INTEGRATED CONTINGENCY PLAN (ICP) AND STORMWATER POLLUTION PREVENTION PLAN (SWP3) TRAINING

2014

ICP/SWP3 - Agenda

- Laws and Regulations
- Integrated Contingency Plan (ICP)
- Storm Water Pollution Prevention Plan (SWP3)
- Munitions Debris
- WFF's Environmental Management System (EMS)

Laws and Regulations

- Federal
  - Clean Water Act
  - Oil Pollution Act (OPA)
  - Resource Conservation and Recovery Act (RCRA)
- State

ICP Requirement

What triggers the requirement for WFF to have an Integrated Contingency Plan?

- Storage of oil greater than 1,320 gallons aboveground or storage of 42,000 gallons of oil underground not regulated by other tank regulations.

- As of May 2014, WFF has 163,453 gallons of #2 Fuel and 314,591 gallons total for all petroleum products.

ICP Applies To

Any container ≥ 55 gallons which contains oil

This includes:

- **Drums**
- **Tanks (aboveground and underground)**
- **Transformers**
- **Mobile Re-fuelers when parked**
- **Other oil storing equipment**

ICP Overview

- Goal to:
  - Minimize hazards to humans and the environment from any release of oil or hazardous substance at WFF
- Coordinates:
  - WFF personnel
  - Local fire and police departments
  - Outside contractors
  - Department of Environmental Quality (DEQ)
  - Environmental Protection Agency (EPA)

ICP Overview

Spill Prevention Control and Countermeasures Plan (SPCC)

Storm Water Pollution Prevention Plan (SWP3)

Hazardous Waste Contingency Plan (HWCP)

Integrated Contingency Plan (ICP)

2014 Edition

May 2014 Edition

Will be available on website at http://sites.wff.nasa.gov/code250

CALL 911

Emergency Contacts for Wallops Flight Facility

IN CASE OF A SPILL, FIRE OR EXPLOSION AT THIS FACILITY,
CALL 911 IF ON-SITE, OR
CALL 757-824-1333 IF OFF-SITE

EMERGENCY PHONE NUMBERS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GODDARD SPACE FLIGHT CENTER
WALLOPS FLIGHT FACILITY
WALLOPS ISLAND, VIRGINIA 23337

On-Site Phone Numbers:

EMERGENCY 911 757-824-1333 (for mobile phones or when off-site)

Emergency Coordinators:

Member	Facility Phone	After Hours Phone	Radio Page
Captain On-Duty	911	911	Fire Dispatch
Fire Station #1	911	911	Fire Dispatch
Fire Station #2	911	911	Fire Dispatch

Environmental Coordinators:

Member	Facility Phone	Mobile Phone	Home Address
Lauren Chance (Environmental Protection Specialist)	Ext. 1179	(410) 710-4113	33085 Bogues Bay Drive Assawoman, VA 23303
Owen Hooks (Alternate) (Environmental Engineer)	Ext. 1941	(443) 523-2697	31490 Shavox Rd, Salisbury, MD 21804

Off-Site Phone Numbers:

National Response Center	800-424-8802
U.S. Environmental Protection Agency Region 3 Office	215-814-5000 800-438-2474
Virginia Department of Environmental Quality Tidewater Regional Office – Main Number	757-518-2000
Virginia Department of Emergency Management (24 hours)	800-468-8892
Eastern Shore Hazardous Material Response Team	911
Virginia Hazardous Material Coordinator	757-363-3891

Note: Contact sheet can be found on page i

ICP Table of Contents

1. Plan Administration
2. Facility Description & Bulk Storage Container Information
3. Discharge Prevention
4. Discharge Response Equipment and Training
5. Spill Countermeasures
6. Worst Case Scenerio
7. Facility Inspections, Tests, and Records
8. Integrated Contingency Plan Deviations

ICP Appendices

Appendix A	Certification of the Applicability of the Substantial Harm Criteria
Appendix B	Wallops Flight Facility Site Maps
Appendix C	Underground Storage Tanks and Oil Storage Summaries
Appendix D	Tank and Potential Discharge Data
Appendix E	Hazardous Waste Accumulation Areas and Evacuation Routes
Appendix F	Controlled Drainage Discharge Log
Appendix G	Supplies and Equipment Inventory of Spill Response
Appendix H	Sample Incident Plan / Briefing
Appendix I	Incident Report Form and Follow-up Report Template
Appendix J	Decontamination of Emergency Equipment
Appendix K	Spill Response Contractors and Agreements
Appendix L	Sample Training Certificate
Appendix M	Site Inspection Checklists
Appendix N	Safety Data Sheets
Appendix O	Storage Tank Piping Diagrams
Appendix P	Storm Water Pollution Prevention Plan

Storage Tanks

- Outdoor Aboveground Fuel Tanks

D-1

D-50

D-4

F-26

Rentals

Storage Tanks

- **Indoor Aboveground Fuel Tanks**

NOAA

Mobile Generator

V-3

Z-62

Storage Tanks

- Underground Storage tanks Fuel Tanks
- Oil Filled Equipment

R-30

N-161

MARS Pad 0-A

Note: Tank pictures can be found in Appendix D

Oil-Filled Containers

- 55 gallons or greater
- Includes cooking oil

N-223

E-2

Storage Tanks

Large Spill Kit
(95-gallon spill kit absorbs up to 63 gallons; neon green color for high visibility and a snap on lid for easy access)

Anti-Siphon Valve
(Prevents fuel from exiting tank if a line is broken or leaking)

Spill Basket
(Used to catch any fuel that spills during filling of the tank)

Long Bolts on Manway Opening
(The long bolts allow the manway cover to lift up and relieve pressure in the tank)

Tank Grounding System
(Used to discharge the tank in the event of a charge build up from lightning)

Adequate Lighting
(There should be adequate lighting 24 hours a day so that any individual can easily see if the tank is leaking or if a spill has occurred)

Neoprene Rubber Piping
(Needs to be replaced due to dry rotting and rubbing against objects)

Seal Concrete Dike
(The concrete dike must be sealed liquid-tight to prevent any fuel contamination in the event of a leaking tank)

Storage Tanks

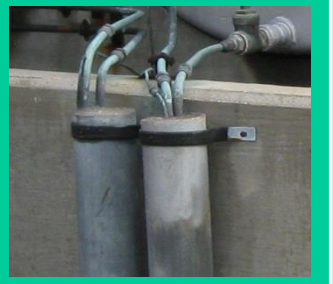
Touchup Paint
(There should be no primer, bare metal, or rust visible)

Raise Vent Height
(Vent must be 12 inches above the fill port and at least 3 feet above the top of the tank)

Enlarge Dike
(A single-wall tank must be in a liquid-tight dike able to hold 110% of the tank capacity)

Vehicle Protection Bollards
(Install concrete filled steel bollards at least 5 feet from the tank, 4 feet apart, and at least 4 feet tall; bollards should be at least 4 inches in diameter and 3 feet in the ground with a 15 inch concrete foundation)

Piping Protection
(Have the fuel lines sleeved with appropriate material to prevent lines from coming in direct contact with the soil)



Piping Support
(The fuel lines require support at least every 5 feet in open areas and every 10 ft along the wall of a building)

Overfill Prevention Device (Fill Valve)
(Shuts off the flow of product when tank is 90% full)

Dust Cap (Fill Valve Cap)
(Designed to deter dust, debris, and water from entering the tank)

Storage Tanks

Replace Plastic Travel Cap with Painted Steel Cap
(Plastic will degrade in the presence of petroleum and needs to be replaced with steel cap)

Spill Basket Lock
(Placed on all tanks to prevent individuals from stealing or contaminating the fuel)

Driver Delivery Signage
(Present by all tanks and must be visible for the fuel delivery driver)

Proper Tank Identification Signage
(Present on all tanks and must be visible for the fuel delivery driver; to verify proper tank identification please contact WFF Environmental Office)

Tank Capacity and Inches Signage
(Present on all tanks and must be visible for the fuel delivery driver; to verify proper capacity and inches please contact WFF Environmental Office)

No Smoking Signage
(Present on all tanks and must be visible for the fuel delivery driver)

