# FACILITIES AND EQUIPMENT AWARENESS

## <u>Stormwater Discharges</u> at NASA Langley Facilities

A stormwater system is designed to handle water originating from precipitation events such as heavy rain and snowmelt. These systems directly discharge into streams, lakes, and rivers without any treatment. Stormwater management is crucial for preventing flooding, protecting water quality, and ensuring sustainable water use.

Preventing pollution, or illicit discharges, into NASA Langley's stormwater system is critical for the protection of our environment. Pollutants negatively impact the environment in and around our local waterways, including the Back River and the Chesapeake Bay.

At Langley, there are various forms of stormwater connections, including facility floor drains, basement sump pumps, roof drains, green infrastructure areas with underdrains, and street and parking lot drains.



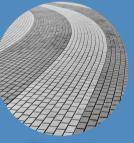
#### **Floor Drain**



#### **Sump Pumps**



**Roof Drain** 



Green Infrastructure



Parking Lot Drains

## <u>Stormwater Discharges at NASA</u> <u>Langley Cont.</u>

Day-to-day activities in and around these connections can transport pollutants such as oil, chemicals, and metals to the stormwater system. Activities can include draining or backwash from equipment, rinsing or cleaning equipment and floors, cooling water for research equipment, and the dewatering of basements, utility tunnels, and sumps.

It is important to have situational awareness of the equipment and processes in and around our facilities that utilize water and recognize if they are draining to a stormwater connection.

### When to Contact Environmental

Langley has regulatory permit coverage for many of our processes on the center. Always notify the Environmental Management Office (EMO) in advance if you plan to:

- install new equipment with water discharges\*
- bring mothballed equipment with water connections back into service\*
- drain equipment (cooling towers, closed-loop systems, water storage tanks, etc.)
- change existing water-generating processes
- change approved products (including detergents or chemicals)

\*Notify EMO via the submittal of a LF 461.

## **Operational Procedures and Best Management** Practices – What You Can Do

 Implement proper containment measures to capture and contain pollutants before they can reach stormwater connections, such as placing drip pans under leaking equipment, utilizing spill containment berms, placing absorbent materials around drains or inlets, checking that drain valves are closed, and using dewatering bags to capture solids and sediment.







**Drip Pan** 

**Containment** Absorbent Berm

Materials

Drain Valve

Dewatering Bag

- Know where your facility's spill kits are located and how to use them.
- Conduct routine inspections and maintenance of equipment in areas around drains and utility trenches. Regularly inspecting and repairing equipment to address leaks, worn-out seals, or other potential sources of pollutants can significantly reduce the risk of illicit discharges.

#### Report leaky equipment or other facility concerns to your Facility Coordinator.

If you see an illicit discharge or spill, contact Emergency dispatch at 911 (Center landline) or 757-864-222 (cell phone).

If you have any questions about water quality at Langley, you are unsure of where existing equipment may be routed to, and/or have any questions regarding specific drains or inlets and what systems they feed into, please contact:

> Ande Remington (757-864-8332) <u>ande.remington@nasa.gov</u>

> Sarat Calamur (757-864-4791) <u>sarat.c.calamur@nasa.gov</u>

**Remember** -- Nothing should enter the stormwater system or be drained outside without EMO's review and approval. Let's work together to keep our water clean!