainage area) of the facility and a summary of the leak detection / monitoring activities in place.

4.3 TENANTS FACILITIES & TENANT ACTIVITIES OVERVIEW

A list of tenants at YIP is presented in, *Willow Run Wayne County Airport Tenant List* (TABLE B). Tenant activities that have the highest potential for stormwater runoff contamination are:

- Aircraft Deicing/Anti-icing
- Aircraft Fueling
- Aircraft Washing
- Ground Vehicle Fueling
- Oil/Fuel Storage
- Deicing Chemical Storage
- Building and Grounds Maintenance
- Aircraft Maintenance
- Aircraft Lavatory Service
- Vehicle/Equipment Maintenance and Washing
- Vehicle/Equipment Storage
- Cargo Handling
- Significant Material Storage

4.4 SITE STORMWATER DRAINAGE

Stormwater at YIP flows from eight drainage areas to eight separate outfalls via storm sewers or ditches. All seven drainage areas contain both pervious and impervious ground surfaces. The eight drainage areas and associated outfalls are presented in the *YIP Drainage System Map* (FIGURE 3). The table below summarizes the approximate size, percent imperviousness, and receiving water body for each drainage area.

Drainage Area	Outfall #	Approx. Size (acres)	Approx. % Impervious	Discharge Location	Reciving Water Body
West	001	80	85	Willow Run Creek	Huron River
West Central	001A	15	90	Willow Run Creek	Huron River
Central	002	830	10	Willow Run Creek	Huron River
Subportion of Central	002A	13.5	65	Willow Run Creek	Huron River
Southwest	003	225	75	Willow Run Creek	Huron River
Southeast	004	105	40	Begole Drain to Bellville Lake	Huron River
Northeast	005	100	25	Horner Drain	Rouge River
East	006	215	5	Hanshaw Drain	Rouge River
Northwest	007	11.5	95	Willow Run Creek	Huron River

4.4.1 West Drainage Area (Outfall 001)

The West Drainage Area is located on the west side of the Airport. The drainage area incorporates Hangar #1 (Main Terminal Building), adjacent aircraft apron area, and the parking lot west of Hangar #1. Tenants located within this drainage area include: Ameristar Jet Charter, AvFlight - West, M2 Modifications, Vayu, and Yankee Air Force Museum.

Drainage from the West Drainage Area is collected in a 54-inch storm sewer that discharges to Tyler Pond, an impoundment of Willow Run Creek which flows into the Huron River (Belleville Lake). Floor drains in Hangar #1 flow to an oil/water separator that discharges to the YCUA sanitary sewer system.

4.4.2 West Central Drainage Area (Outfall 001A)

The West Central Drainage Area is a small stormwater drainage area located between the West and Central Drainage Areas. Tenants located within this drainage area include: Trumbull Aviation, Roush Aviation, and the Eagle Flight Training Center. Drainage from the West Central Drainage Area is collected in a 30-inch storm sewer that discharges to Tyler Pond, an impoundment of Willow Run Creek which flows to the Huron River. Floor drains in all West Central Drainage Area facilities flow to the sanitary sewer system.

4.4.3 Central Drainage Area (Outfall 002)

The Central Drainage Area, the largest of the eight YIP drainage areas, includes the majority of the runway and taxiway areas at the Airport. Runoff in this area is collected in an 84-inch sewer that discharges on the western boundary of the Airport, via a short open channel into Willow Run Creek which flows into the Huron River. Tenants in the Central Drainage Area include: Hantz Air, the Federal Aviation Administration (FAA) Control Tower, and the YIP Air Rescue and Fire Fighting (AARF) facility. Hantz Air maintains a hangar with interior trench drains connected to an oil/water separator that discharge to the sanitary sewer system. The FAA and ARFF facilities are served by septic systems.

4.4.4 Subportion of Central Drainage Area (Outfall 002A)

The Subportion of Central Drainage Area includes the YIP Maintenance Facility Buildings. Floor drains in these facilities flow to the sanitary sewage system; an oil water separator is installed on floor drainage from Building #2621. Drainage from the Subportion of Central Drainage Area flows via an open channel to a manhole that connects to a pipe flowing under Willow Run Airport Drive and then discharges to Willow Run Creek from an outfall constructed into the skirt of the Tyler Road Dam.

4.4.5 Southwest Drainage Area (Outfall 003)

The Southwest Drainage Area is located in the southwest corner of the Airport. The primary tenants in this area include: Kalitta Air and Kalitta Charters. The YIP Fuel Farm is also located in this drainage area. Floor drains in these facilities are either plugged or flow to the sanitary sewer system. Drainage from the Southwest Drainage Area aprons flow to a large concrete oil/water separator. Oil collected in this separator is removed on an as needed basis using a licensed hauler. After passing through the separator, stormwater flows to Willow Run Creek through a 54" outfall.

4.4.6 Southeast Drainage Area (Outfall 004)

The Southeast Drainage Area collects stormwater from aprons and facilities located in the southeastern corner of the Airport into a 48-inch sewer that that discharges to the Begole Drain which discharges to Belleville Lake, an impoundment of the Huron River. Tenants in the Southeast Drainage Area include Active Aero Charter/USA Jet (AA/USA), Odyssey Aviation, Flagship Private Air, Aviation Depot Group, and the Eagle T-Hangars. Floor drains within the Southeast Drainage Area are connected to the sanitary sewer system and those in the AA/USA maintenance hangar flow through an oil/water separator prior to discharge to the sanitary system.

4.4.7 Northeast Drainage Area (Outfall 005)

The Northeast Drainage Area collects stormwater from aprons located in the northeastern corner of the Airport. Discharge from this drainage area flows to a 48-inch storm sewer pipe that discharges into the Horner Drain. The Horner Drain flows off Airport property and under Ecorse Road, eventually discharging into the Rouge River. Facilities located in the Northeast Drainage Area include: AvFlight – East, the Bird Cage T-Hangars, and a Federal Aviation Administration building. All facility floor drains within the Northeast Drainage Area are connected to the sanitary sewer system.

4.4.8 East Drainage Area (Outfall 006)

The East Drainage Area consists of open fields and roads east of Fourth St. and north of Tyler Rd. Stormwater generated in this drainage area flows into and through ditches and then to a drain along Beck Rd. that discharges to the Hanshaw Drain. The Hanshaw Drain eventually flows to the Rouge River. No storm sewers exist within the East Drainage Area. The only significant tenant located within this drainage area is the Yankee Air Force (YAF) Museum and YAF Education Center. Floor drains within this drainage area are connected to the sanitary sewer system.