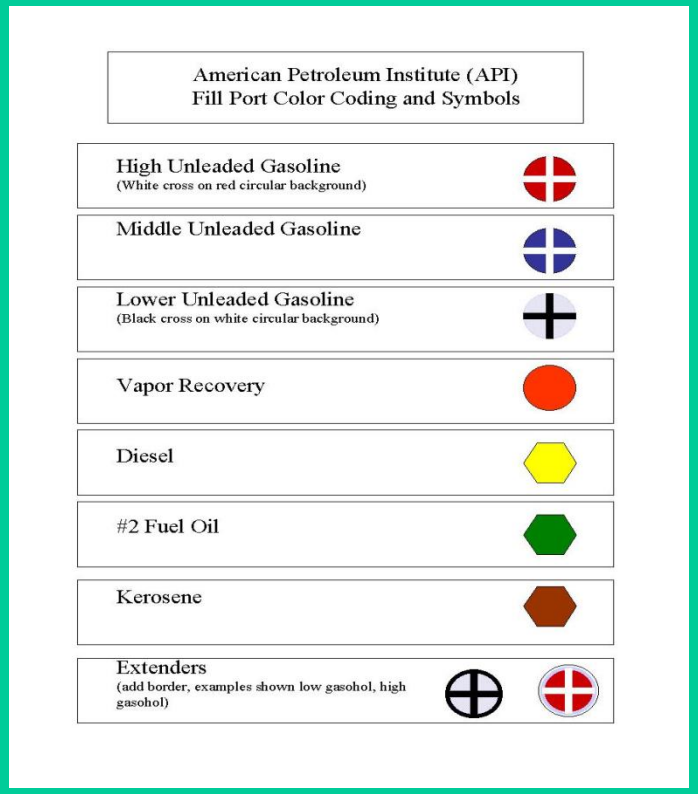
Label Piping
(Helpful in the event of a leaking pipe or during pipe maintenance)

NFPA Label
(Present on all visible sides of the tank; color coded, numerical system for indicating the health(B), flammability(R), reactivity hazards(Y), and special precautions (W); 4 is extreme and 0 is minimal)

Storage Tanks

Proper Fuel Type Labels
(Present on all visible sides of the tank; identifies tank contents)

Color Code Fill Area



Vehicle Fueling

When fueling a vehicle:

- No Smoking.
- Turn off engine.
- Turn off cell phone and other electronic devices.
- Discharge static electricity before fueling (before fueling, touch any metal on the vehicle away from the vehicle's fuel filler with bare hand. This will discharge the static electricity on the body. Do not re-enter a vehicle while gasoline is pumping. This can re-charge the body with static electricity).
- Fire: if a fire starts, do not remove the nozzle. Back away immediately and use the emergency stop button (ESTOP) to stop pumping fuel.
- Do not leave pump unattended when pumping.

Vehicle Fueling

What's wrong with this picture?

What should be done next?

Note: Vehicle Fueling Procedure can be found in Section 3

Fuel Deliveries

- Check sorbent material in delivery truck.
- Protect adjacent storm drains.
- Shut down engine unless used for transfer pumping operation.
- Set brakes and chock wheels prior to and for the duration of all fuel and oil transfers.
- Perform bonding/grounding prior to fuel and oil transfers, if necessary.
- No smoking during fuel and oil transfers.
- Use drip pails below hose connections during fuel and oil transfers.

Fuel Deliveries

- Confirm that the tank or vehicle being filled can accept delivered volume.
- Remain within 25 feet and maintain an unobstructed view of cargo tank and hose at all times during fuel and oil transfers.
- Inspect vehicle drains and outlets for leakage prior to loading and prior to vehicle departure; make necessary adjustments or repairs prior to departure.
- Verify complete disconnect of hoses and bonding / grounding prior to removal of wheel chocks.
- Delivery drivers are advised to check with facility personnel prior to departing.

Fuel Deliveries

Before Fueling

Note: Procedure can be found in Section 3

Minor Discharge

A "minor" discharge 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 discharged is small (e.g., may involve less than 25 gallons of oil);
- Discharged material is easily stopped and controlled at the time of the discharge;
- Discharge is localized near the source;
- Discharged material is not likely to reach surface water;
- There is little risk to human health or safety; and
- There is little risk of fire or explosion.

Minor Discharge

Minor discharges can usually be cleaned up by WFF personnel. The following guidelines apply:

- Immediately notify the WFF Fire Department.
- Under the direction of the Fire Department, eliminate potential spark sources. If safe to do so, identify and shut down source of the discharge to stop the flow, contain the discharge with response materials and equipment.
- Place discharge debris in properly labeled waste containers.
- The Fire Department will notify the Environmental Coordinator.
- The Fire Department will complete applicable portions of the incident report form (Appendix I), file one copy, and forward a copy to the WFF Environmental Office.
- If there is a reportable discharge to the environment, the Environmental Coordinator will make the appropriate notifications.

Small Spills

- Ensure your safety and the safety of others
- Call 911 – Report the Spill
- Place absorbent booms around the spill
- Protect any drain
- Place absorbents in drums or bags and call the Environmental Office at Ext. 1718 for pick up

What Should Be Done?

- Wash this spill to the nearest storm drain?
- Call 911?
- Walk away?

Major Discharge

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

- The discharge is large enough to spread beyond the immediate discharge area;
- The discharged material enters water or has the potential to enter the water;
- The discharge has spread beyond WFF boundaries;
- The discharge requires special equipment or training to clean up;
- The discharged material poses a hazard to human health or safety; or
- There is a fire or explosion or the danger that one may occur.

Waters of Virginia

"The discharged material enters water or has the potential to enter the water" applies to:

- Surface waters
- Groundwater
- Wetlands
- Storm sewer systems

Major Discharge

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

- If WFF personnel are required to leave the Facility, evacuation routes are shown in each building and Appendices B and E.
- Notify the Fire Department. If an internal fire alarm is available, activate the alarm; otherwise, spread the alarm verbally.
- The Fire Department will notify the Environmental Coordinator.
- Appropriate emergency response procedures will be implemented and may involve outside spill contractors.
- The Fire Department shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, reoccur, or spread.

Major Discharge

- The Fire Department will complete applicable portions of the incident report form (Appendix I), file one copy, and forward a copy to the WFF Environmental Office.
- If there is a reportable discharge to the environment, the Environmental Coordinator will make the appropriate notifications.
- The Fire Department and the Environmental Office will ensure that all wastes are containerized and that all Fire Department emergency equipment is decontaminated as described in Appendix J.

Note: Procedures can be found in Section 4

Countermeasures

Countermeasures to contain and divert spills from entering waters of the Commonwealth of Virginia include the following:

- Elimination of the source of the spill (i.e., shutting valves, banding piping, plugging ruptured tanks, etc.);
- Strategic placement of sorbent materials around or on top of spilled material;
- Placement of booms around proximate storm drain inlets and sanitary sewer manholes; and
- Construction of earthen dikes in the immediate area or downstream of the spill.

