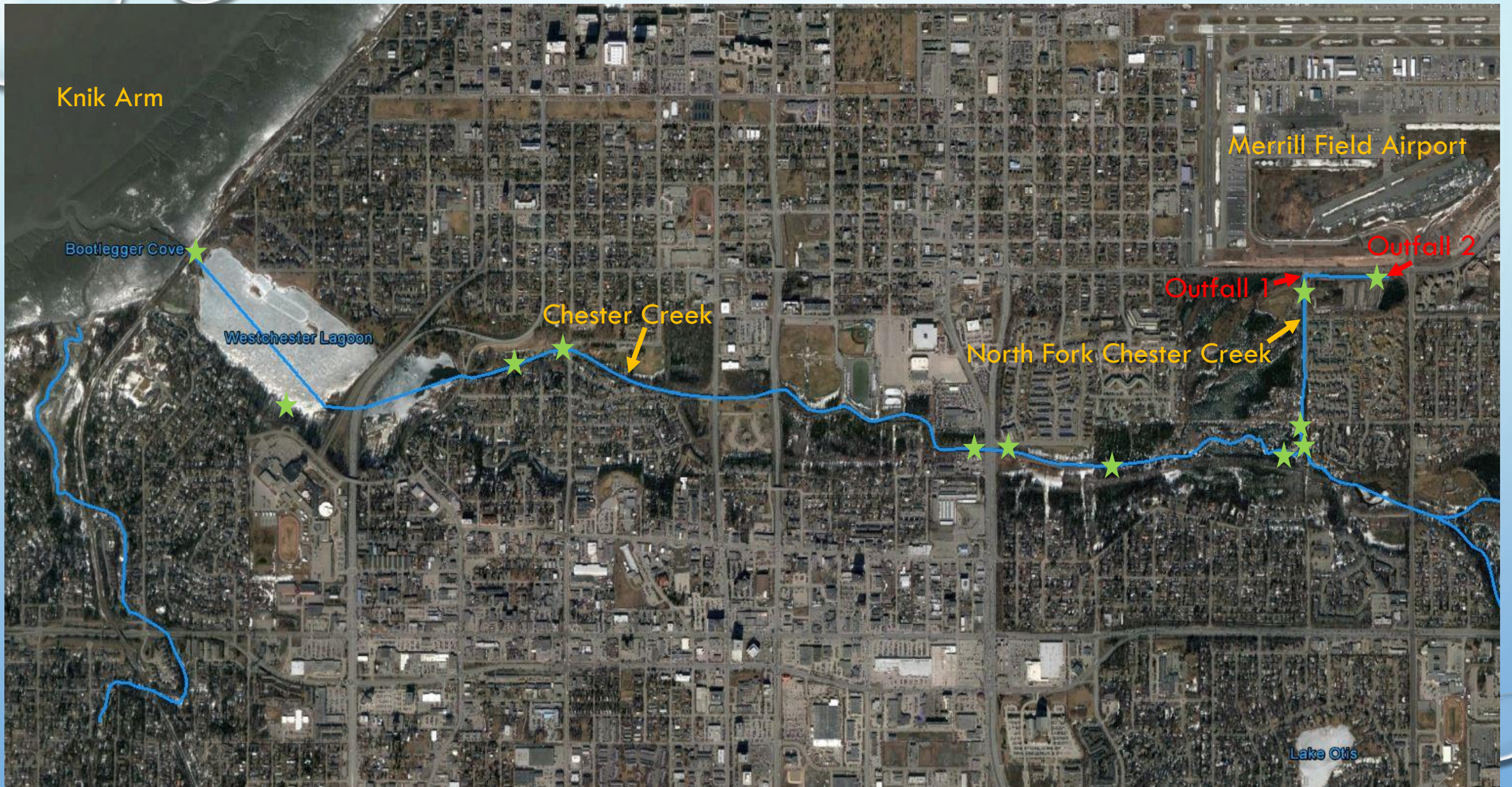


STORM WATER POLLUTION PREVENTION AT MERRILL FIELD AIRPORT



WHY REGULATE STORM WATER?