4.4.9 Northwest Drainage Area (Outfall 007)

The Northwest Drainage Area consists of a portion of paved area of the former Hydramatic employee parking lot located directly west of the 9 Approach end of Runway 9/23. Stormwater generated in this drainage area flows into a 60" stormsewer that discharges to Tyler Pond, an impoundment of Willow Run Creek which flows into the Huron River (Belleville Lake). There are no buildings or other structures located in the Northwest Drainage Area.

4.4.10 Drainage into Willow Run Airport Property

Off-site stormwater flows onto Airport property at one location – a culvert that conveys drainage from grassland south of Ecorse Road (directly after the exit from U.S. Highway 12). This drainage flows into a 24-inch storm sewer that runs along the northwest corner of the Airport property. Materials applied or spilled on Ecorse Rd. in this area could potentially be conveyed into the Central Drainage Area collection system.

5.0 Significant Material Evaluation

5.1 ACTIVITIES INVOLVING SIGNIFICANT MATERIALS

5.1.1 Aircraft Deicing

The principal materials used to remove ice and snow from aircraft at YIP are Type I propylene glycol (PG)-based aircraft deicing fluids (ADFs). These fluids are applied hot (~180 °F), are relatively thin in viscosity, and melt snow and ice from aircraft control surfaces as they are applied. The majority of Type I ADF applied to an aircraft drips to the ground beneath the aircraft immediately following application. After ice and snow have been removed using Type I ADF, thicker Type IV fluids are sometimes applied to protect aircraft control surfaces from refreezing. Type IV ADF used at YIP is also PG-based. Because it is thicker, Type IV ADF remains on aircraft surfaces until takeoff speed is attained, at which point it sloughs off. Both Type I and Type IV ADF are characterized by elevated BOD concentrations (>600,000 mg/L @ 100% concentration) and have the potential to impact stormwater quality.

Several aircraft operators and Fixed-base Operators (FBOs) conduct aircraft deicing activities at YIP in designated deicing areas as discussed below. During snow and freezing rain events, Type I ADF applied to an aircraft that subsequently drips onto ramp pavement is collected to the maximum practical extent according to control measures described in *YIP Spent Aircraft Deicing Fluid Runoff (SADR) Collection Plan* (APPENDIX G). These ADF runoff control measures are discussed in Section 9. The quantities of ADF applied at YIP during the 2015/2016 – 2016/2017 winters are also included in APPENDIX G.

West Drainage Area. Various aircraft are deiced in a designated area on the Hangar #1 ramp by AvFlight - West equipment and personnel. Spent aircraft deicing fluid runoff is collected using a vacuum truck.

West Central Drainage Area. Aircraft deicing is not conducted in the West Central Drainage Area.

Southwest Drainage Area. Aircraft deicing is not conducted in the Southwest Drainage Area.

Central Drainage Area. Hantz Air conducts limited deicing activity on its ramp in an area that drains to a dedicated containment vault. Vault contents are discharged to the POTW.

Subportion of Central Drainage Area. Aircraft deicing is not conducted in the Subportion of the Central Drainage Area.

Southeast Drainage Area. Odyssey Aviation owns aircraft deicing equipment and conducts deicing activities in dedicated locations on the East Ramp. Spent aircraft deicing fluid runoff is collected using a vacuum truck.

Northeast Drainage Area. AvFlight - East deices aircraft in dedicated ramp areas in front of their facility. Spent aircraft deicing fluid runoff is collected using a vacuum truck.

East Drainage Area. No aircraft deicing is conducted in the East Drainage Area.

Northwest Drainage Area. No aircraft deicing is conducted in the Northwest Drainage Area.

5.1.2 Pavement Deicing

Application of liquid potassium acetate and solid sodium acetate pellets to runway and taxiway areas is conducted by the YIP Maintenance Department to maintain flight safety. The highest potential for exposure of stormwater to pavement deicing chemicals occurs in the Central Drainage Area.

5.1.3 Aircraft and Ground Vehicle Fueling Activities

The majority of aircraft at YIP are fueled by truck either by the aircraft owner or by one of the FBOs that operate at YIP. AA/USA Jet aircraft are fueled by Odyssey Aviation and Kalitta Charters fuel their aircraft using their own trucks. Hantz Air aircraft are fueled directly from the AST located at that facility. Private aircraft are fueled by their owners at a credit-card operated dispenser located on the AA/USA ramp in the Southeast Drainage Areas.

Aircraft fueling activities are regulated by both the WCAA Air Rescue and Fire Fighting Department (ARFF) and the SPCC plans that the fuel truck owners/operators have implemented for these operations. All aircraft fuel trucks at YIP are regularly inspected by the ARFF Department for proper operation of all fueling equipment, including safety equipment. All trucks are equipped with spill containment equipment as part of their respective SPCCs.

The credit-card operated dispenser at the AA/USA Jet facility is manually operated and automatically shuts off when pressure on the handle is released or when the aircraft fuel tank is full. In addition, signage at this facility requests users of the system to deploy catchbasin covers (provided) before fueling operations are undertaken.

Diesel and unleaded gasoline fueling of ground support vehicles at YIP occurs at locations in four drainage areas by the employees of companies that own or operate their own fuel tanks/dispensers or by an FBO. All ground vehicle fueling operations are conducted under commitments contained in each operator's SPCC.

The provisions of the SPCCs in place at YIP reduce the likelihood that fuel spills will occur. However, spills that do occur in the Southwest Drainage Areas, including the YIP Fuel Farm, should be contained by the oil/water separator serving Drainage Area 3.

The following regulations apply for all on-site vehicle fuel dispensing and load/unload operations:

- No smoking
- Stop vehicle motor
- No dispensing of fuel into unapproved containers
- In case of fire or spill:
    - Use Emergency Stop
    - Report Emergency by calling (734) 485-6660
- Must have product identification visible
- Emergency Stop Switch location shall be identified and in clear view

5.1.4 Aircraft, ground vehicle, and equipment maintenance activities

The majority of aircraft and vehicle maintenance activities at YIP occur inside hangars and/or garages. When aircraft or vehicle maintenance activities that could result in a spill (i.e. – working on fueled equipment) must be conducted on ramp areas, personnel have been requested to cover nearby catchbasins with appropriate covers prior to beginning work. Spills that do reach ramp catch basins in the Southwest Drainage Areas should be contained by the oil/water separator that serves this drainage area.