Note: Procedures can be found in Section 5

What If …

And …

Then

Call 911

Countermeasures

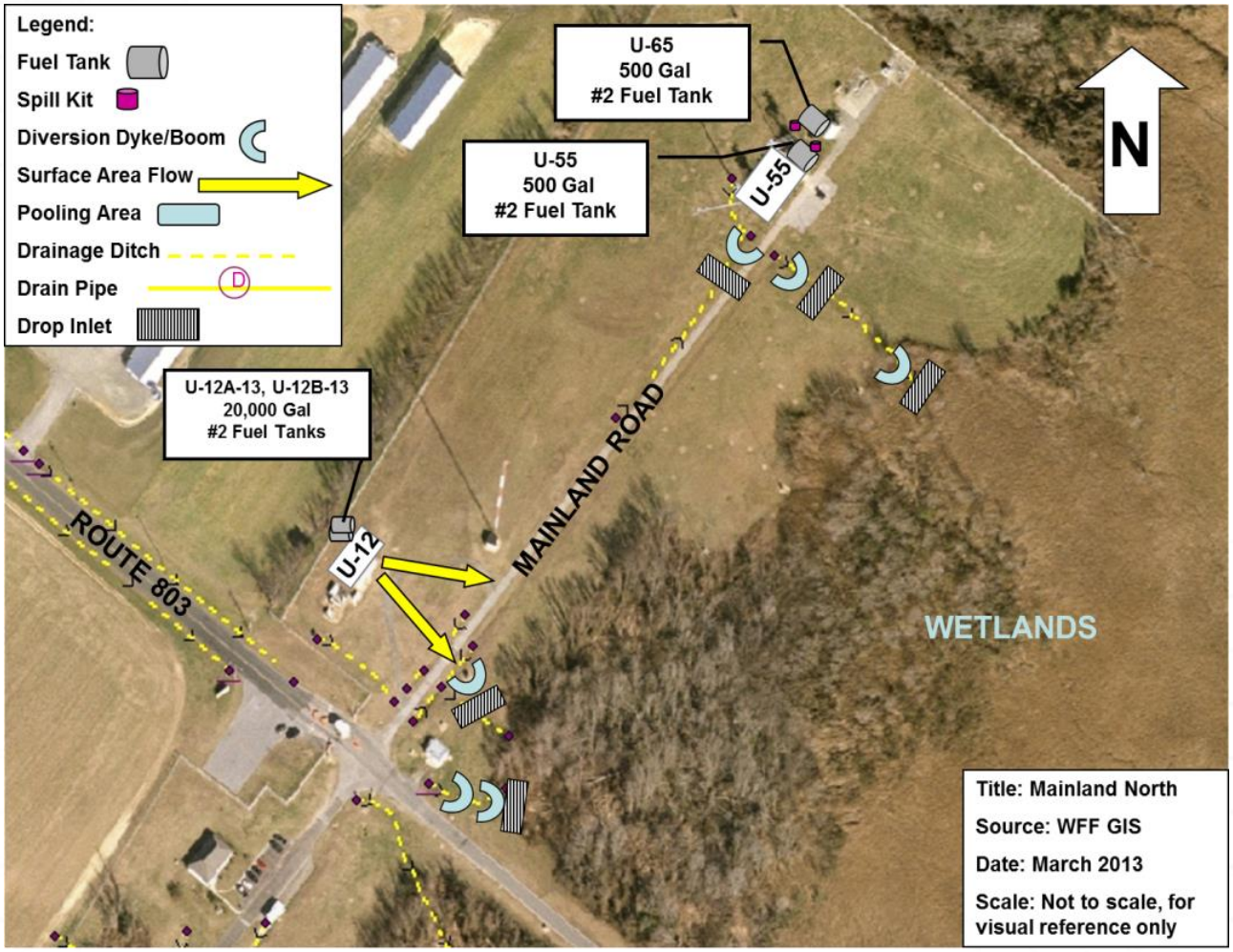
Worst Case Scenario

Spill Drill Exercise

Note: Worst Case Scenerios are described in Section 6.

Countermeasures

Incident Briefing Plans



Note: Incident Briefing Plans can be found at the WFF Fire Department.

Weekly AST Inspection

Daily & Weekly Inspection is required for:

D-1

D-9A

D-9B

F-26-1A

F-26-1B

U-12A&B

MARS 33

Note: Procedures found in Section 7.
Forms found in Appendix M.

WFF Integrated Contingency Plan **37.01.01.16244**

WEEKLY INSPECTION FORM
ABOVEGROUND STORAGE TANK SYSTEMS:

Facility: Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia 23337

Date: _____
Completed By: _____
Company: _____

SYMBOLS: Y – Yes N – No S – Satisfactory U – Unsatisfactory NA – Not Applicable
D – Diesel Oil J – Jet Fuel MO – Motor Oil UO – Used Oil

ITEM	CONDITIONS	COMMENTS(1)	REFERRED TO
TANK ID: _____			
Tank Condition			
Support Condition			
Staining on concrete or adjacent surfaces			
Tank area clear of debris			
Secondary containment free of oil, water and debris			
AST label appropriate and legible (not faded)			
Threaded fill caps kept closed when not in use			
Evidence of fuel spillage at remote fill and/or direct fill			
Fuel leaks visible on top of the tank or from piping			
Fuel gauge functioning properly			
All vent systems operational			
Status of spill kit supplies			
Is corrosion (rust) present on exterior surface of tanks, fittings or other equipment?			

(1) Provide comments below or attach additional sheets as necessary. Be sure to note the item you are commenting on.

_____
_____
_____

KEEP ON FILE FOR FIVE (5) YEARS.
MAKE AVAILABLE TO REGULATORY PERSONNEL UPON REQUEST.

May 2014

Monthly AST Inspection

Monthly Inspection is required for all aboveground storage tanks.

NASA - WALLOPS FLIGHT FACILITY

MONTHLY ABOVEGROUND STORAGE SYSTEM INSPECTION CHECKLIST

Building #	Tank #	Facility Name/Address	Inspected By:	Date
Were any issues found? Circle: YES or NO			Was Task Order Issued? Circle: YES or NO	

CATEGORY	DESCRIPTION		
TANK COMPONENTS		Y, N or N/A	COMMENTS
Condition of Tank	Is paint in good shape?		
	Is concrete pad or dike in good condition?		
	Does tank has adequate vehicle protection?		
Overfill Prevention	Does the tank have an overfill alarm and is it working properly?		
	Is the tank equipped with a functioning overfill prevention valve?		
Tank Gauge	Is the tank gauge legible, accurate, and working properly?		
Tank Ladders or Stairs	Is the tank ladder or stairs in good condition?		
Secondary Containment	Is the secondary containment area dry? (Interstitial or Concrete Dike)		
Former Concrete Containment	Are the drain holes free of debris?		
Leaks	Is the tank area clean with no evidence of any leaks or spills? (Wipe areas clean.)		
Tank Saddles	Are the saddles in good condition no evidence of corrosion where the tank meets the tank saddles?		
Vent	Are the primary and emergency vents unrestricted and working properly?		
Signage	Does the tank have proper signage: Hazard Diamond, product, working and design capacities, delivery driver instructions, and tank number?		
TANK FILL AREA		Y, N or N/A	COMMENTS
Spill Containment Manhole (Spill Bucket)	Is the spill bucket free of dirt, trash, water or product?		
Fill Pipe	Is the fill cap in good condition, seals tightly and locked?		
Spill Kit	Is the spill kit in place and properly stocked?		
PIPING		Y, N or N/A	COMMENTS
Support	Is the piping properly supported?		
Leaks or Corrosion	Are there visible stains or leaks present? (All stains should be wiped clean.)		

Instructions: If certain equipment is not required and/or not present, make a notation in the "COMMENTS" column. Describe the issues in the "COMMENTS" section and notify the appropriate person to request a task order be issued.

ADDITIONAL COMMENTS:

7/25/2011 Page 1 of 1 NASA ICP Update.AST Monthly Inspection Checklist UPDATED Final 3-17-10.xls

Monthly Drum Inspection

Monthly inspection is required for all 55 gallon drums.

WFF Integrated Contingency Plan 37.01.01.16286

MONTHLY INSPECTION FORM
DRUM STORAGE AREA

Facility: Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia 23337

Date: _____
Completed By: _____
Company: _____

ITEM	CONDITIONS	COMMENTS(1)	REFERRED TO
DRUM STORAGE AREA _____			
Containment area conditions			
Labels appropriate and legible			
Staining on concrete floor – evidence of leaks/spills			
Adequate spill kit supplies			

(1) Provide comments below or attach additional sheets as necessary. Be sure to note the item you are commenting on.

_____

KEEP ON FILE FOR FIVE (5) YEARS.
MAKE AVAILABLE TO REGULATORY PERSONNEL UPON REQUEST.

May 2014

Quarterly Transformer Inspection

Quarterly inspection is required for all transformers.

WFF Integrated Contingency Plan 37.01.01.16286

QUARTERLY INSPECTION FORM
ALL TRANSFORMERS

Facility: Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia 23337

Month: _____
Completed By: _____
Company: _____

DATE	TRANSFORMER	CONDITIONS	EVIDENCE OF LEAKS	COMMENTS
	SN-PVH079			
	EXCESS			
	SN-50485			
	EXCESS			
	EXCESS			
	STA-X-72			
	T-8			
	T-10			
	T-11			
	T-12			
	T-13			
	T-14			
	T-15			
	T-16			
	TR-CG-5 (TR-H-30)			
	T-CG-11			
	T-CG-12			
	T-CG-13			
	T-CG-14			
	T-CG-21			

May 2014

Inspections

Quiz

When should we report a release?

