Stormwater Best Management Practices

Help protect our valley's water supply

A Best Management Practice (BMP) is defined as any program, process, location criteria, operating method, measure or device which controls, prevents, removes or reduces pollution.

The quality of Southern Nevada's water is important to the future of our community. In addition to having enough water it is essential that the water be of good quality to support swimming, fishing, drinking, irrigating, and other uses. While we've made a lot of progress in cleaning up specific sources of pollutants, everyday activities in our community continue to affect water quality. In the Las Vegas Valley, rainwater that falls onto streets, driveways, lawns, etc., is channeled into the storm drain and flows untreated to Lake Mead, the Las Vegas Valley's primary source of drinking water. As this water moves across the Valley, it carries with it pollutants from our business activities, our vehicles, and many other activities.

Although we live in a desert, it doesn't mean we don't get rain. In fact, rainfall in Southern Nevada doesn't just come in gentle drizzles with no runoff. Rainfall in our area often comes during brief but intense storms, with significant amounts of rainfall occurring in a short time frame. Desert soils also have poor water infiltration rates, meaning they don't readily absorb water, so that much of the water from a storm may move as surface runoff, collecting pollutants as it flows.

Each resident of the Las Vegas Valley can help protect the quality of Lake Mead, the Valley's main source of drinking water, by being aware of these simple fixes:

- Use pesticides, fertilizers, and other chemicals sparingly.
- Repair auto and equipment leaks.
- Recycle or properly dispose of hazardous waste, used auto fluids (antifreeze, oil, etc.), batteries, paint, chemicals, etc.
- Chemical and liquid containers stored outside should be properly labeled, sealed and stored in secondary containment or approved equal.
- Use a commercial car wash or wash vehicles at a location that drains to sanitary sewer.
- Use dry cleanup methods rather than hosing down areas.
- Maintain spill kits at appropriate locations and train employees on their proper use.
- Keep outside areas clean and orderly.

only rain in the storm drain

Carpet & Upholstery Cleaning

Carpet cleaning is widely practiced in homes and commercial premises to prolong the life of carpets and to ensure that living and working areas are hygienic. But did you know that some carpet cleaning agents are directly toxic to plants and/or animal life? Other residues from carpet cleaning may themselves be toxic under certain circumstances.

The wastewater by-product from carpet cleaning activities can damage the environment if dumped onto streets or into storm drains where it eventually makes its way to Lake Mead. This includes cleaning products that are labeled "non-toxic" and "biodegradable". These cleaning chemicals can act as nutrients and promote excessive algae growth. That is why the wastewater generated from carpet and upholstery cleaning must be properly managed and disposed of by the service provider. Acceptable methods include: discharging into a toilet, tub, sink or sewer cleanout at the client's residence; or through a drain that passes through an approved sanitary sewer pre-treatment device such as a sand/oil separator at the client's or service provider's business. Public manhole lids should not be removed to dispose of the wastewater.

Additional Resources

Clark County Water Quality Program Website
http://www.clarkcountynv.gov/ Key Word: "Water Quality"

Las Vegas Stormwater Quality Management Committee:
http://www.lvstormwater.com/

• Clark County Regional Flood Control District	702-685-0000
• City of Las Vegas	702-229-6541
• City of Henderson	702-565-2329
• City of North Las Vegas	702-633-1290
• Clark County, NV	702-668-8674

Do you need a State stormwater permit?
http://ndep.nv.gov/bwpc/storm01.htm

Do you need a State clean water discharge permit?
http://ndep.nv.gov/bwpc/diminimis.htm

Guidelines for Washwater and Urban Runoff
http://www.lvstormwater.com/pdfs/bmp_brochure.pdf

Southern Nevada Health District	702-759-1000
Nevada Division of Environmental Protection	702-486-2850 775-687-9429
Nevada Recycling Hotline	800-597-5865
Republic Services of Southern Nevada	702-399-1112

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Contact our Water Quality staff for questions or more information at 702-668-8674 or e-mail waterquality@cleanwaterteam.com

CLARK COUNTY NEVADA

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Restaurant & Food Service

The byproducts of food-related cleaning can harm the environment if they enter the storm drain system.

Food businesses can cause harm by putting food waste in leaky dumpsters, not cleaning up outdoor food or chemical spills, or by washing outdoor spills into the storm drain system. Other routine activities such as cleaning oily vents, floor mats, trash/recycle bins, and other equipment are sources of pollution, unless proper precautions are taken. When it rains, oil and grease not properly disposed of may be washed into the storm drain system. Practicing a few simple steps can help protect water quality by keeping debris from entering storm drains and preventing fats, oil, and grease from getting into sanitary sewer lines.