West Drainage Area. The majority of maintenance activities conducted in the West Drainage Area occur inside Hangar #1 by the WCAA Maintenance Department and tenants. The floor drains in Hangar #1 are connected to an oil/water separator that discharges to the sanitary sewer system and therefore present minimal potential for exposure to stormwater.

West Central Drainage Area. Maintenance activities in the West Central Drainage Area occur in the Roush Aviation hangar where small quantities of oil are stored and floor drains are connected to the sanitary sewer system and therefore present minimal potential for exposure to stormwater.

Southwest Drainage Area. The majority of maintenance activities in the Southwest Drainage Area are conducted by the Kalitta Air and Kalitta Charter facilities. The floor drains in the Kalitta Air hangar have been plugged. The Kalitta Air maintenance shop floor drains and trench drains in the Kalitta Charter facility connect to oil/water separators before discharging to the sanitary sewer system. Therefore, activities within the Southwest Drainage Area have minimal potential for stormwater exposure.

Central Drainage Area. Maintenance activities take place at the Hantz Air facility on the north side of the Airport located within the Central Drainage Area. Floor drains at this facility are connected to an oil/water separator before discharge to the sanitary sewer system and therefore present minimal potential for stormwater contamination.

Subportion Central Drainage Area. Vehicle maintenance activities take place in Building #2621. Oil, grease, hydraulic fluid is stored in this building with appropriate secondary containment and the floor drains in the building are equipped with an oil/water separator that is regularly maintained. Vehicles are stored but not maintained in Building #2620. Sand and salt are stored in Building #2619.

Southeast Drainage Area. Maintenance activities are conducted in the Southeast Drainage Area by Odyssey Aviation in Building #2064. Floor drains in this building flow through an oil/water separator into the sanitary sewer system. Therefore, maintenance activities in this building present minimal potential for stormwater runoff contamination.

Northwest / Northeast / East Drainage Areas. No maintenance activities are conducted in the Northeast or East Drainage Areas.

5.1.5 Aircraft Painting and Stripping

Aircraft stripping or painting operations are not performed at YIP. There is therefore no potential for material contamination of stormwater due to these operations at the Airport.

5.1.6 Aircraft Lavatory Service Operations

AvFlight – East & West and Odyssey Aviation conduct limited lavatory servicing of aircraft at YIP. Servicing generally takes place on ramp areas where aircraft lavatory tanks are unloaded into dedicated carts. These carts are serviced by a licensed disposal company and their contents are disposed of off-site or the contents are disposed into appropriate sanitary sewage connections. Because of the relatively small size of this operation, both in frequency and amount of material, this activity is considered to have low potential for stormwater contamination at YIP.

5.1.7 Building and Grounds Maintenance

The Airport Maintenance Department applies limited quantities of herbicide products. These products are stored in Building 2620 located in the Sub-portion Central Drainage Area where floor drains are connected to the sanitary sewer system. Approximately 175 gallons of herbicide are applied per year, mostly to areas around fence, signs, and lights. The largest potential area for herbicide application is in the Central Drainage Area. Herbicides at YIP are applied by personnel that have received the appropriate training for the use and storage of these materials.

The YIP Maintenance Department applies approximately 1,000 gallons of runway cleaning material per year on runway surfaces to keep them clear of tire and other markings. Runway paint is also occasionally used to repaint runway markings. Runway cleaner and paint are not stored at YIP. The materials are applied to runways within the Central Drainage Area and only during dry weather if possible. Because of the infrequency of use, these activities are considered to have little potential for stormwater contamination at YIP.

5.1.8 Firefighting Operations

Discharge of unimpacted stormwater runoff associated with firefighting operations is allowed by the NPDES permit and was therefore not evaluated as a potential source of stormwater pollution.

5.2 SIGNIFICANT MATERIAL STORAGE

Potential sources of stormwater impacts at YIP are limited to areas where industrial activities involving significant materials are performed outdoors. These include deicing and anti-icing activity and deicing material storage areas; fuel dispensing and storage areas; and equipment maintenance and washing areas. A brief description of these areas is provided in the sections below, along with an evaluation of the potential for significant material contact with stormwater in other areas at YIP. The areas described in this section are shown on the *YIP Drainage System Map* (FIGURE 3).

The YIP *WCAA-Owned Significant Materials* (TABLE A) summarizes significant materials used at YIP that have the greatest potential for contacting stormwater. Significant materials other than deicing or petroleum hydrocarbon-based chemicals stored or used outdoors at YIP include pavement rubber remover, automobile antifreeze, solvents, herbicides, pesticides, and paints. Storage locations for these materials are presented in TABLE A as well. *Material Safety Data Sheets (MSDSs)* for several inventoried significant materials are compiled in APPENDIX H.

5.2.1 Petroleum Hydrocarbon-based Material Storage

The WCAA stores and uses petroleum products primarily for fueling and/or maintaining its inventory of vehicles and equipment that support the operation and maintenance of the Airport. These products include: diesel fuel, unleaded gasoline, aviation gasoline, motor oils, waste oils, lubricating oils and greases, automatic transmission fluids, and hydraulic fluids Table A, the YIP *WCAA-Owned Significant Materials,* describes container-type, construction material, contents, volume, leak-detection and location for oil owned by the WCAA.

Aboveground Oil Storage: Aboveground oil/fuel storage locations at YIP that equal or exceed 55-gallons are shown in Table A and described below:

Fuel Farm

- Six (6) 50,000-gallon single walled steel tanks (Jet A)
- One (1) 30,000-gallon single walled steel tank (100 Octane fuel)
- One (1) 6,000-gallon single walled steel a double-walled "Fireguard" tank (gasoline).
- One (1) 1,000-gallon single walled steel tank (slop tank).
- One (1) 3,000-gallon double-walled steel tank (diesel fuel).