Who should we contact?

What Should We Do in the Event of an Emergency?

For ALL spills and releases, notify the Wallops Fire Department at: Ext. 911 or

757-824-1333

(if using a mobile phone)

Reporting a Spill

Provide:

Time of spill

Location of spill

Type/name of material spilled

Estimated quantity

Status of spill

Cause of spill

Name and code of reporting party

2013 EPA Clean Water Act Inspection Observations

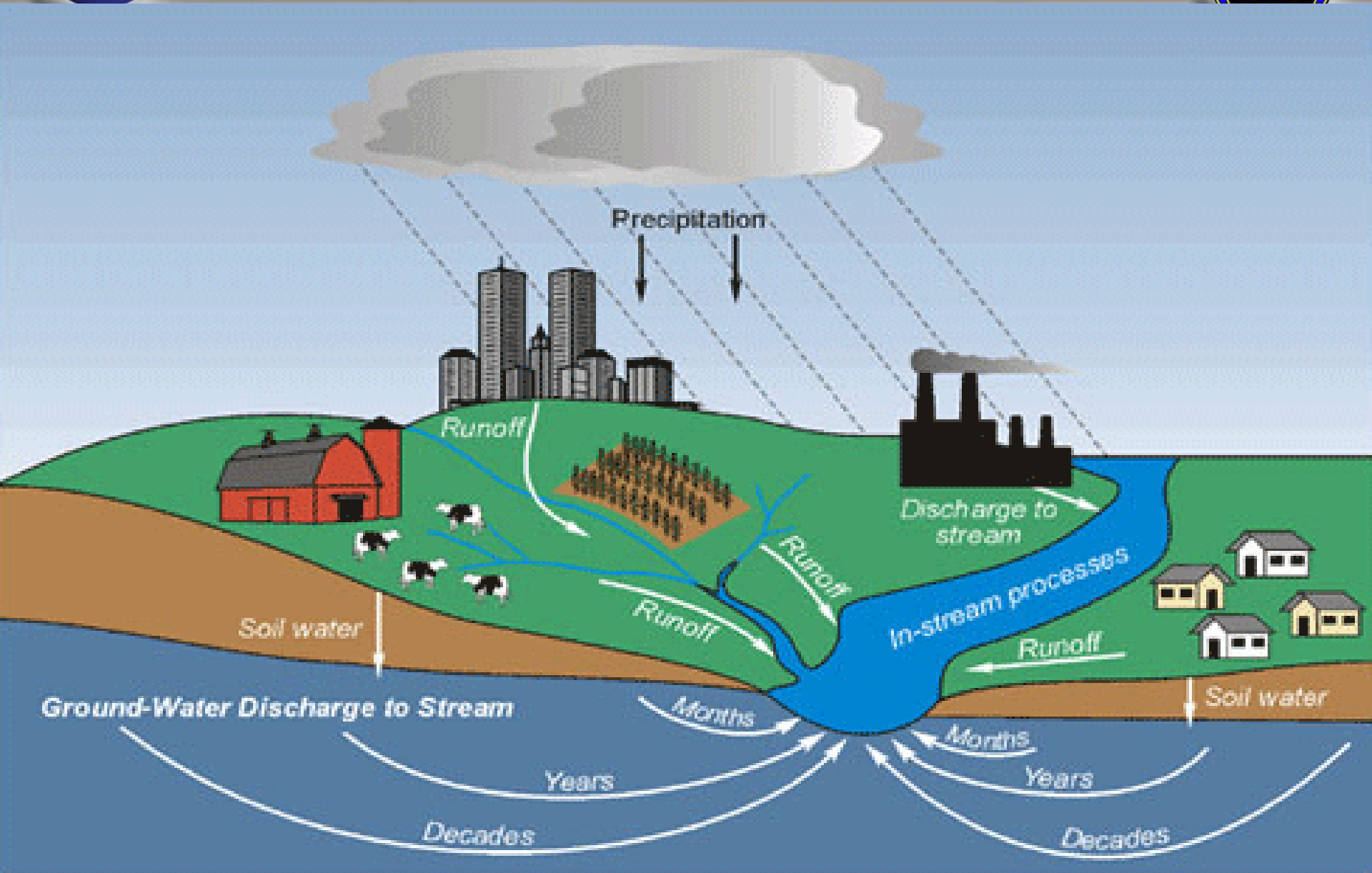
- Sediment and Erosion Control Inspections at a construction site
- Storm drains near AST need to be covered during fueling
- Inspection of areas where infrequently used vehicles/equipment are parked to check for leaks/spills

SWP3

The Stormwater Pollution Prevention Plan (SWP3):

- Is required by the Virginia Pollutant Discharge Elimination System (VPDES) permit
- Goal is to minimize the potential pollutants which could be carried away in stormwater discharge.

Sources of Pollutants



Eastern Shore

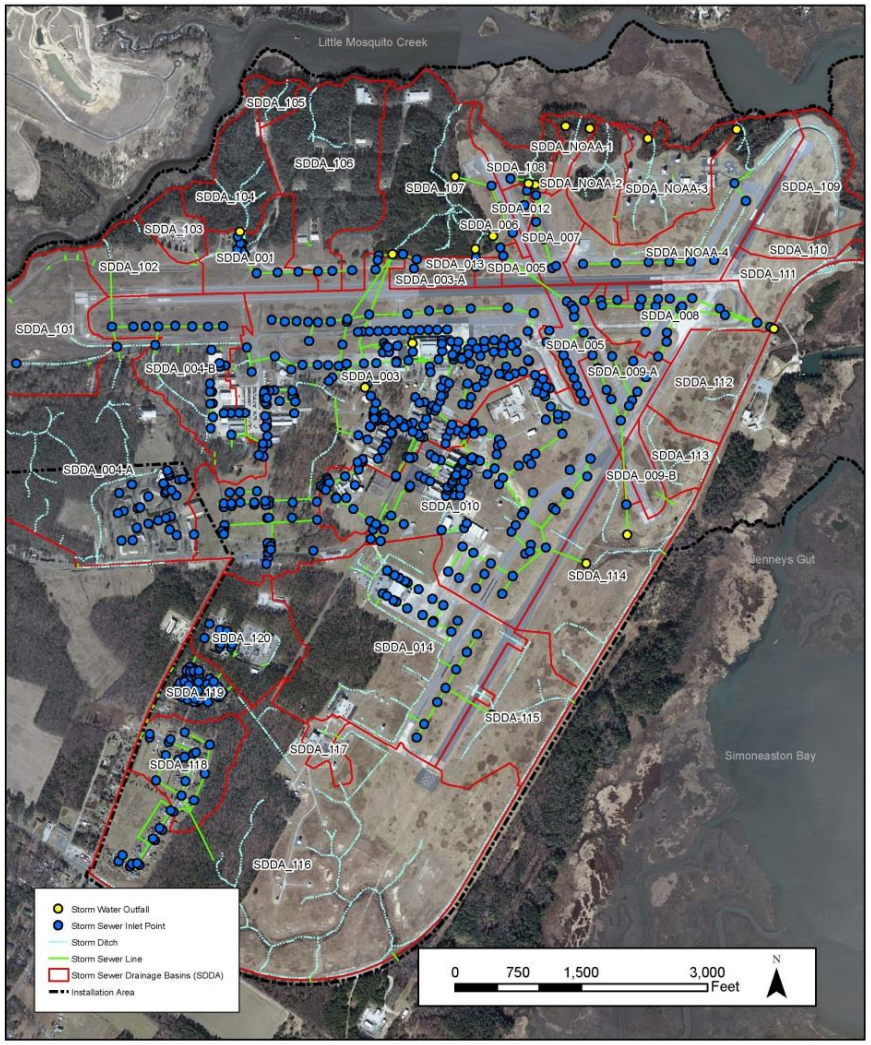
The watersheds on the Eastern Shore are the Chesapeake Bay and the Atlantic Coastal.

