2017

Best Management Practices for Pressure Washing and Impervious Surface Cleaning

As a valued member of the Nixa community, we know you are vested in protecting the quality of life that your customers, residents, visitors and others expect and which keeps our economy strong. When water flows off residential, commercial and industrial yards, properties, or pavement, it flows directly into the stormwater conveyance system including drains, inlets, ditches and catch basins.

Many mistakenly believe this water gets **"cleaned"** or treated somehow before reaching our waterways. The sanitary sewer system and the stormwater conveyance system are completely separate systems; they are **not** connected. Sanitary sewer effluent does get treated, but water that flows into a storm drain goes **untreated** directly into our rivers, creeks, streams and even our drinking water source.

It is a violation of City of Nixa code, the State of Missouri Department of Natural Resources regulations and the United States Environmental Protection Agency regulations to discharge pollutants into any stormwater conveyance system or any receiving water of the state. As a responsible business within our community, we trust that you will help us prevent the discharge of harmful pollutants into the City of Nixa's stormwater conveyance system and ultimately protect the water ways that make our region enjoyable for all.

This document describes requirements for the disposal of waste and wastewater generated by the use of pressure washing equipment (mobile or otherwise) when generated within the City of Nixa. It also presents information on practical methods, known as Best Management Practices (BMPs) which may be used to protect the environment and to comply with regulatory requirements.

These requirements and BMPs apply to anyone within the City of Nixa who generates wastewater from pressure washing including; contractors that provide a pressure washing service to others; businesses that use pressure washing equipment as part of their operations or maintenance (such as cleaning heavy equipment or parking lots); and homeowners that either rent or purchase a low cost unit.

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What is Pressure Washing?

Pressure washing uses mechanical equipment to create a high pressure stream of water, typically ejected from a hand-held wand or nozzle. Depending on the application, pressure washing may be conducted with or without heated water or added cleaners.

Pressure washing is used to clean many things, including:

- Trucks
- Automobile fleets
- Parking lots
- Building exteriors
- Sidewalks
- Drive-thru lanes
- Heavy equipment
- Roofs
- Restaurant equipment and hood filters
- Graffiti
- Fences
- Decks, etc.

As you perform your daily activities, we ask that you, your employees and/or contractors be proactive. It is easier to prevent pollution than to try to clean it up once it has occurred. If you think there is a potential to create pollution, follow the 3C's as a general guideline:

Contain: Contain your work area by preventing water and potential pollutants from leaving your work site and reaching the stormwater conveyance system. The area around your trash dumpster should be free of accumulated trash and debris. The trash dumpster itself should be free of leaks, if it is not, contact your trash service provider and request a hole free, leak free dumpster.

Control: Better manage your work area by keeping equipment, tools and supplies organized and properly contained. Use dry cleaning methods first. Sweep up debris with a broom or use a mop to clean hard surfaces.

Capture: Clean up your work area and properly dispose of contaminated water, pollutants and debris. Use a broom, mop, or vacuum to capture any residue or pollutants that have the potential to be discharged.

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Regulations: To improve the quality of water we fish and swim in, not to mention drink, the City of Nixa is subject to Municipal Separate Storm Sewer System (MS4) Permit regulations mandated by MoDNR and the EPA.

The MS4 Permit requires the City of Nixa to implement elements such as a Storm Water Ordinance to reduce pollutants in stormwater runoff (directly caused by rainfall) and to effectively prohibit non-stormwater discharges. The discharge of wastewater from pressure washing, to the storm drainage system or surface waters is prohibited by this ordinance (see link to ordinance below)

Pressure Washing as Part of the Solution: Pressure washing (or Cosmetic Cleaning as it is sometimes referred to) is an activity that can help improve the quality of our waters when done properly. By cleaning surfaces (e.g. equipment, parking lots, sidewalks, buildings, etc.), collecting the wastes (water and/or debris), and properly disposing of it, there is less chance of pollutants ending up in our waterways during a heavy rain fall event.

Disposal Requirements and Prohibitions: Proper disposal of pressure washing wastewater, in compliance with environmental regulations, depends on the nature of the pollutants in it. It is the responsibility of the generator to determine the proper collection and disposal method for wastewater created by pressure washing.

Storm Drains: Discharging pressure washing wastewater into any natural body of water or any storm drainage system, which includes street curb inlets, roadside ditches, gutters, and drainage channels, within the City of Nixa is **prohibited** by Federal, State, and local laws.

Evaporation: Pressure washing wastewater that contains visible debris or residue, soap, detergent or other cleaning agents, or excessive amounts of any pollutant, may not be left on paved surfaces to evaporate, because the residue will eventually be discharged to the storm drain.

Land Disposal: Wastewater may be collected and discharged or directed onto vegetated yard areas when the wastewater does not; create a nuisance, flow into a storm drain or does not contain waste or contaminants (i.e. solvents, cleaners, oils, metals, etc.). Such discharges must soak into the ground and may not flow into the storm drain. The property owner's permission must be obtained prior to discharging or diverting wastewater to vegetated areas. **Note:** Repeated discharges to landscaped areas may result in an accumulation of contaminants, thus damaging vegetation and increasing contaminant levels in the soil.

Sanitary Sewer: Disposal of pressure washing wastewater to the sanitary sewer collection system within the city limits of Nixa is strictly prohibited.

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BMP-1 Planning: Determine where you are going to discharge wastewater before starting, what collection method you will be using and how you intend to properly dispose of the wastewater generated from each cleaning activity. Identify where all storm drains are situated at the wash site.