YIP Maintenance Building #2621

- One (1) 275-gallon above ground tank 15W-40 motor oil
- One (1) 275-gallon above ground tank 5W-30 motor oil
- One (1) 275-gallon above ground tank farm tractor lubricant
- One (1) 275-gallon above ground tank hydraulic oil
- One (1) 275-gallon above ground tank automatic transmission fluid
- One (1) 275-gallon above ground tank used oil
- Two (2) 55-gallon drums ethylene glycol antifreeze
- One (1) 55-gallon drum 80W-140 oil
- One (1) 55-gallon drum 75W-90 oil
- Four (4) 30-gallon drums gear lube
- Six (6) 55-gallon drums oil (various)
- - all above drums are stored within appropriate secondary containment

YIP Fuel Truck

- The YIP Maintenance Department operates a mobile fuel truck that equipped with a 1,500-gallon diesel fuel tank. This truck is filled during the winter only and is parked in the lot adjacent to Building #2621. This truck is filled by a bulk supplier.

Hanger #1 Parking Lot Area (YIP Administration Offices / Tenant Offices)

- One (1) 500-gallon single-walled diesel fuel tank with concrete containment – Emergency Generator – Housed in small building located in main parking lot west of Hanger #1.

Packard Hangar Pump System Building #2082

- One (1) 200-gallon diesel double-walled steel pedestal tank.

Waste oil generated at YIP facilities is properly disposed of using a licensed hauler. Manifests of waste oil shipments are retained in the YIP Environmental Office.

Total Oil Storage operated by WCAA: 343,710 gallons

In addition to the oil storage listed above, other significant material storage is discussed below:

5.2.2 Deicing Fluid Storage

Northeast Drainage Area. Bulk 100% ADF is stored by AvFlight in a 3,000-gallon secondarily contained tank located adjacent to the AvFlight - East facility. AvFlight also owns and operates two deicing fluid application trucks that operate in the West and Northeast Drainage Areas.

Southeast Drainage Area. Bulk 100% ADF is stored by Odyssey in a 3,000-gallon tank located in a protected location inside a building located in the Southeast Drainage Area where floor drains flow to the sanitary system and in two 750-gallon tanks containing ADF mixed at 55% ADF/45% water. Odyssey operates two deicing trucks at YIP in the Southeast Drainage Area.

Central Drainage Area. Hantz Air stores ADF in two 230-gallon totes that are located within a cement containment dike. Hantz Air applies ADF using tow-behind-sprayers.

5.2.3 Salt/Sand Storage

Approximately 500 tons of road salt is stored in Building #2619. This salt is stored and managed in accordance with the *MDEQ Salt and Brine Storage Manual* (APPENDIX I). All truck-loading operations are conducted on an impervious surface inside the building. Salt that is spilled during loading operations is swept back toward the pile in the building. The salt storage area is inspected once per week by WCAA Environmental personnel. A large pile of sand is also stored in Building #2619.

5.2.4 Pavement Deicing Chemical Storage

YIP Maintenance Building #2620

- One (1) 2,000-gallon trailer-tank liquid potassium acetate.
- Five (5) 2,205 lb. totes + one (1) pallet 55 lb. bags pelletized sodium acetate runway deicer.
- Three (3) pallets 55 lb. bags pelletized calcium chloride deicer.

5.2.5 Fire Fighting Foam Storage

YIP Maintenance Building #2620

- One (1) 330-gallon tote 3% aircraft firefighting foam

5.3 TANK TRUCK LOADING/UNLOADING 112.7(H)

WCAA maintains an aircraft fuel truck loading rack at the Fuel Farm (FIGURE 4) located in the Southwest Drainage Area. Jet fuel, Aviation Gasoline, Unleaded Gasoline and Diesel fuel are transferred from over-the-road tankers into the Fuel Farm tanks during daytime periods only. Trained WCAA staff, familiar with the requirements of this ICP, supervise all fuel tanker unloading operations at the facility.

Aviation fuel is stored in large, single walled, steel aboveground storage tanks, ranging in size from 30,000 gallons AvGas (1) to 50,000 gallons Jet A (6). Vehicle fuel is stored in self-contained, double walled, secondary containment tanks, (gasoline – 6000-gallon AST, diesel fuel – 3000-gallon AST). A concrete dike is in place around the perimeter of the aviation fuel tanks and the 3000-gallon diesel fuel storage tank, which provides over-sized secondary containment (note: the 3000-gallon diesel fuel tank is a double-walled tank that was moved inside this dike from another location). Runoff collected in this containment area flows through a filtering system that can absorb small amounts of fuel in stormwater runoff that is periodically released from the containment system *YIP Fuel Farm Containment Valve Operations Memo* (APPENDIX J). Following the filter, runoff passes through the Hanger #2 oil/water separator, prior to draining to Willow Run Creek. The Fuel Farm slop tank is also located within the containment dike. Contents of this tank are properly disposed of using a licensed hauler. Manifests of waste oil shipments are retained in the WCAA Environmental Office, located at Detroit Metropolitan Airport.

UNDER NO CIRCUMSTANCES IS ACCUMULATED STORMWATER DISCHARGED FROM THE DIKED AREA OF THE FUEL FARM OTHER THAN UNDER MANUAL OPERATION OF THE VALVING BY TRAINED STAFF, AND VISUAL CONFIRMATION THAT IT IS FREE OF SIGNIFICANT PETROLEUM IMPACTS.

Valves in the Fuel Farm pumping/piping system are electronically operated and close automatically during any electrical power failure. Procedures for operation of the fuel farm, including operation of the drainage valve from the diked area (i.e., normally closed and locked, opened via manual operation only, etc) is part of an Operational Manual for the Fuel Farm, and is kept in the office trailer located at the Fuel Farm. This manual and its procedures are incorporated into this IPC plan by reference.

Fuel trucks, owned and operated by airlines and FBOs at YIP are loaded at the Fuel Farm 24 hours per day. Drivers for all tenants/airlines that load fuel at the fuel rack are familiar with the Standard Operating Procedures (SOPs) for this transfer operation. The SOPs are posted at the site and are also incorporated into this plan by reference. All loading of mobile fuel trucks takes place within a contained area as shown in *YIP Fuel Farm Schematic* (FIGURE 4). Any spills that occur in the loading area are contained. Fuel spilled into this contained area are cleaned up by a licensed hauler (large spills) released into the Fuel Farm diked containment area (minor spills). The transfer pumps are equipped with automatic shut-off switches.

All tenant/airline mobile fuel trucks that receive fuel from the YIP Fuel Farm operate under their own SPCCs. Copies of Tenant SPCCs are included in APPENDIX K.