SWP3

The SWP3 describes:

- The SWPP Team
- Potential pollutant sources
- Preventive measures
  - Best Management Practices (BMPs)
  - Inspection
  - Training

Main Base Drainage Features



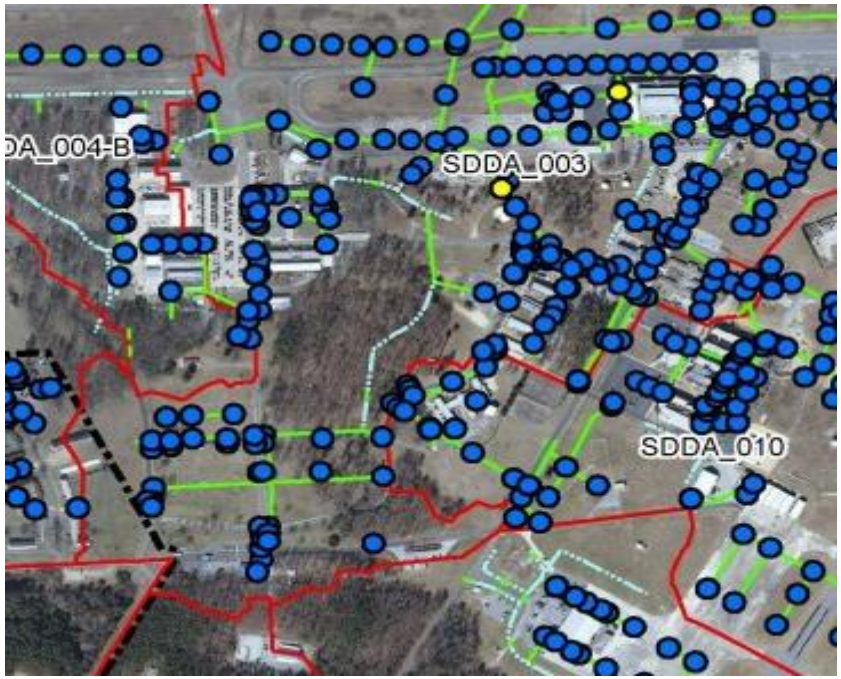


Figure B.3.1 WFF Main Base Drainage Features

Mainland and Island Drainage Features

Figure B.3.2 WFF Mainland and Island Drainage Features

Potential Pollutant Sources

Activities at WFF Addressed in SWP3:

- Petroleum Storage
- HW Accumulation Areas
- Vehicle Maintenance Facility
- Aircraft Runways
- Rocket Motor Storage Area
- Environmental Areas of Concern
- Outdoor Drum Storage Areas
- Construction/Land Clearing
- Launch Support

BMP HW and Petroleum

Hazardous Waste Accumulation, Petroleum Storage, Drum Storage

- 55 gallon containers stored on secondary containment
- Training
- Monthly drum or HW inspection
- Limited outdoor storage
- Good housekeeping

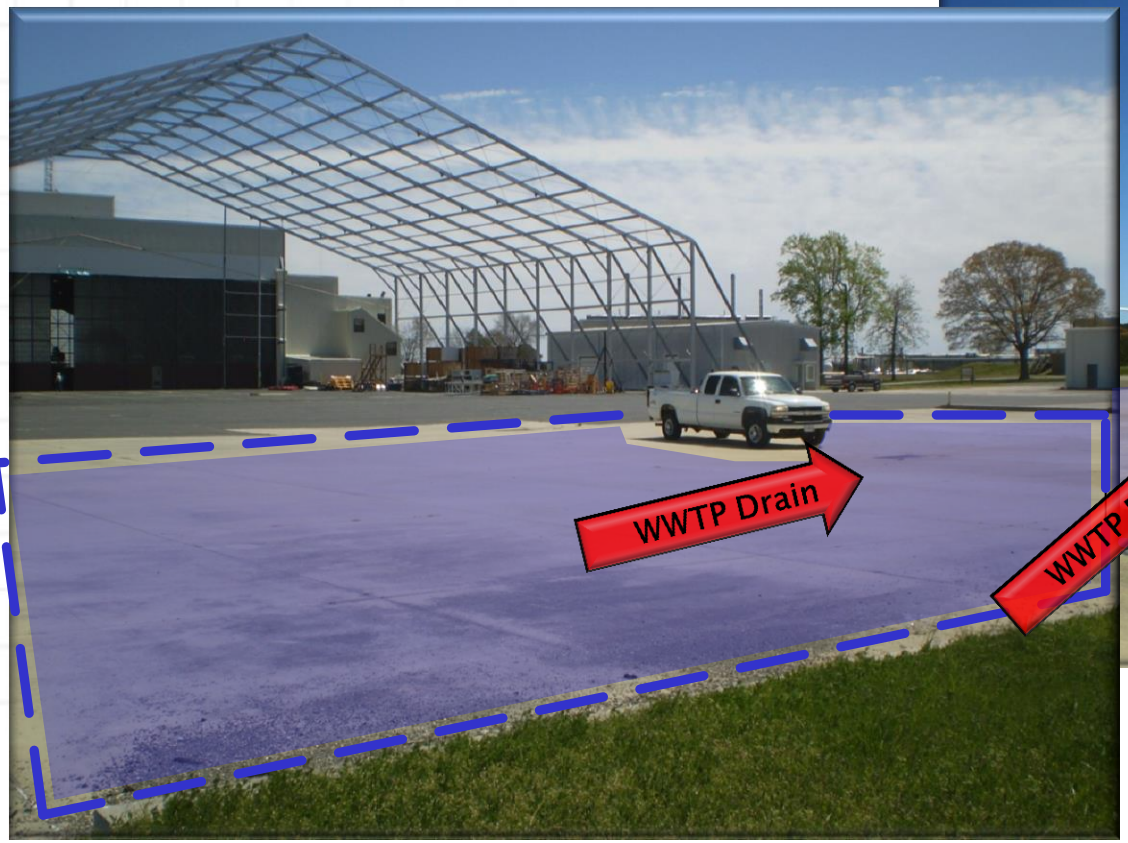
BMP Vehicle Maintenance

- Preventive maintenance
- Sorbent pads while working
- Covering storm drains during outdoor repairs

BMP Equipment Washing

Management of Runoff

Wash oversize vehicles only at the D-1 Hangar Wash Rack

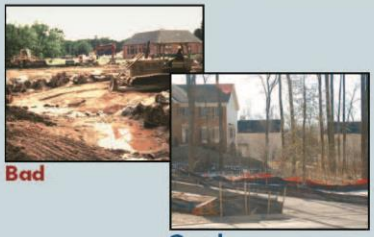


BMP Aircraft Runways

- Inspecting fuel delivery trucks
- Training
- Covering storm drains when fueling
- Sweeping and vacuuming of runways
- Grass buffers between runways and drop inlets

Stormwater and the Construction Industry

Protect Natural Features



Bad

Good

- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

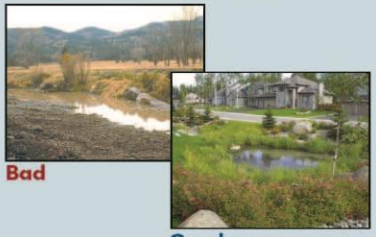
Construction Phasing

Bad

Good

- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

Vegetative Buffers

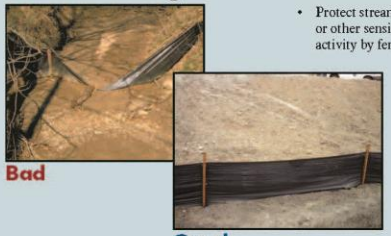


Bad

Good

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

Silt Fencing



Bad

Good

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

Maintain your BMPs!

www.epa.gov/npdes/menuofbmps

Site Stabilization

Bad

Good

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

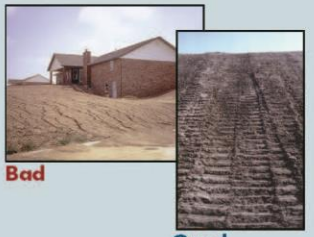
Construction Entrances

Bad

Good

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

Slopes

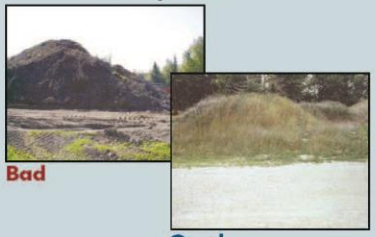


Bad

Good

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

Dirt Stockpiles



Bad

Good

- Cover or seed all dirt stockpiles.