BMP-2 Surface Pre-Cleaning: Consider using dry methods for surface pre-cleaning, such as using absorbents on small oil spots and sweeping up trash/debris/dirt before wet washing. Pre-cleaning is an activity that may reduce costs and simplify the wastewater disposal process. When using dry pre-cleaning methods, be sure to pick up pre-cleaning debris as soon as possible, so the materials do not have a chance to enter the storm drains.

BMP-3 Pressure Washing: Minimize the amount of water used during pressure washing activities, thus reducing the volume of wastewater that needs to be properly disposed. Avoid using cleaning products that contain hazardous substances (e.g. hydrofluoric acid, muriatic acid, sodium hydroxide, bleach, etc.) that can turn wastewater into hazardous waste. Acidic, caustic, and detergent cleaners may damage paved or coated surfaces.

BMP-4 Wash Water Containment & Collection: Minimize and dispose of waste properly and recycle whenever possible. Collect wash water in permanent or temporary capture facility. Decide what is the best method of collection (e.g., berms, storm drain cover mats, containment pools, vacuums/pumps, vacuum boom, inflatable pipe plug, etc.). Locate property high and low spots to determine where wash water can be pooled for collection. Do not leave areas of wash water on paved surfaces for evaporation. Sweep up any visible solids and sediments remaining after all the wash water has been collected.

Note: Inflatable pipe plugs should only be used in storm drains on private property. They are not authorized to be used in public storm drain inlets or pipes within the City of Nixa.

BMP-5 Cleaners: Avoid using solvent-based cleaners (especially chlorinated solvent cleaners).

Wastewater Disposal: The following activities within the City of Nixa require capture of wash water from pressure washing activities:

• **Transportation related cleaning -** washing fleet vehicle exteriors, mobile auto detailing, and rinsing of automobiles, recreational vehicles (RV), and boats at retail dealerships.

• **Surface related cleaning** - sidewalks, plazas, driveways, parking lots, service stations, building exteriors and walls.

• **Food service related cleaning -** restaurant parking lots, trash dumpster areas, restaurant floor mats, exhaust filters, grease filters or food trucks.

• **Engine/equipment degreasing –** any activity involving pressure washing of heavy equipment (bull dozer, wheel or track loader, dump trucks, etc.).

WASTEWATER TREATMENT: If you are considering using a wastewater recycling or pretreatment unit (e.g. oil/water separator), make sure you understand the waste streams that are generated. Identify proper disposal methods for these wastes, and consider disposal costs before starting a job. Consider contracting with a company that can provide appropriate treatment and disposal of your wastes. In some cases, you may be able to reduce the liability that comes with the generation and disposal of hazardous waste.

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Power washing of any Hazardous Waste Material is strictly prohibited: What is Hazardous Waste?

Hazardous waste is any waste that because of its quantity or characteristics may pose a threat to human health or the environment. Waste that exhibits specific characteristics of ignitability, corrosivity, reactivity (tendency to explode), toxicity or is listed as hazardous waste in state or federal regulations must be managed as hazardous waste.

Hazardous wastes can be liquids, sludge, solids or gases. They can be wastes from manufacturing processes or discarded commercial products. Many household wastes may also be hazardous. Certain chemicals like pesticides, cleaning agents, old paint and solvents, pharmaceuticals, fertilizer and other yard chemicals and even items like fluorescent light bulbs may pose a threat to human health and the environment if not disposed of properly.

Hazardous waste listings and definitions are located in section 40 CFR 261, Subparts C and D. incorporated and modified by 10 *CSR 25-4. See links below.*

Hazardous waste generator is defined in 40 CFR 260.10 “as any person by site, whose act or process produces a hazardous waste identified or listed in 40 CFR 261 or whose act first causes a hazardous waste to become subject to regulation.”

It is important to remember that if hazardous waste is improperly managed then the Missouri Department of Natural Resources has the authority to enforce the hazardous waste laws and regulations on any party involved in hazardous waste generation.

Disposal Options:

Businesses generating hazardous waste should contract with a licensed disposal contractor for proper removal and disposal options.

FOR MORE INFORMATION

City of Nixa Public Works Department, Danny Newell, Public Works Inspector-MS4 Coordinator at dnewell@nixa.com or (417) 725-2353; Nate Miller, Asst. Public Works Inspector, at nmiller@nixa.com or (417) 725-2353.

www.nixa.com, click “Code of Ordinances” tab, click on Technical Specification, scroll down to Part IV, Section 110 (PG 166) Land Disturbance, Illicit Discharge & Erosion Control.

Missouri Department of Natural Recourses

Power Washers of North America (PWNA) www.pwna.org

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"Small Business Guide to Managing Hazardous Waste"
https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses

Electronic Code of State Regulations:
http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c25-4.pdf

Electronic Code of Federal Regulations section 40 CFR 260: *http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr260_main_02.tpl*

Electronic Code of Federal Regulations section 40 CFR 261: *http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr261_main_02.tpl*

Special thanks to the Cities of San Diego California and Lawrence Kansas for letting the City of Nixa use information published by them and their cooperation in Stormwater protection.

Storm Drain Cover/Mat

Street Curb Inlet Cover

Vacuum Boom

Storm Drain Boom

Containment Pool

Disclaimer: The information presented in this document is intended for guidance purposes only and is not to be considered all-inclusive. The information provided may be of value as an educational or reference tool. However, we do not endorse any product that may be noted in this document. Please note that laws and regulations are subject to change. It is recommended that the applicable codes, ordinances and statutes be reviewed to verify which requirements pertain to your business. Although the material contained in this document will be routinely updated, it may not reflect recent changes in the various laws and regulations.