

BEST MANAGEMENT PRACTICES (BMPs)

RETAIL GAS STATIONS

Fuel dispensing areas, air/water supply areas, asphalt or concrete pads, dumpsters, and trash bins at gas stations have the potential to pollute storm water runoff with gasoline, oil, grease, automotive fluids, and trash. Storm water runoff can pick up and wash these pollutants into the City's storm drainage system, which flows directly into our streams and coastal waters.

BMPs, simple and effective methods to prevent the pollution of storm water, should be implemented by gas stations to prevent pollutants from gas station operations and activities from being picked up by storm water. Implementing storm water BMPs is a vital part of protecting Hawaii's waters for life. Suggested BMPs for operations and maintenance at retail gas stations are included in this brochure and are intended for vehicle fueling stations and those with a convenience store. Information about other related activities, such as vehicle maintenance, can be downloaded off the City's website, www.cleanwaterhonolulu.com.



VISIT THE WEBSITE

www.CLEANWATERHONOLULU.com

OR

CALL THE

ENVIRONMENTAL CONCERN LINE

768-3300

The Law: The Federal Clean Water Act gave the Environmental Protection Agency (EPA) the authority to implement water pollution control programs. Local statutes and ordinances address compliance and enforcement of the EPA's mandates.

The Ordinance: The Revised Ordinances of Honolulu, Section 14-12.23(a) Environmental Quality Control-Violation states, "It shall be unlawful for any person to discharge or cause to be discharged any pollutant into any drainage facility which causes a pollution problem in state waters, or causes a violation of any provision of the City NPDES [National Pollutant Discharge Elimination System] permit or the water quality standards of the State of Hawaii."

Discharging pollutants to the storm drain system is against the law. Violations can result in fines of up to \$25,000 per violation, per day.

REFERENCES:

California Stormwater Quality Association. 2003. Stormwater Best Management Practice Handbook, Industrial and Commercial. <http://www.cabmphandbooks.com>

California Stormwater Quality Association. 2003. Stormwater Best Management Practice Handbook, New Development and Redevelopment. <http://www.cabmphandbooks.com>

City and County of Honolulu. 2012. Storm Water BMP Guide. <http://www.honolulu.gov/ReportsNotices/StormWaterQualityPage.aspx>

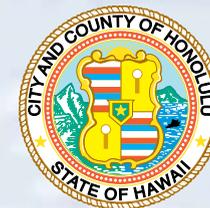
City and County of Honolulu. 2012. Storm Water Quality Checklist Preparation Manual, Priority B, Retail Gas Outlet with 10,000 sq-ft of impervious area. <http://www.honolulu.gov/ReportsNotices/StormWaterQualityPage.aspx>

STORM WATER BEST MANAGEMENT PRACTICES



RETAIL GAS STATIONS

FUEL DISPENSING AREAS • AIR/WATER SUPPLY AREAS
TRASH STORAGE • PROPERTY MAINTENANCE



City and County of Honolulu
Department of Facility Maintenance

Photo: Forest & Kim Starr



E Mālama I Ka Wai Ola
Protect our waters...
FOR LIFE

STORM WATER MANAGEMENT

PROTECTING OUR WATERS

Rain falling in urban areas flows along streets and gutters, and collects in drain inlets and catch basins. Storm water is then carried by drain pipes and channels into streams and the ocean. Dirt, debris, grime, automotive fluids, and other such loose materials on the ground can be picked up by storm water and end up polluting our island waters.

Streams and oceans are homes to fish, plants, and other aquatic life, and serve as major recreational areas for the Oahu community. They offer opportunities for activities such as fishing, swimming, surfing, diving, and paddling. Keeping storm water as clean as possible is in everyone's interest. The information in this brochure provides guidance on how to protect our streams and the ocean by reducing storm water pollution.