Storm Drain Inlet Protection

Bad

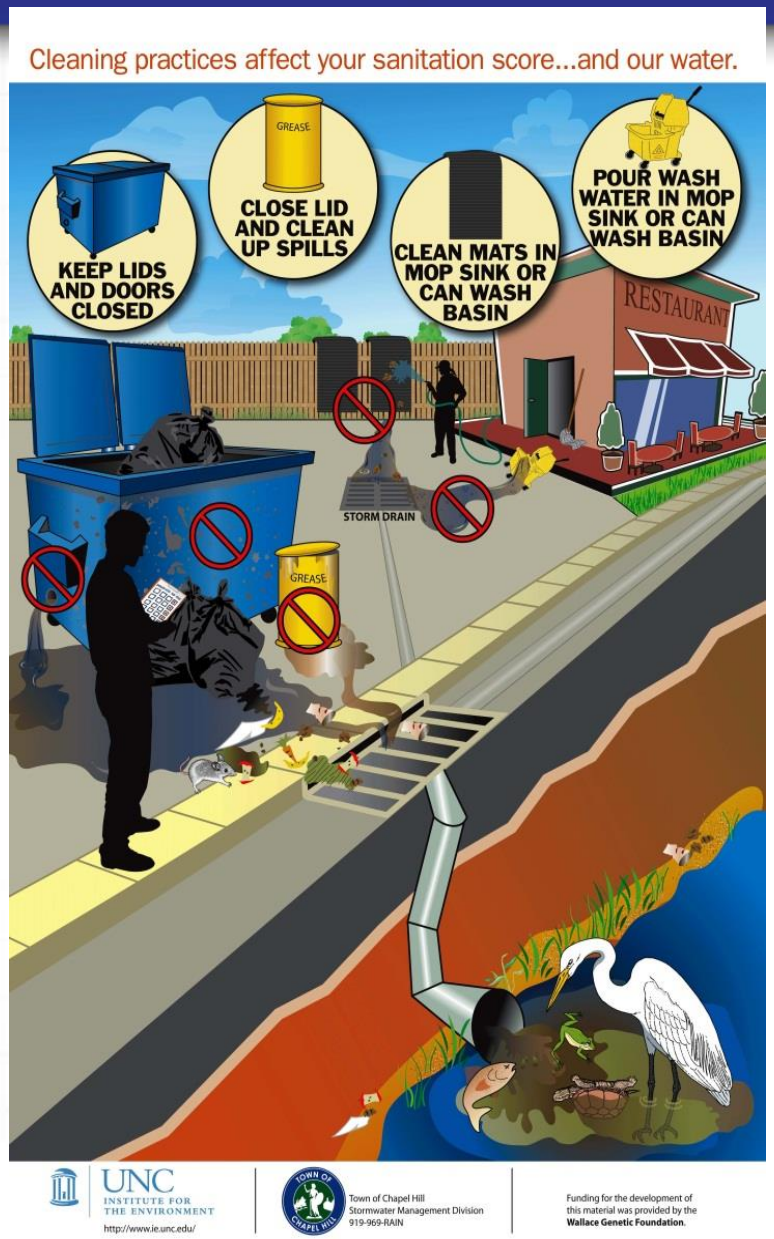
Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

BMP AOC

Sediment and Erosion Control during work at Environmental Areas of Concern (AOC)

BMP Housekeeping



BMP Facility-wide

Visual Inspections of Storm Drains

10 Things You Can Do to Prevent Stormwater Runoff Pollution

- Use fertilizers sparingly and sweep up driveways, sidewalks, and gutters
- Never dump anything down storm drains or in streams
- Vegetate bare spots in your yard
- Compost your yard waste
- Use least toxic pesticides, follow labels, and learn how to prevent pest problems
- Direct downspouts away from paved surfaces; consider a rain garden to capture runoff
- Take your car to the car wash instead of washing it in the driveway
- Check your car for leaks and recycle your motor oil
- Pick up after your pet
- Have your septic tank pumped and system inspected regularly

EPA United States Environmental Protection Agency

For more information, visit
www.epa.gov/nps or
www.epa.gov/npdes/stormwater

Discussion

What are the BMP's that affect you in your work area everyday?

ICP/SWP3 Points of Contact

If you have ANY questions or concerns please call any of the following people:

Lauren Chance (ICP) - x1179

Owen Hooks (ICP) – x1941

Monica Borowicz – x1023

Marianne Simko – x2127

Shane Whealton –x1090

Hazardous Waste Line – x1718

Water Conservation

- Why we care…
  - EPA designated Sole Source Aquifer
  - EMS Medium Priority
  - Executive Orders 13423 and 13514 – Reduce consumption by 2% per year 16% over 8 years

Water Conservation

- What we do…
  - Low-flow water fixtures
  - Participant – Regional Groundwater Meetings
  - No lawn irrigation
  - Drinking water aquifier not used for cooling towers

Water Conservation

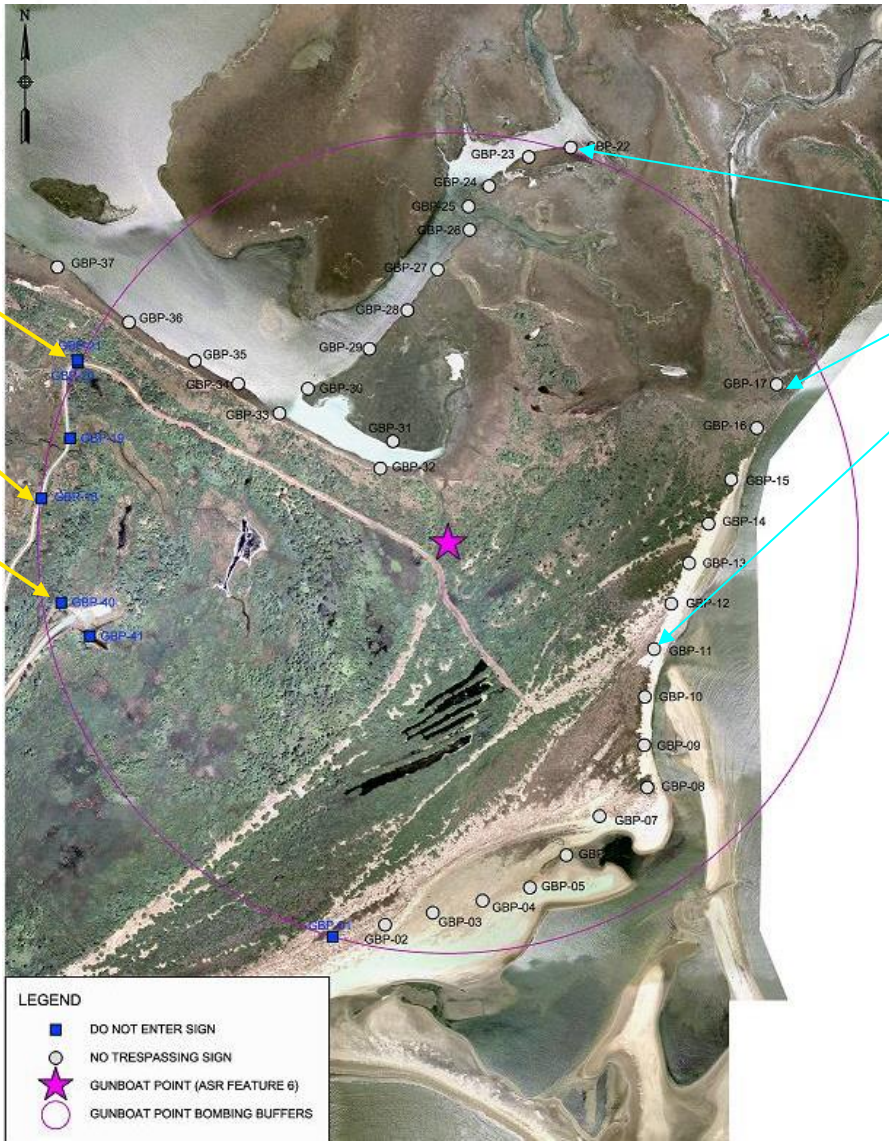
- What you can do…
  - Report leaks to HELP Desk (Ext. 4357)
    - gym shower leak, faucets that keep dripping, toilets that keep running, etc.
  - Consider water use in your work.
  - Example: a pressure washer uses less water (in gallons per minute) than a garden hose.

