Drainage System Maintenance SOP-41.0

Description of SOP:

The stormwater conveyance system collects and transports urban runoff that may contain pollutants. Maintaining catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis will remove pollutants, prevent clogging, of the downstream conveyance system, restore catch basin's sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Purpose of SOP:

The following procedures are to be implemented for the stormwater conveyance systems within the City of Harlingen.

Suggested Protocols:
Catch Basins/Inlet Structures

- Municipal staff should regularly inspect facilities to ensure the following:
  - Immediate repair of any deterioration threatening structural integrity
  - Catch basins should be cleaned as frequently as needed
  - Stenciling of catch basins and inlets
- Clean catch basins, storm drain inlets and other conveyance structures in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.
- Conduct inspections more frequently during the wet season for the problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned and record the amount of waste collected.
- Dewater the wastes with outflow into the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed of.

Storm Drain Conveyance System

- Create an inspection and cleaning schedule for the municipal storm drain system, including storm water detention ponds, energy dissipaters, weir and spillway.
- Preventive maintenance and inspection will be conducted at least one time per year for cracks, leaks, and other conditions that could cause breakdowns in the system.
- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipes clear of excessive buildup
- Collect flushed effluent and pump to the sanitary sewer for treatment or dispose of at transfer station.

- Document inspections, cleanings and repairs and maintain complete records in a record keeping system
- Proper erosion and sediment control practices shall be used when performing repairs and maintenance

Open Channels and Outfalls

- Locate all outfalls in the municipality and create an inspection schedule
- Preventive maintenance practices for outfalls shall be done with inspections at least one time per year for cracks leaks, and other conditions that could cause a breakdown in the system.
- Repair of defective structures identified during inspections shall be done as soon as possible
- Document inspections and repairs at outfalls in a record keeping system.
- Where excessive erosion is evident at outfalls measures will be taken to correct the problem
- Open Channels shall be inspected for illegal dumping, trash, debris, and overgrown grass on a regular basis
- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Document inspections for open channels in a record keeping system

Maintenance and Inspection

- Two person teams may be required to clean and inspect catch basins, storm inlets, etc. The use of Vactor trucks may be required for cleaning of catch basins and inlets.
- Arrangements must be made for proper disposal of collected wastes.

Training:

- Train crews in proper maintenance activities, including record keeping and disposal
- Only properly trained individuals are allowed to handle hazardous materials/wastes
- All employees shall understand stormwater discharge prohibitions, wastewater discharge requirements, and the best management practices (BMPs).
- A training log/sign-in sheet will be used to document training
- Employees will be familiar with the sites spill control plan and/or proper spill cleanup procedures

Spill Response and Prevention:

- Refer to SOP 11.0 Spill Prevention, Control, and Cleanup
- Have spill cleanup materials readily available and in a known location

- Clean up spills immediately and use dry methods (absorbents)
- Properly dispose of spill cleanup material (absorbents)
- Collected waste shall be disposed of properly