5.4 APPROPRIATE POSITION OF MOBILE OR PORTABLE OIL STORAGE TANKS

Oil-containing drums are stored indoors, where secondary containment is provided by spill pallets. Spills associated with drum use are quickly contained and cleaned up using sorbent materials and appropriate cleaning products.

5.5 BULK STORAGE CONTAINERS (112.8(C))

All containers are constructed of materials compatible with the materials they contain, as well as the temperature and pressure conditions of storage. All containers larger than 55-gallons are equipped with secondary containment volumes that comply with applicable regulations.

All WCAA fuel ASTs are shop-built and elevated (i.e., the tank bottoms are not in contact with the ground). Therefore, the visual inspections described previously, in addition to the spill prevention response capabilities of WCAA personnel, are deemed to be environmentally equivalent to the integrity testing requirement of this section.

Non-destructive integrity evaluations are not performed on small saddle tanks or 55-gallon storage drums for the following reasons: 1.) smaller saddle tanks are stored indoors, and are elevated off the ground. These tanks are inspected regularly in accordance with the *Steel Tank Institute (STI) SP-001 Tank Inspection Standard SP-001* (APPENDIX L) as described in this ICP. WCAA personnel can detect any leakage from these ASTs visually during scheduled inspections; 2.) Storage drums are elevated on spill pallets and have all sides visible, and facility personnel can readily detect any leak before they cause a discharge to navigable waters or adjoining shorelines.

Corrosion poses minimal risk of failure because drums are single-use and remain on site for a relatively short period of time (less than one year). The drum storage areas are inspected monthly. This is in accordance with accepted industry practice for drum storage and provides an effective means of verifying container integrity, as noted by EPA in the preamble to the SPCC rule at 67 FR 47120.

5.6 OVERFILL PROTECTION

All fuel farm ASTs are equipped with overfill protection and audible alarms. Other ASTs have direct read gauges. WCAA personnel are present throughout the filling operations to monitor product levels within each container. For 55-gallon drums, it is deemed unnecessary to have overfill prevention measures as described in 112.8(c)(8) as they are single use containers that are stored indoors on secondary containment pallets in areas where floor drains are not present. These are deemed environmentally equivalent to the overfill requirements of the SPCC regulation.

Fuel spills resulting from tank seams, gaskets, rivets and bolts will be corrected promptly (112.8(c)(10)).

5.7 MISCELLANEOUS SIGNIFICANT MATERIAL STORAGE AREAS

The storage locations of significant materials with potential for stormwater contamination not mentioned above are summarized in the YIP *WCAA-Owned Significant Materials* (TABLE A).

5.8 MANAGEMENT OF SOIL EROSION

Best management practices for soil erosion control at YIP include the following:

- Planting and maintenance of unpaved Airport areas with grass or other vegetative ground cover to prevent the exposure of soil to the elements.
- Preparation of, and adherence to, a Construction SWPPP for construction projects at YIP that involve disturbance of greater than one acre at any given time, or preparation of a similar construction document that addresses sedimentation control.

5.9 SUMMARY OF SIGNIFICANT MATERIAL/STORMWATER EXPOSURE CONCERNS

Based on the assessment conducted in this section of the ICP, the following activities present the greatest potential for the exposure of significant materials to stormwater at YIP:

- Aircraft deicing activities conducted in the West, Southwest, Central, Northeast and Southeast Drainage Areas – to be addressed by non-structural and structural controls.
- Pavement deicing activities in both landside and airside areas. To be addressed by non-structural controls.
- Fuel handling, storage, and dispensing activities conducted in the West, West Central, Subportion of Central, Southwest, Southeast and Northeast Drainage Areas – to be addressed by a combination of structural and non-structural controls.
- Aircraft and vehicle maintenance activities conducted in the West, West Central, Subportion of Central, Southwest, and Southeast Drainage Areas – to be addressed by non-structural and structural controls.

Non-structural and structural stormwater controls are discussed in detail in Sections 6 and 7 of this ICP, respectively.

6.0 Non-structural and Structural Controls

Non-structural controls required by the SWPPP portion of this ICP are identified below:

6.1 NON-STRUCTURAL CONTROLS

Non-structural control measures are intended to minimize the contact between significant materials and stormwater by modifying existing practices and/or procedures.

6.1.1 Outfall Inspections

All YIP stormwater outfalls are inspected at least once per week with observations being recorded in the YIP Environmental Field Notebook. During these inspections, any abnormalities in the effluent (turbidity, foaming, floatables, etc.) are noted. If anomalies are noted and the source of the anomaly is identifiable, corrective measures will be taken immediately. If the source is not readily identifiable, upstream portions of the affected drainage area will be inspected to determine the source(s). Laboratory analyses are also available if unknown substances need to be identified.

6.1.2 Exterior Facility Inspections

Other exterior YIP areas are also inspected during the weekly inspection noted above. These areas include: ramp areas, roadways, parking lots, perimeter ditches, interior swales, tenant areas, and waste disposal areas. All observations are noted in the YIP Environmental Field Notebook.

6.1.3 East Side Sanitary Lift Station

The East Side Sanitary Lift station conveys sewage from the YIP East Side facilities, through a 13,625-foot-long force main to a sanitary manhole on the west side of YIP that discharges to the Ypsilanti Communities Utility Authority Treatment Plant. This duplex lift station is equipped with two 35-HP submersible pumps that alternate under normal conditions. This lift station is equipped with an alarm system that sends an e-mail alert to the WCAA Maintenance Department if sewage in the station rises to an unsafe level or if one or both of the pumps experiences failure or power loss.

6.1.4 Quarterly Comprehensive Facility Inspections

Quarterly Comprehensive Facility Inspections are conducted at YIP following the procedures outlined in the Standard Operating Procedures (SOP) document and form shown in *Willow Run Airport Quarterly Facility / Stormwater Inspection Form* (Table C). All WCAA owned oils storage tanks and oil/water separators are also inspected during these quarterly inspections. Documentation of maintenance done on these separators is recorded on this form as well. Records of oil/water separator maintenance activities conducted by tenants on oil/water separators they operate are requested during tenant inspections (see Section 6.1.7). Electronic records of all these inspections are maintained by the E&S Department.

6.1.5 Quarterly Visual Stormwater Assessments

Quarterly Visual Stormwater Assessments are conducted at YIP Inspections following the procedures outlined in the Standard Operating Procedures (SOP) document and form shown in *Willow Run Airport Quarterly Facility / Stormwater Inspection Form* (Table C). Records of these visual assessments are electronically maintained by the E&S Department.