Notice to Wallops Employees

- Archival documents indicate munitions and explosives of concern (MEC) may potentially be located at:
  - Gunboat Point on Northern Wallops Island
  - Machine Gun rocket Firing Range – located southeast of the Spin Balance Facility
  - Main Base Boat Basin – area is within fenced area; off limits to unauthorized personnel
- These areas were historically used by the Navy as test ranges for various munitions.
- As a result of these potential safety concerns, NASA WFF installed several U.S. Government Property signs along the facility boundaries. These signs alert employees and inadvertent trespassers of potential MEC dangers.
- NASA prepared Fact Sheets summarizing these concerns and distinguishing property boundaries. Contact the Environmental Office at Ext. 1718 to receive a copy.

Notice to Wallops Employees

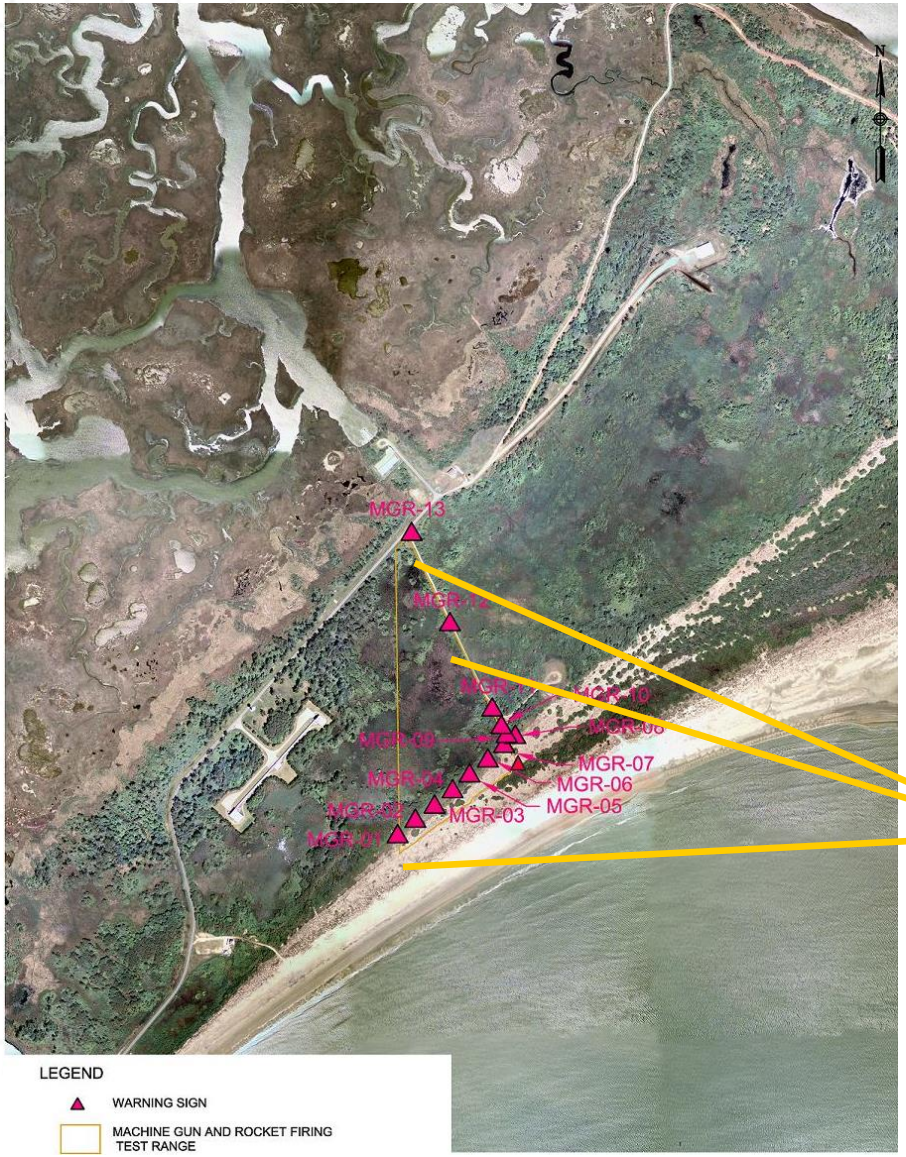
Northern Wallops Sign Locations



Size of Restricted Access Area is approximately 648 acres: (3,000-foot radius from target center)

39 Signs Posted

Machine Gun and Rocket Firing Sign Locations



WARNING
MUNITIONS TEST RANGE

WARNING
This area may contain unexploded ordnance and munitions. Picking up or disturbing munitions items could result in serious injury or death.

For Your Safety
- Stay out of the Munitions Hazard Area.
- Do not walk or play in the dunes.
- Learn to recognize the type of munitions that could be present.

20 MM round

20 MM projectile (U.S. Navy photo)

- If you see items that may be munitions, do not disturb them, retreat from the area and mark the location near the item.
- Report all possible munitions sightings to Island Security.

Munitions Hazard Area

The area immediately south of the Heliport access road is the location of a former Machine Gun and Rocket Firing Test Range. The range was used by the Navy from 1952 through 1958. The range was primarily used for testing 20 and 30 millimeter machine guns and "cannons." The range area is currently a wetland and is bordered by the Heliport access road and the high dunes along the Atlantic Ocean.

Munitions Hazard Area

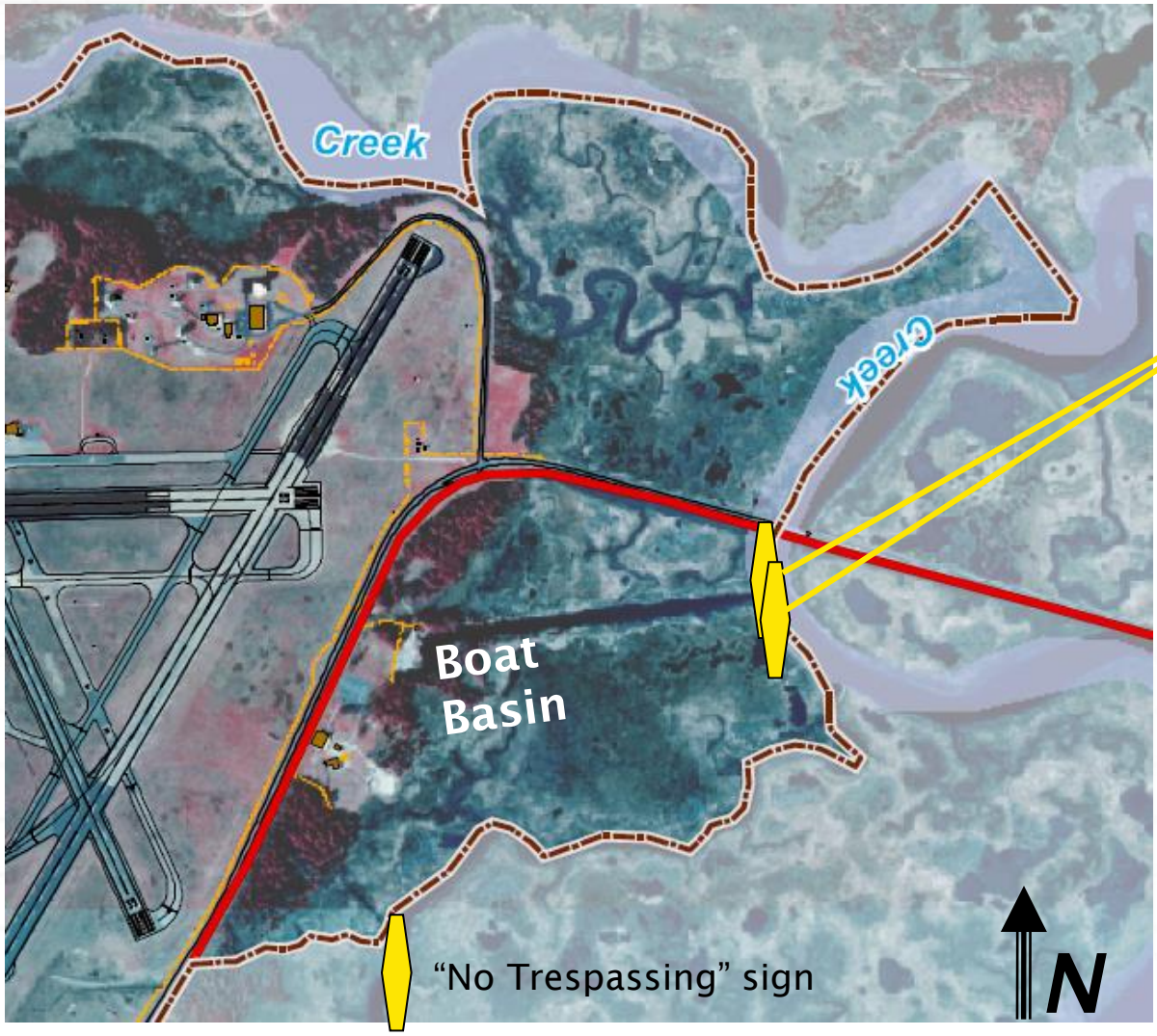
RECOGNIZE – Munitions within the test range are likely to appear as rusted metal or large bullets.