- Cover, repair or replace leaky dumpsters and compactors, and/or drain the pavement beneath them to the sanitary sewer.
- Secure containers to prevent accidental spills, vandalism, or unauthorized use
- Do not rinse out the dumpster! Request your waste hauler exchange the dirty dumpster for a clean one
- Conduct regular inspections of the storage area and other outside areas for trash and debris
- Store containers away from storm drains
- Always empty wash water and mop buckets into the mop sink
- Clean floor mats, filters, etc. inside building with discharge to a sanitary sewer (sink or floor drain)
- Avoid chlorinated compounds, petroleum distillates, phenols, and formaldehyde. Use water-based products.
- Post "NO GREASE" signs above sinks
- "Dry wipe" all pots, pans, and plates prior to dish washing
- Do not pour fats, oil, grease, and grit (FOGG) into floor drains, sinks, or into parking lot inlets
- Use drying agents (kitty litter or towels) to clean up spills
- Maintain grease traps
- Recycle grease and oil

Wash Down of Lunch Wagons/Food Carts

- Wash water must be discharged at a commissary equipped to accept and discharge wastewater to the sanitary sewer system.
- Never discharge any water (except melted ice) to gutters or storm drains.

Industrial/Commercial

Compliance with stormwater regulations at your site can be as simple as minimizing stormwater contact with potential pollutants and implementing good housekeeping practices at your facility.

- Change or modify processes to eliminate or reduce the production of hazardous waste.
- Designating specific storage areas away from storm drain systems for storing equipment and hazardous materials.
- Practice source reduction by ordering only the amount of hazardous materials that are needed to finish the project.
- Educate your employees and subcontractors about stormwater management requirements and their pollution prevention responsibilities.

Control the amount of surface runoff from parking lots and open areas by impeding internally generated flows and using berms or drainage ditches to direct runoff to landscape areas and slow the flow from your site.

- Do not hose down your shop floor into streets or parking lots. It is best to dry sweep regularly.
- Cover open dumpsters with secured tarps or plastic sheeting. Never clean out a dumpster by washing it down.
- Provide covers and secondary containment for outdoor storage of hazardous materials.
- Prepare and use easy to find spill containment and cleanup kits. Include safety equipment and cleanup materials appropriate to the type and quantity of materials that could spill.
- Use a funnel when pouring liquids and place a tray underneath to catch spills. Place drip pans under the spouts of liquid storage containers.
- Clean up spills immediately using dry clean-up methods (e.g., absorbent materials such as cat litter, sand or rags for liquid spills, and by removing the contaminated soil from spills on dirt areas.
- Practice proper waste disposal. Many industrial waste fluids, including solvents, water-based paint, used oil and coolants can be recycled. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste.
- Cover outdoor loading docks, storage and work areas, making sure they have adequate secondary containment to trap spills that may occur.
- To reduce or eliminate the generation of waste, fix sources of drips or leaks where possible and regularly replace worn seals on equipment.

Automotive Repair

Oil, grease, anti-freeze, and other toxic automobile fluids can travel into stormwater runoff contaminating soil and water which makes our water quality unsafe for people and aquatic life.GAnderson2@iadtvegas.com

Cleaning Auto Parts

Scrape parts with a wire brush instead of liquid cleaners. Arrange drip pans, drying racks, and drain boards so fluids are directed back into the parts washer or the fluid holding tank. Do not wash parts or equipment in a shop sink, parking lot, driveway, or street.

Storing Hazardous Waste

Keep your liquid waste separated. Many fluids that are not mixed can be recycled with hazardous waste disposal companies. When storing hazardous materials, use spill containment and place under cover.

Preventing Leaks and Spills

Place drip pans underneath the vehicle to capture fluids. Use absorbent cleaning agents instead of water to clean work areas.

Cleaning Spills

Use dry methods for spill cleanup (i.e. sweeping & absorbent materials). Train all employees on proper cleanup and disposal procedures. Keep spill kits at appropriate locations. To report serious toxic spills call 911.

Metal Grinding and Polishing

Keep a bin under your lathe or grinder to capture metal filings. Send uncontaminated filings to a scrap metal recycler for reclamation. Store metal filings indoors. When storing outdoors, ensure the container is covered.

Proper Disposal of Hazardous Waste

Recycle used motor oil, oil filters, anti-freeze, batteries, tires and metal filings collected from grinding or polishing auto parts.

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