6.1.6 Tenant Facility Inspections

Significant tenant and YIP facilities are inspected by a member of the WCAA Department of Environment & Sustainability at least once every two (2) years. A list of YIP tenant facilities is included in Table B. Smaller, less significant facilities are inspected less frequently. Issues covered during these inspections include:

- Accurate facility contact information.
- Activities conducted at the facility.
- Facility condition.
- Material storage and disposal practices.
- Spill Management Plans / Clean-up equipment.
- Verification that SPCCs/PIPPS are in place, if threshold quantities are exceeded.
- Registration status of above and below-ground storage tanks (including Class A, B, and C Operator Certification, if appropriate).

All data is recorded in a dedicated form and deficiency letters sent out as a result of these inspections are tracked using a separate spreadsheet. Sample inspection forms and a summary of recent inspections are included in *Tenant Facility Environmental Inspection Program Forms* (APPENDIX M). Copies of inspection reports are maintained with this Plan for a period of three (3) years.

6.1.7 General Good Housekeeping Programs

Good housekeeping practices are usually relatively inexpensive activities that can be performed by YIP employees or tenants to reduce the potential for stormwater contamination. The following Good Housekeeping practices are conducted at YIP:

- Maintaining uncluttered and clean-swept workspaces that are exposed to stormwater runoff;
- Immediate cleanup of small spills and leaks;
- Placement of drip/catch pans at known or suspected leak locations;
- Inventory management practices for significant materials;
- supervision of load/unload operations;
- Inspection and maintenance of the YIP stormwater system at least every six months;
- Periodic sweeping of paved parking and roadway areas;
- Appropriate pesticide/herbicide storage and application;
- Planting and maintenance of unpaved airport areas with grass and vegetative ground cover to prevent soil erosion;
- Employee training regarding stormwater pollution prevention.

6.1.8 Annual Tenant Environmental Awareness Meetings

An Airport-wide Tenant Environmental Awareness Meeting is held once per year, usually in the Fall. During these meetings, tenant environmental responsibilities are discussed. In addition, threshold quantities and operations that would require a tenant facility to obtain a permit or maintain a plan (e.g. – SPCC) are also discussed. Stormwater awareness posters and other stormwater-related materials are also distributed during these meetings. A copy of recent presentations and their attendees are included in *YIP Stormwater/SPCC Training Programs and Attendees* (APPENDIX N).

6.2 TRAINING

6.2.1 Personnel Training and Spill Prevention Procedures

Relevant facility personnel have been instructed by YIP Management in the operation and maintenance of oil pollution prevention equipment and salt management procedures and pollution control laws and regulations. YIP's Spill Response Coordinator is responsible for ensuring that all appropriate Wayne County Airport Authority employees are familiar with this ICP and that the procedures are in place to prevent significant material spills at Authority-operated facilities at YIP.

Annual spill prevention briefings are provided to appropriate WCAA personnel to ensure adequate understanding of this ICP. These briefings highlight any past spill events or failures and recently developed precautionary measures. Records of these briefings and spill prevention training are shown in *YIP Stormwater/SPCC Training Programs and Attendees* (APPENDIX N).

6.2.2 Web-Based Stormwater Training

A web-based stormwater awareness-training program has been developed by the WCAA as part of the SWPPP. The training materials are available to all Airport and tenant employees and provide guidance on stormwater pollution prevention in general, and the requirements of the Airport's SWPPP in particular. The topics covered during these training sessions include, but are not limited to:

- The difference between stormwater and sanitary sewers.
- Definition of elements of stormwater contamination (BOD, oil and grease, etc.).
- Typical sources of airport stormwater contamination.
- Best management practices employees can take to minimize stormwater contamination.
- Reporting procedures.

YIP's web-based stormwater awareness-training program was developed in the summer of 2004, and to date, numerous WCAA and tenant employees have participated in the web-based training. Following the training, employees must take a stormwater training test on-line for documentation that training has occurred. YIP's stormwater training testing and training materials are found at (http://www.wcaastormwatertraining.com).

Numerous tenants also provide corporate stormwater training programs to their employees. Copies of the WCAA program and the list of employees that have taken the WCAA web-based training and tenant corporate training attendee lists provided to the WCAA are included in *YIP Stormwater/SPCC Training Programs and Attendees* (APPENDIX N).

6.2.3 Illicit Discharge Elimination Program (IDEP) Training

WCAA staff that conduct YIP outfall inspections have received Illicit Discharge Elimination training through the Wayne County Department of Public Services. This training, combined with the weekly outfall inspections (see Section 6.1.1), comply with the IDEP requirements of the YIP MS4 permit.

6.2.4 Public Education Programs

Stormwater Awareness materials that describe measures that can be taken to protect stormwater are distributed during each annual Tenant Environmental Awareness Meeting (see Section 6.1.8). Examples of stormwater awareness materials provided during these meetings are shown in APPENDIX O. In addition, announcements of relevant stormwater-related events (Stream Clean-up Days, etc.) are e-mailed to WCAA employees.

7.0 Structural Control Measures

USEPA guidance recommends that, where non-structural stormwater control measures are inadequate to control contact between significant materials and stormwater, structural measures should be provided. Structural measures at YIP address aircraft deicing activities, equipment maintenance on aprons, and fueling operations. Unlike non-structural control measures, which, for the most part, apply to the entire Airport, structural control measures vary between specific drainage areas. For this reason, structural control measures are discussed by drainage area in the following sections.

7.1 WEST DRAINAGE AREA

7.1.1 Aircraft Deicing Fluid Runoff

As discussed in Section 4.2.1, the use of PG-based ADFs for aircraft deicing is allowed on the Hangar #1 apron in the West Drainage Area subject to the provisions of the YIP Spent Aircraft Deicing Fluid Runoff (SADR) Collection Plan (Appendix G). Point-of-use collection has been implemented to reduce the quantity of ADFs entrained in stormwater.

7.1.2 Fueling Activities

Aircraft and vehicle fueling activities in the West Drainage Area are conducted primarily by AvFlight – West which has an SPCC/PIPP plan in place for this activity (see APPENDIX K).

7.1.3 Outdoor Aircraft and Vehicle Maintenance Activities

Tenants that conduct aircraft or other maintenance activities on ramp areas in the West Drainage Area have been requested to cover catchbasins with magnetic covers before work is undertaken.

