Fort Sill has two storm water permits. The first permit covers the industrial activities and has been in effect since 1995. These activities include the operations at motor pools, landfills, airfields and recycling centers. This permit required Fort Sill to conduct annual inspections, analyze water samples, write individual storm water plans at each location, and submit an annual report to Oklahoma Department of Environmental Quality (ODEQ).

The second permit is the Phase II program. This was established by EPA in 1999 that regulate populations less than 100,000 people, specifically including all federal facilities, and construction sites larger than one acre. In 2004, a permit was applied for and received from ODEQ for storm water discharges associated with the Phase II program for Fort Sill. This required that a storm water plan be created addressing six minimum control measures. An annual report is submitted to ODEQ for their review that addresses all of the control measures. With the onset of privatizing the housing areas, Fort Sill has included Picerne as a partner with their storm water management plan. Picerne has identified areas that they will participate in as part of the Phase II program. The objective of the phase II program is to minimize the impacts of water quality from both urban and suburban areas.

In these specific areas, much of the land surface is covered by buildings and pavement, which do not allow rain and snowmelt to soak into the ground. Instead, most developed areas rely on storm drains to carry large amounts of runoff from roofs and paved areas to nearby waterways. As storm water flows over these areas, it picks up debris, chemicals, dirt and other pollutants. Anything that enters the storm sewer system is discharged untreated into the waterbodies that are used for swimming, fishing and sometimes, drinking water. Polluted runoff is the nation's greatest threat to clean water quality. The porous and varied terrain of natural landscapes like forests, wetlands, and grasslands traps rainwater and snowmelt and allows them to filter slowly into the ground and recycled naturally. However, impervious (nonporous) surfaces like roads, parking lots, and rooftops prevent rain and snowmelt from infiltrating, or soaking, into the ground.

The loss of infiltration from urbanization may also cause profound groundwater changes. Although urbanization leads to great increases in flooding during and immediately after wet weather, in may also result in lower stream flows during dry weather. Many native fish and other aquatic life cannot survive when these conditions prevail. Urbanization increases the variety and amount of pollutants carried into streams, rivers, and lakes. By practicing healthy habits, common pollutants like pesticides, pet waste, grass clippings and automotive fluids can be kept off the ground and out of storm water. Below is a list of a few healthy habits that can help lower the amount of pollutants entering the storm sewer system.

• Vehicles and Garages:

Use the AAFES car wash instead of washing the car in the housing areas. The AAFES car wash facilities drain their water directly into the sanitary sewer system and not into the storm water system.

Check your car and other machinery for leaks and spills. Make repairs as soon as possible and clean up spilled fluids with an absorbent material like kitty litter or sand. Do not rinse the spills into the storm drain. Even rinsing off the side walk or drive way will result in the water

eventually finding its way into the storm water system. Remember, one drop of oil can pollute 1000's of gallons of water.

Recycle used oil and other automotive fluids at the Auto Crafts Center. Do not dispose of these chemicals in the trash either. Vehicle fluids are the number one surface water quality problems nation wide.

Lawn and Garden

Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Avoid application if the forecast calls for rain.

Sweep up yard debris rather than rinsing them off the sidewalk or drive way. Too many leaves and yard clippings can take oxygen out of water and suffocate the plants and animals that need oxygen to breath.

Don't overwater the lawn. Water during the cool times of the day and don't let water run off into the storm drain.

Use mulch for landscaping projects to prevent pollutants from blowing or washing off the yard and into the storm drain system.

Vegetate bare spots to prevent soil erosion.

• General

Purchase and use nontoxic, biodegradable, recycled and recyclable products whenever possible. Use hazardous substances like paints, solvents and cleaners in the smallest amounts possible. Clean up spills immediately. Dispose of these substances at the Environmental Quality Division office at building 2592.

Remember to pick up pet waste and dispose of it properly. Pet waste has dangerous bacteria that can spread diseases to plants, animals and humans that swim in it.

Street litter such as Styrofoam, plastic and paper can be prevented from blowing into storm drain inlets by keeping trash bins covered and by not littering. Oklahoma can get quite breezy at times.

Any questions regarding storm water issues, please feel free to contact EQD at 442-3266