- The largest source of water pollution today is storm water.
- When rain or snow melt falls onto pavement (or other impervious surfaces), the water picks up whatever contamination, pollutants, sediment, and debris may be present, before it runs off into the storm drain.
- Anchorage's storm drain systems are not treated – so these pollutants are transported directly to the receiving water.
 - In the case of MRI, the receiving water is North Fork Chester Creek, which flows to Chester Creek, and eventually, Knik Arm.
 - North Fork Chester Creek is listed as an impaired water body for Fecal Coliform.
 - Several species of anadromous fish inhabit, spawn in, and migrate through these waters, including Coho salmon, Rainbow Trout, and Dolly Varden.
- Vegetation, soil, wetlands, and natural ground act as filters for pollutants; developed areas (where pavement is the prominent ground cover) create a much greater potential for polluted storm water discharge.



★ Locations of anadromous fish capture

ABOUT THE PERMIT

- Receiving water for Merrill Field Airport (MRI) storm water discharge is North Fork Chester Creek.
- Discharge is regulated under the Alaska Pollutant Discharge Elimination (APDES) Multi-Sector General Permit (MSGP) for industrial storm water discharges. MRI falls under **Sector S – Air Transportation**.
- Some responsibilities of the permittee under the MSGP are to:
 - Develop and maintain a **Storm Water Pollution Prevention Plan (SWPPP)**
 - Select, install, implement, and maintain **control measures**
 - **Minimize exposure**
 - Employ **good housekeeping**
 - Minimize the potential for leaks, spills, and other releases through **spill prevention and response** procedures.
 - **Train all employees** who work in areas where industrial materials or activities are exposed to storm water.

THE SWPPP

MRI SWPPP Team

- Responsible for assisting the Facility Manager in developing and revising the facility's SWPPP, maintaining control measures, and taking corrective actions.
 - Facility Manager: Alex Jumao-as, Assistant Airport Manager
 - Maintenance Coordinator: Steve Kegler, MRI
 - SWPPP Oversight: Kristi McLean, CESCL, R&M
 - SWPPP Inspector: Nathan Dennis, CESCL, R&M

The SWPPP is a living document that is updated regularly and provides:

- A description of the nature of industrial activities at MRI
- A detailed site map showing all locations and control measures pertinent to storm water
- Control measures and BMPs applicable to the specific activities performed at MRI
- An inspection schedule and copies of inspection reports
- A detailed reference for all facility users to understand and participate in the MRI storm water program

CONTROL MEASURES AIM TO PREVENT EXPOSURE

- Control measures are used to prevent exposure of potential pollutants to storm water runoff.
- Some control measures used at MRI include:
 - Education – leaseholder and MRI staff training on a regular basis
 - Illicit Discharge Detection and Elimination – routine inspections and quarterly visual assessments (sampling) to identify and prevent any discharges of pollutants
 - Oil Water Separator (OWS) in Maintenance Shop
 - Vegetated and/or rock lined channels to filter drainage, particularly in snow storage areas where snow melt produces large volumes of runoff in the spring



- Minimizing exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff is a 'first line of defense' against storm water pollution: **if it's inside or well covered, the likelihood of storm water pollution is greatly reduced.**



IF YOU CAN'T PREVENT EXPOSURE, MINIMIZE IT

- At MRI, many activities with the potential to pollute storm water are performed inside the Maintenance Shop or individual leaseholders' hangars or other facilities.
- Spill kits and overflow protection at fueling stations
- Air craft wash station drains to OWS
- Secondary containment is an option when equipment or materials must be stored outside.
- Sedimentation Basin



GOOD HOUSEKEEPING PRACTICES

- [A Drop in the Bucket](#)
- Mud on your shoes – how do you keep it from getting tracked through the house?
- Examples of good housekeeping at MRI
 - Paved areas are swept regularly
 - Immediate response to spills and leaks
 - Labeling, sealing, and properly storing chemicals, oil, and hazardous materials (indoors or covered)
 - Regular preventative maintenance
 - Covered waste receptacles available at fueling stations to dispose of oily rags, towels, etc..
 - Performing maintenance/cleaning of small equipment (for example, diesel heaters, lifts, etc..) inside or with secondary containment underneath

What are some good housekeeping practices you or your tenants employ?