No other structural controls are deemed necessary for the West Drainage Area at this time.

7.2 WEST CENTRAL DRAINAGE AREA

Tenants that conduct aircraft or other maintenance activities on ramp areas in the West Central Drainage Area have been requested to cover catchbasins before work is undertaken.

No other structural controls are necessary within the West Central Drainage Area at this time.

7.3 SOUTHWEST DRAINAGE AREA

7.3.1 Aircraft Deicing Fluid Runoff

No aircraft deicing is conducted in the Southwest Drainage Area. Aircraft operated by Kalitta Charters are deiced on the Hangar #1 ramp, when necessary.

7.3.2 Fueling Activities

Fueling activities in the Southwest Drainage Area are conducted primarily by the WCAA and Kalitta Charters which have SPCC plans in place for these activities (see APPENDIX K).

7.3.3 Outdoor Aircraft and Vehicle Maintenance Activities

Tenants conducting aircraft or other maintenance activities on ramp areas in the Southwest Drainage Area have been requested to cover catchbasins before work is undertaken.

7.3.4 Floor Drains

All floor drains in the Southwest Drainage Area flow to the sanitary sewer system.

7.3.5 Fuel Farm

The YIP Fuel Farm will be operated in accordance with the SPCC/PIPP elements of this ICP in place for this facility.

Drainage from the Southwest Drainage Area flows through the Hangar #2 Separator before discharge. No other structural controls are deemed necessary at this time.

7.4 CENTRAL DRAINAGE AREA

Hantz Air collects spent aircraft deicing fluid in an underground vault. Collected runoff is hauled away and disposed of by a licensed contractor.

No other structural controls are deemed necessary in the Central Drainage Area at this time.

7.5 SUBPORTION CENTRAL DRAINAGE AREA

7.5.1 Aircraft Deicing Fluid Runoff

No aircraft deicing is conducted in the Subportion of the Central Drainage Area.

7.5.2 Fueling Activities

No fueling activities are conducted in the Subportion Central Drainage Area. However, the YIP Fuel Truck is parked in this area when it is not in use (see Section 5.2.1).

7.5.3 Outdoor Aircraft and Vehicle Maintenance Activities

No outdoor maintenance activities are conducted in the Subportion of the Central Drainage Area.

No other structural controls are deemed necessary in the Subportion of the Central Drainage Area at this time.

7.6 SOUTHEAST DRAINAGE AREA

This section addresses structural measures that will be implemented to minimize stormwater impacts in the Southeast Drainage Area.

7.6.1 Aircraft Deicing Fluid Runoff

The use of PG-based ADFs is allowed in the Southeast Drainage Area subject to the provisions of the YIP Spent Aircraft Deicing Fluid Runoff (SADR) Collection Plan (APPENDIX G). Point-of-use collection has been implemented to reduce the quantity of ADFs entrained in stormwater.

7.6.2 Fueling Activities

Aircraft and vehicle fueling activities in the Southeast Drainage Area are conducted primarily by Odyssey Aviation which has an SPCC/PIPP plan in place for this activity (see APPENDIX K). Mats are deployed over catchbasin covers during fueling activities as part of this SPCC/PIPP.

7.6.3 Outdoor Aircraft and Vehicle Maintenance Activities

Tenants that conduct aircraft or other maintenance activities on ramp areas in the Southeast Drainage Area have been requested to cover catchbasins before work is undertaken.

7.6.4 Odyssey Aviation UST Fueling Port

The Odyssey UST fueling port is protected by a 12,000-gallon underground storage tank that is opened during all fueling activities.

No other structural controls are deemed necessary in the Southeast Drainage Area at this time.

7.7 NORTHEAST DRAINAGE AREA

7.7.1 Aircraft Deicing Fluid Runoff

The use of PG-based ADFs is allowed in the Northeast Drainage Area subject to the provisions of the *YIP Spent Aircraft Deicing Fluid Runoff (SADR) Collection Plan* (APPENDIX G). Point-of-use collection has been implemented to reduce the quantity of ADFs becoming entrained in stormwater.

7.7.2 Fueling Activities

Aircraft and vehicle fueling activities in the Northeast Drainage Area are conducted primarily by AvFlight - East which has an SPCC/PIPP plan in place for this activity (see APPENDIX K). Mats are deployed over catchbasin covers during fueling activities as part of this SPCC/PIPP

7.7.3 Outdoor Aircraft and Vehicle Maintenance Activities

Tenants that conduct aircraft or other maintenance activities on ramp areas in the Northeast Drainage Area have been requested to cover catchbasins with magnetic covers before work is undertaken

No other structural controls are deemed necessary in the Northeast Drainage Area at this time.

7.8 EAST DRAINAGE AREA

No structural controls are deemed necessary within the East Drainage Area at this time.

7.9 NORTHWEST DRAINAGE AREA

No structural controls are deemed necessary within the Northwest Drainage Area at this time.

7.10 SIGNIFICANT MATERIALS STILL PRESENT AFTER STRUCTURAL CONTROLS

Following the implementation of the structural controls described above, some potential remains for significant materials to be present in stormwater generated at YIP, due to aircraft and pavement deicing activities. Uncollectible ADF runoff is addressed in correspondence between the WCAA and MDEQ dated September 13, 2004 and attached to this ICP as APPENDIX P.

Pavement deicing materials used at YIP are calcium chloride and rock salt on landside areas and sodium acetate pellets on runway, taxiway, and other areas where aircraft come in contact with pavement deicing materials. Aircraft are not permitted by the FAA to come in contact with calcium chloride or rock salt; therefore sodium acetate is used as it is an FAA approved pavement deicing material for aircraft contact.

7.11 POST-CONSTRUCTION STORMWATER RUNOFF CONTROLS

The WCAA has adopted the Wayne County Stormwater Ordinance as a means to control post-construction stormwater runoff. For construction projects at YIP that occur in Wayne County, the Wayne County Stormwater Management Ordinance and Administrative Rules are implemented through the existing review and permit processes of the Permit Office of the Wayne County Department of Public Services, Engineering Division. For projects in the Washtenaw County areas of YIP, the intent of the Wayne County Stormwater Ordinance is enforced by the WCAA through the Construction and Alteration Permit process.

