



The National Park Service EnviroFact Sheet

Environmental Management Program
Mailing/E-mail Address
Washington, DC XXXXX
(202) XXX-XXXX

Wastewater Management (G-10)

DRAFT

July 2007

Wastewater may include any water that is mixed with a contaminant. Two types of wastewater likely to be generated at parks include sanitary wastewater and maintenance wastewater.

Sanitary wastewater includes typical domestic wastewater or sewage that would come from bathrooms or kitchens. Sanitary wastewater may be discharged to septic systems, to a POTW, or to a park-owned wastewater treatment plant.

Maintenance wastewater is generated as a result of maintenance operations such as auto shop or building maintenance, or landscaping activities.

Maintenance wastewater could be mixed with any number of pollutants that should not be discharged to septic systems or to the POTW (unless it is expressly allowed by the local sewer authority).

Maintenance wastewater is often referred to as "industrial wastewater."

How wastewater is regulated also depends on **where** it is disposed. At an NPS facility, wastewater will usually discharge to:

- A sanitary sewer;
- A septic tank; or
- Surface or groundwater.

You must contact your state or local water authority to find out how each discharge point needs to be regulated.

FOR MORE INFO...

EPA Office of Wastewater Management NPDES page:
<http://cfpub.epa.gov/npdes/>

APPLICABLE REGULATIONS

Wastewater discharges are regulated under two laws: the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA). The CWA prohibits any discharges of pollutants into waters of the United States without a permit under the National Pollutant Discharge Elimination System (NPDES) Program. The SDWA regulates the underground injection of fluids through wells (septic tanks may be considered underground injection wells).

The EPA has given permitting authority to states that have demonstrated they can implement programs that meet EPA requirements. To determine if your state has NPDES permitting primacy, see EPA's Office of Wastewater Management website at:
http://cfpub.epa.gov/npdes/statestats.cfm?program_id=12.

Of particular relevance to NPS facilities are those states authorized to regulate federal facilities. Local sewer ordinances and septic system requirements will also impact how wastewater regulations will be applied to your park's operations.

PERMITS

NPS facilities requiring an NPDES permit for a discharge to surface waters (e.g. from a wastewater treatment plant) may need either an **individual** or a **general** permit. Individual permits outline specific discharges allowed at individual facilities. A general permit covers several facilities, in the same geographic location, under a single permit. Discharges to a local sewer may require a state or local permit. A septic system permit may also be required.

MANAGING WASTEWATER DISCHARGES

To determine which water quality regulations affect the park and effectively manage your park's wastewater discharges:

- *Inventory All Wastewater Discharges* – Inventory the places where water is used and wastewater is generated (e.g., oil/water separator discharges from an auto shop). Knowing *how* wastewater is generated and *what* is in it is necessary in determining both the best disposal methods and what regulations apply to the park's operations.
- *Determine Where Wastewater is Being Discharged* – After determining *what* is discharged, you must then determine *where* it is going. For example, is wastewater discharged to a Publicly Owned Treatment Works (POTW), to a storm drain, to land, to ground water, or to a septic tank? Then determine *how* or *if* the facility is regulated under any local, state, or federal requirements.



SEPTIC SYSTEMS AND UNDERGROUND INJECTION CONTROL (UIC)

The UIC Program regulates the discharge of wastewater directly into the ground. If an NPS facility discharges wastewater to a septic system or cesspool, the UIC Program requirements may apply (see requirements on the attached checklist). If this is the case, the state water authority must be contacted to determine how the park is regulated.

POLLUTION PREVENTION

The toxicity and volume of maintenance wastewater at parks can often be reduced through pollution prevention. Plugging drains and minimizing the use of water in washing and cleanup operations can reduce the pollutants in wastewater. Additional pollution prevention opportunities include the following:

- Label all storm drain catch basins "NO DUMPING. DRAINS TO CREEK, RIVER, OCEAN."
- Keep solvents, fuels and oils, and caustic and toxic chemicals segregated from wastewaters as much as possible.
- Pre-wipe components before cleaning to minimize water usage and the amount of pollutants in the wastewater.
- Use steam instead of high pressure in vehicle and equipment washing to reduce water usage and improve cleaning effectiveness.
- Install a closed-loop vehicle washing system, or clean vehicles and equipment at an off-site location that has proper washwater collection and treatment/disposal facilities.
- Look for opportunities to use environmentally friendly materials in maintenance activities (i.e., biodegradable/pH neutral soaps, propylene glycol antifreeze, less caustic boiler chemicals).

WASTEWATER COMPLIANCE CHECKLIST

Checklist Item	Notes
<p>1. Ensure that the proper permitting authority (the state or EPA) has been contacted to determine:</p> <ul style="list-style-type: none"> • Who the regulatory authority is with regard to UIC requirements and NPDES permitting (the state or EPA); • Whether any of the facility's activities (e.g., vehicle washing) are required to have a permit for discharges to surface water, to a POTW or to an underground injection well; • Whether the state or local agency imposes regulations that are stricter than the federal regulations; and • Whether the facility is complying with state and local water quality requirements and applicable permits. 	
<p>2. Ensure that the park staff has identified all areas in the park where water is used and wastewater is generated (e.g., maintenance and auto shops).</p>	
<p>3. Ensure that park staff have identified where each wastewater source is discharged (e.g., via storm drains to surface water, to ground water, to the POTW, or to floor drain piping to a French drain).</p>	
<p>4. If feasible, ensure that all floor drains, or other piping that could discharge wastewater, have been plugged to control un-permitted discharges.</p>	
<p>5. Ensure that the park staff is aware of UIC Program requirements applicable to park septic systems, cesspools or any other systems that could be classified as a "Class V injection well." (Contact your state for guidance in defining such a well.)</p>	
<p>6. Unless otherwise allowed by a UIC permit, ensure that only sanitary wastes (e.g., typical kitchen and bathroom wastes) are discharged to the park's septic system.</p>	
<p>7. Ensure that Class V injection wells at the park have been inventoried and that inventory information is submitted to the authorizing agency. The inventory will include, at a minimum, the following information:</p> <ul style="list-style-type: none"> • Facility name and location; • Name and address of legal contact; • Ownership of facility; • Nature and type of injection wells; and • Operating status of injection wells. <p>Note: Inventory reporting requirements differ by state. Authorizing states must be contacted to determine information required.</p>	
<p>8. Ensure that sanitary wastes or maintenance wastewater discharged to a sanitary sewer connected to the local POTW meet the requirements of the POTW (i.e., documentation is maintained indicating whether or not a permit is required to discharge wastewaters generated by park operations).</p>	
<p>9. If the park has an NPDES permit, ensure that any wastewater discharges to surface water conform to the permit requirements.</p>	