SPILL PREVENTION AND RESPONSE

- Spill kits are to be present and labeled at all permanent and portable fueling stations.
- Example of a complete spill kit:

MOBILE UNIVERSAL SPILL KIT

Get there quick! Roll right to the scene of the spill.

- 50 gallon. 8" rubber wheels. Hinged lid.

Includes:

- (50) 15 x 19" Pads
- (4) 3" x 12' Sorbent Socks
- (8) 18 x 18" Pillows
- (1) pair Nitrile Gloves
- (5) Disposal Bags
- (5) Tamper Proof Seals
- Emergency Handbook
- Goggles



- Fire extinguishers should also be available at or near permanent and portable fueling stations.

SPILL REPORTING

- ADEC requires reporting of any release of a hazardous substance as soon as the person has knowledge of the discharge.
- Report oil/petroleum discharges to ADEC and MRI Management as follows:
 - 1 to 10 gallons (ea.): monthly
 - 10 to 55 gallons: within 48 hours
 - Over 55 gallons: immediately
- Keep a record of all spills in your SWPPP binder. Include:
 - Date and time of spill
 - Location of spill
 - Type and quantity of spill
 - Action taken

For emergency spill response, call **911**
immediately.

To report a spill (emergency and non-emergency),
call MRI at 907.343.6303
and visit

[http://www.muni.org/Departments/merrill field/Pages/SWPPP.aspx](http://www.muni.org/Departments/merrill_field/Pages/SWPPP.aspx)

IT'S THE LAW!

AS 46.03.755, 18 AAC 75.300, 75.325 and 18 AAC 78.200

REPORT OIL AND HAZARDOUS SUBSTANCE SPILLS

During Normal Business Hours

call the nearest response team office:

Central Alaska: (907) 269-3063
Anchorage Fax: (907) 269-7648

Northern Alaska: (907) 451-2121
Fairbanks Fax: (907) 451-2362

Southeast Alaska: (907) 465-5340
Juneau Fax: (907) 465-5245

Alaska Pipeline: (907) 451-2121
Fairbanks Fax: (907) 451-2362

Outside Normal Business Hours

Toll Free 1-800-478-9300

International 1-907-269-0667



Alaska Department of
Environmental Conservation
Division of Spill Prevention and Response
www.dec.alaska.gov/sppr/spillreport.htm

Hazardous Substance

Any hazardous substance spill, other than oil, must be reported immediately.

Oil – Petroleum Products

To Water

- ◆ Any amount spilled to water must be reported immediately.

To Land

- ◆ Spills in excess of 55 gallons must be reported immediately.
- ◆ Spills in excess of 10 gallons, but 55 gallons or less, must be reported within 48 hours after the person has knowledge of the spill.
- ◆ Spills of 1 to 10 gallons must be recorded in a spill reporting log submitted to ADEC each month.

To Impermeable Secondary Containment Areas

- ◆ Any spills in excess of 55 gallons must be reported within 48 hours.

Underground Storage Tank Spill Reporting

Regulated Underground Storage Tank (UST) systems are defined at 18 AAC 78.005. Releases at heating oil tanks must be reported.

- You must report a suspected belowground release from a UST system, in any amount, within 24 hours (18 AAC 78.220(c)).
- You must report if your release detection system indicates two consecutive months of invalid or inconclusive results.
- If you observe unusual operating conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water, report it to the UST Unit:

907-269-3055 or 269-7679

Central Alaska:
Anchorage

(907) 269-3063
Fax: (907) 269-7648

Hazardous Substance

Any hazardous substance spill, other than oil, must be reported immediately.

Oil – Petroleum Products

To Water

- ◆ Any amount spilled to water must be reported immediately.