8.0 Additional SPCC Requirements

8.1 POTENTIAL FOR EQUIPMENT FAILURE

Based on site experience, and the locations of WCAA's applicable oil storage, reasonable scenarios for equipment failure would result from overfilling the emergency generator tank, Fuel Farm ASTs, and leaking from drums within storage areas.

For exterior oil storage, discharges from a failure due to overfilling of an ASTs at the Fuel Farm would be contained within the site containment dike. Discharges from overfilling of the Autogas AST (double-walled) would be directed to the local storm sewer catch basins, which are connected to the Hanger #2 oil/water separator system. Discharges from overfilling of the emergency generator at Hanger #1 would not enter the local storm sewer collection system, as the tank is contained in a sealed concrete pit. For interior oil storage at Hangar #1, any discharge due to a drum leak would be located on the interior floor, where the floor drains flow through an oil/water separator to the YCUA Treatment Plant. Spill response capability, as well as secondary containment measures are in place to address these potential scenarios, and are described further in other sections of this plan.

8.2 EXCEPTIONS

None.

8.3 CONTAINMENT AND DIVERSIONARY STRUCTURES

The facility uses several different types of preventative systems to contain oil and polluting material and prevent discharges from reaching the YIP stormwater system, the YIP *WCAA-Owned Significant Materials* (TABLE A), presents specific information on the storage tanks including capacity, material stored, and method of secondary containment, if applicable.

8.3.1 Dikes and Berms

The facility utilizes containment structures and devices including dikes. For specific application and tank information, see the YIP *WCAA-Owned Significant Materials* (Table A).

8.3.2 Curbing

The facility does not employ curbing as a containment mechanism.

8.3.3 Weirs, Booms or Other Barriers

Additional containment structures include concrete building walls for various storage totes and drum areas to prevent the migration of spills.

8.3.4 Valves Used on Diked Storage Areas

See *Dikes and Berms* (Section 8.3.1), above.

8.4 CONTAINMENT STRUCTURES FOR OFFSHORE FACILITIES

Willow Run Wayne County Airport is not considered an offshore facility.

8.5 LOADING RACKS

The WCAA does not own or operate any loading racks at YIP.

8.6 DEMONSTRATION OF PRACTICABILITY

The WCAA has determined that the use of existing containment structures and readily available spill equipment and manpower to prevent the discharge of oil from both fixed and mobile oil storage from reaching navigable water, is practical and effective for this facility.

8.7 PRECIPITATION DRAINAGE

See *Site Stormwater Drainage* (Section 4.4) and FIGURE 3.

8.8 MISCELLANEOUS TANK ISSUES

8.8.1 Partially-Buried Storage Tanks

There are no partially-buried metal storage tanks subject to this rule at this facility, therefore requirements of 112.8(c)(5) do not apply.

8.8.2 Control of Leakage Through Defective Heating Coils

There are no internal heating coils within any tanks at this facility (112.8(c)(7)).

8.8.3 Tank Installation Fail Safe Engineering

Overfill protection is provided as shown in TABLE A, where alarms are not present, remaining ASTs have direct read gauges for direct volume checks. WCAA personnel are present throughout the filling operations to monitor product levels within each container. For 55-gallon drums, it is deemed unnecessary to have overfill prevention measures as described in 112.8(c)(8) as they are stored on secondary containment pallets and are single-use containers. These activities are deemed environmentally equivalent to the overfill requirements of the SPCC regulation.

8.8.4 Tank Compatibility with Contents

All storage containers at YIP are compatible with the materials they contain, as well as the temperature and pressure conditions of storage.

8.8.5 Brittle Fracture Evaluation

Shell thicknesses on all storage tanks are less than 0.5 inches. As discussed in the American Petroleum Institute (API) Standard 653 *Tank Inspection, Repair, Alteration, and Reconstruction* (API-653), brittle fracture is not a concern for tanks having a shell thickness less than 0.5 inches.

8.8.6 Visible Discharges

Oil leaks resulting in a loss of fuel from tank seams, gaskets, rivets and bolts will be corrected promptly (112.8(c)(10)).

8.9 QUALIFIED OIL-FILLED OPERATIONAL EQUIPMENT

The YIP facility contains many, small, mostly pad-mounted transformers. These transformers have been determined to not pose a significant leak/spill concern.

8.10 SPCC REQUIREMENTS FOR ON-SHORE FACILITIES

The facility is an on shore facility and as such must meet the general requirements listed under 40 CFR 112.7 presented above and also meet the requirements for onshore facilities under 40 CFR 112.8.

8.11 FACILITY TRANSFER OPERATIONS

8.11.1 Buried Piping Installation, Protection and Examination

Buried piping when exposed (due to construction activities or other reasons) will be inspected for corrosion damage and the inspection documented and retained for three (3) years. If upon examination, corrective actions are required, repairs will be conducted promptly. If damage may increase the potential for a release of material, the system will be deemed inoperative and will be tagged and locked out to prevent use until repairs are complete.

8.11.2 Not in Service and Standby Service Terminal Connections

The terminal end connection of pipes that are no longer in use will be equipped with a blank flange and marked as to their origin.

8.11.3 Pipe Support Design

Pipeline supports, flange joints, and expansion joints are designed to minimize abrasion and corrosion and allow for expansion and contraction conditions.

8.11.4 Above-Ground Valve and Pipeline Examination

Facility pipelines, associated valves, and support structures used in material transfer operations are routinely inspected along with buried piping containment monitoring devices. Inspection records are maintained for three years. Integrity result records are maintained for ten years.

8.11.5 Above-Ground Piping Protection from Vehicular Traffic

All above-ground piping is protected by buildings and/or other barricades. Any future above-ground piping not protected by buildings and/or other barricades and that are vulnerable to being struck by a vehicle, will either be labeled with appropriate signs to alert all drivers of this danger, or brought to the attention of the driver by facility security personnel.

8.12 DRAINAGE SYSTEMS FROM UNDIKED AREAS

See *Site Stormwater Drainage* (Section 4.4).

8.13 FINAL DISCHARGE OF DRAINAGE

See *Site Stormwater Drainage* (Section 4.4).

8.14 FACILITY DRAINAGE SYSTEMS AND EQUIPMENT

See *Site Stormwater Drainage* (Section 4.4).

8.15 REMAINING REQUIREMENTS

40 CFR 112.8(d), 112.9 through 112.15, 112.20 and 112.21 are not applicable.