DESIGN CONSIDERATIONS

General

- Cover the following areas with a roof or canopy:
 - Fuel dispensing areas
 - Waste receptacle
 - Air/water supply areas
- Position roof downspouts away from the fueling area.
- Install a low containment berm around the waste receptacle and air/water supply areas.
- Fit underground tanks with spill containment and overflow prevention systems.

Surfacing

- Pave fuel dispensing areas with Portland cement concrete to prevent fuel from infiltrating into the ground.
- Use asphalt sealant to protect asphalt paved areas surrounding the fueling area.

Grading

- Slope fuel dispensing, outdoor trash receptacle, and air/water supply areas to prevent ponding, run-on, and runoff of storm water.
- Grade fueling areas to drain towards a dead-end sump or landscaped area.

OPERATIONS AND MAINTENANCE RECOMMENDATIONS

General

- Use dry methods to clean up leaks and spills immediately. Locate spill kits in easily accessible areas.

- Develop and implement a Spill Response Plan for spill prevention and response.
- Develop BMPs for the operations at your facility to prevent storm water pollution.
- Provide regular training on proper waste handling/disposal methods, the spill cleanup procedures, and BMPs.
- Label all drains using paint or stencil to indicate whether flow is to the storm drain, sewer, or oil/water separator.
- Inspect and clean drains on a regular basis.
- Routinely inspect air/water supply areas and clean up any leaks or drips

Fuel Dispensing Areas

- Keep fuel dispensing areas clean by using dry methods such as sweeping for debris, or using rags and absorbents for leaks and spills.
- Temporarily plug the downstream drain if washing of the area is needed. Contain, pump out, and properly dispose of the collected water.
- Use vapor recovery nozzles to help control drips and air pollution.
- Post signs at the fuel dispenser warning against “topping off” of fuel tanks.
- Ensure tank truck personnel are present at all times when transferring fuel from the truck to the station’s fuel tank. Check that the delivery truck is equipped with a cam-lock system.

Trash Storage Areas

- Use water-tight outdoor waste receptacles and keep the lids closed.
- Keep dumpsters closed.
- Avoid exposing dumpsters to rainfall where possible.
- Inspect dumpsters for leaks and make repairs if needed, or have dumpsters replaced.
- Prevent disposal of liquid waste in dumpsters.
- Use dry methods to clean dumpsters, dumpster storage areas, and trash can areas.
- Do not hose down waste receptacles, dumpsters or dumpster storage areas.
- Post “No Littering” signs.

Other Paved Areas

- Use dry methods to maintain paved areas; wash as a final step only when necessary.
- Direct wash water to landscaped areas if possible when washing occurs. Contain, collect, and dispose of wash water in a sanitary sewer if needed, and provide inlet protection as needed.
- Collect wash water with a mop or wet vacuum for disposal to sanitary sewer. Pass parking lot wash water through a petroleum-trapping filter before discharging it into the sanitary sewer system.
- Do not discharge parking lot wash water into City streets and storm drains; it is prohibited.

Landscape

- Follow recommended usage instructions for fertilizers, herbicides, and pesticides. Do not over apply.
- Adjust sprinkler heads to avoid over watering and runoff.
- Never apply landscaping chemicals just before it rains.
- Do not blow or rake leaves into the street or storm drain.

Charity Car Washes

- Minimize the amount of car wash soap used, and use hose bibs or nozzles to conserve and limit water usage.
- Keep wash water on site and direct to landscaped areas if possible.
- Collect and dispose of wash water in the sanitary sewer if needed.
- Dispose of leftover soapy water from buckets into a sink or toilet. Wash water should not be discharged into City streets or the storm drain system.

For More Information

Environmental Concern Line 768-3300
or www.cleanwaterhonolulu.com

REPORT UNCONTROLLABLE OR UNCONTAINABLE SPILLS IMMEDIATELY TO THE HAWAII DEPARTMENT OF HEALTH, HAZARD EVALUATION AND EMERGENCY RESPONSE AT (808) 586-4249, (808) 247-2191 (AFTER HOURS), OR CALL 911.