To Land

- ◆ Spills in excess of 55 gallons must be reported immediately.
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To Impermeable Secondary Containment Areas

- ◆ Any spills in excess of 55 gallons must be reported within 48 hours.

INSPECTIONS

- R&M Consultants, Inc. will be performing regular SWPPP inspections at MRI
- Inspection items include (but are not limited to):
 1. Outfalls and discharge locations



- 2. Leaseholder housekeeping practices – are lease lots clean, are there any signs of spills or potential pollutant discharge, are permanent and portable fueling stations stocked with spill kits, any sheen on standing water, etc..



- 3. Compliance and control measures – Maintenance Shop good housekeeping and BMPs, OWS maintenance, de-icing activities and documentation, ground maintenance (snow storage, vegetative swales, sediment runoff).



4. Completeness and applicability of the SWPPP – any new activities or leaseholders? New or modified BMPs needed? Addressing incidents of non-compliance and corrective action.



HAZARDOUS MATERIALS – STORAGE AND USE

- The SWPPP indicates that glycol and/or urea based deicers are not used at MRI
 - Additional monitoring and sampling, and potentially collection of runoff as a result of de-icing activities, would be required if these chemicals were to be used at MRI
- All drums, containers, barrels, cans, and other vessels containing hazardous materials should be stored indoors or in a covered area, and should not be exposed to precipitation or standing water.
- Unloading/loading activities should be conducted in areas where any incidental spills or leaks can be contained. For example, if a case of household bleach is being unloaded from a small cargo plane and splits open, what will you do?
- Follow manufacturer's recommendations for storage and use of all hazardous materials.
- Regularly inspect storage areas and practice good housekeeping. Better yet, write it down afterwards! Date, time, observations, corrective action taken. Documentation is essential to a comprehensive and defensible program.

ACHIEVING PERMIT COMPLIANCE

Because storm water is regulated by the ADEC (a State agency), rather than the EPA (a Federal agency), there is a much greater regulatory presence locally. Inspection frequency has increased recently.

MRI was inspected by the ADEC in the fall of 2016, which resulted in several opportunities for improvement of the storm water program.

Many of the items related to documentation, which is essential to the integrity of the program.

Generally speaking, compliance with the MSGP is achieved by:

- Developing a SWPPP that outlines a facility specific plan for preventing pollution of storm water.
- Implementing that plan daily.
- Inspecting, sampling for, and documenting the effectiveness of the plan.
- Taking and documenting corrective action, as necessary.
- Reporting these activities to ADEC.

YOU CAN HELP

To comply with the requirements of the MSGP and prevent pollution of Anchorage's water resources, all MRI users, tenants, and leaseholders should adopt these practices:

- Good housekeeping
- Using BMPs when fueling aircraft
- Wash aircraft only at the designated wash facility
- Report all spills and leaks, educate yourself on how to respond to spills, and periodically check that spill kits are available, labeled, and well stocked
- Be an active participant in the storm water management program; share your knowledge and experiences with other users
- Bring ideas, concerns, observations, and questions to Merrill Field Airport Management
- Document activities, spills, inspections, and corrective actions in your SWPPP binder. Documentation does not mean you are admitting 'fault' or otherwise; it means you are taking the appropriate steps to identify an issue and correct it.

SWPPP BINDERS

Please maintain a copy of the current SWPPP, the MSGP, and any related records and notes in your SWPPP binder. This would also be a great place to maintain an inventory of your spill kit(s).

R&M is in the process of updating the SWPPP in accordance with the 2020 MSGP. An electronic copy of the updated SWPPP will be distributed via email, as well as posted on the webpage.

[HTTP://WWW.MUNI.ORG/DEPARTMENTS/MERRILL_FIELD/PAGES/SWPPP.ASPX](http://www.muni.org/departments/merrill_field/pages/swPPP.aspx)

If you have any questions or concerns, please contact:

Alex Jumao-as, Assistant Airport Manager, MRI

907.343.6311

DISCUSSION AND QUESTIONS