RETREAT – Try to remember where you saw the item. If possible, when you are safely away from the item, mark the area with a piece of cloth or broken branches.

REPORT – To protect yourself, your family and your fellow workers, immediately report what you saw to Island Security.

CONTACT: Island Security at Ext. 2780

Main BaseBoat Basin Sign Locations



What You Should Know and Do

- Unexploded military ordnance and munitions present a substantial danger and are a safety hazard.
- Because of this safety concern, NASA has designated the areas as a *hazard* and has posted the areas.
- For your safety, heed the warning signs and stay out of the marked areas.

Remember the 3 "R's":

Recognize – Recognize the danger and heed all warning signs. Recognize that ordnance and munitions are likely to appear as rusted metal or large bullets. These items should not be disturbed.

Retreat – If you see potential munitions, immediately leave the area. When you are safely away from the item, try to remember where you saw the item, and if possible, mark the area with a piece of cloth or broken branches.

Report – To protect yourself and your fellow workers, immediately report what you saw to the Fire Department.

CONTACT: Fire Department by dialing 757-824-1333 or 911

Environmental Policy

GSFC commits to conducting its mission in a manner that promotes environmental stewardship. As an integral part of all mission planning and implementation, Goddard's Environmental Policy is to:

a. Consider the neighboring natural environment while executing the Goddard Mission;

b. Comply with relevant federal, state, and local legislation and regulations; Executive Orders; NASA policies and other requirements;

c. Prevent pollution and conserve natural resources;

d. Implement pragmatic and cost effective solutions to environmental problems;

e. Communicate with the Goddard family, our partners and the public; and

f. Continue to improve our environmental performance through our environmental management system including:

1) Promote awareness through education and training;

2) Consider the environment as we do our jobs;

3) Explore advances in environmental technology; and

4) Provide a framework for setting objectives and targets.

These commitments enable each of us to do our part for environmental stewardship in our community.

WFF EMS

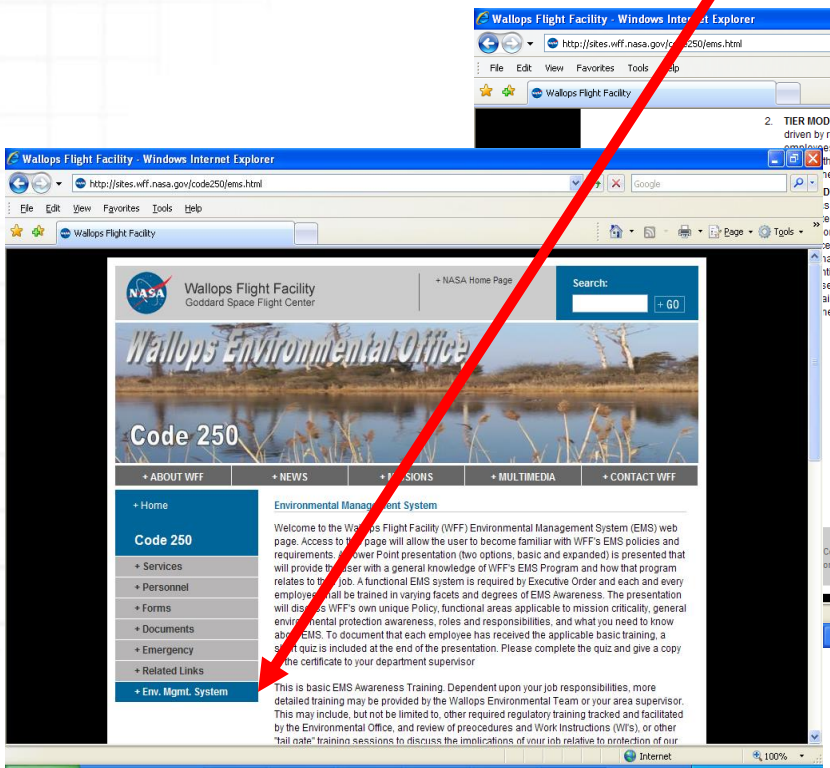
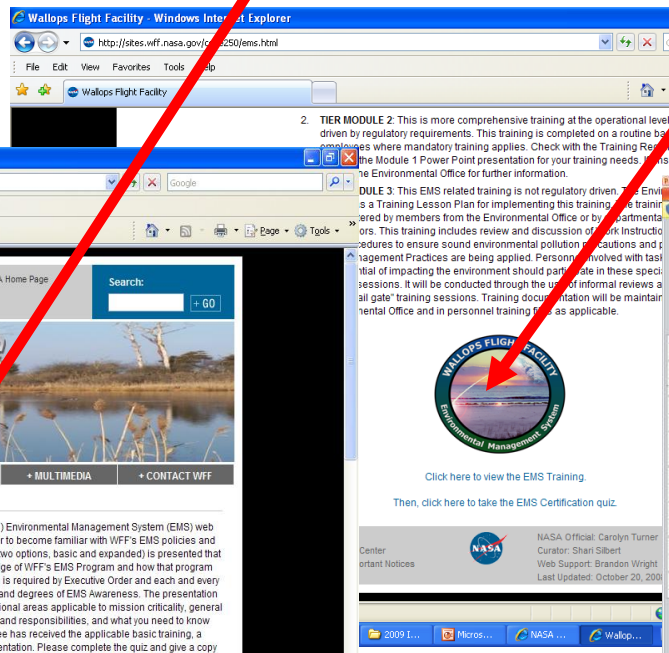
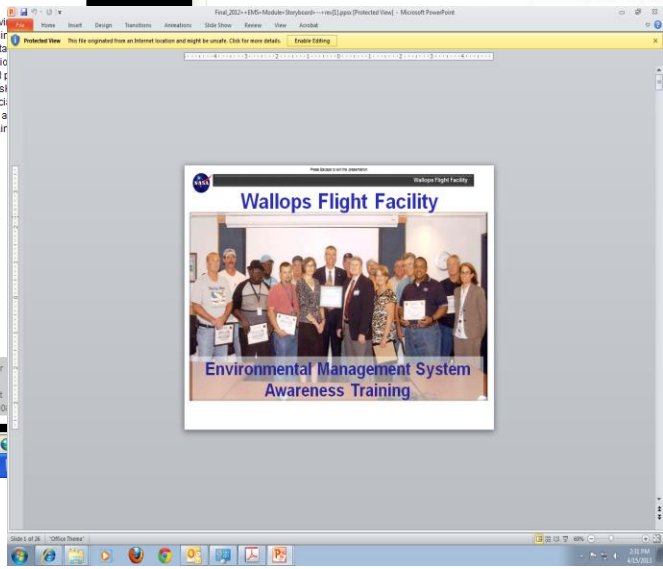
High Priorities for FY2014:

- Hazardous Waste
- Environmental Planning
- Site Restoration

WFF EMS Training

- Training must be completed by December 2013.
- Training must be refreshed every 3 years.
- Supervisors are responsible for tracking training.

WFF EMS Training

- **Available on Satern Website:**
  - https://satern.nasa.gov
  - **Course listed as GSFC Wallops Flight Facility Environmental Management System Awareness Training**

- **Available on the Code 250 Website:**
  - http://sites.wff.nasa.gov/code250
  - **"Click" on the blue Env. Mgmt. System box**
  - **"Click" on the EMS Logo for training**