STORMWATER QUALITY MANAGEMENT CONSTRUCTION PROJECTS REQUIREMENTS



The City of Lake Forest Municipal Code requires the control of urban runoff at all construction projects.

To ensure that discharge of pollutants from the site will be effectively prohibited and will not cause or contribute to an exceedance of water quality standards, the implementation of Best Management Practices (BMPs) is required.

Best Management Practices (BMPs):

Best Management Practices (BMPs) collectively refer to a variety of pollution prevention controls implemented throughout the project site at various times of the project. BMPs discussed herein are specifically aimed to control pollution in stormwater runoff during the construction phase of the project.

BMPs must be selected, installed, and maintained properly throughout the duration of construction projects. The major construction BMP categories can be broken down into:

- · Erosion Control (EC)
- · Sediment Control (SE)
- · Wind Erosion Control (WE)
- · Tracking Control (TC)
- · Non-Stormwater Management (NS)
- · Waste Management and Materials Pollution Control (WM)

The BMPs that are commonly used on construction sites are shown in Figure 1. Minimum site BMP requirements, Per Orange County Stormwater Program, are listed on the next page.

Construction activities related BMPs are also available at:

 $\underline{https://www.lake forestca.gov/en/departments/public-works/environmental-compliance/construction-activities \ . \\$

The City Authorized Inspector may, in addition to any other remedies provided in the City Municipal Code or available under applicable laws, take enforcement action against violators of chapter 15.14 of the City Municipal Code through any combination of the administrative enforcement options, as guided by the City's Enforcement Response Plan. The Authorized Inspector may issue a stop work order directing that all work under the applicable permit be suspended. [15.14.090]

Best Management Practices for Construction Sites

Earthmoving Equipment

All earthmoving equipment must be stored onsite. Drip pans must be placed under equipment not in use, and maintenance must be conducted onsite instead of in the street. Any leaks should be cleaned up and repaired immediately.



Washout Areas

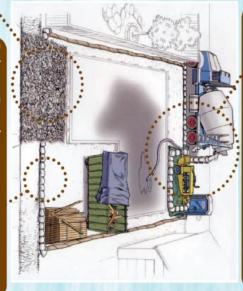
Disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco, and concrete. Use a plastic-lined pit to collect and contain liquids and prevent runoff into the street and gutter. The washout area must be checked and maintained daily to ensure compliance. Washout material must be disposed of properly.

Dirt and Grading

Stockpiled dirt and gravel must be stored onsite and covered. Dust control shall be maintained throughout all phases of construction. During the rainy season (October 1 – April 30) additional gravel, bags, tarps, and visqueen must be stored onsite for emergency

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags, sandbags, and straw wattles. Tarps also must be placed beneath concrete pumpers at all times to prevent spills into the street and sidewalk. Residual materials must be cleaned up as well. Trucks and pumpers are required to clean out in the washout area, not in the street, catch basin or a wheelbarrow.



Perimeter Controls

Gravel bags, silt fences and straw wattles are acceptable perimeter controls and must be used to control site run-on and runoff. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum onsite to quickly pick up spills. Sites wet/dry vacuum onsite to quickly pick up spills. Sites must be checked and maintained daily.

Tracking Controls

All entrances/exits on the site must have coarse gravel (1" to 3" angular material) and/or steel shaker plates to limit offsite sediment tracking. Hand or mechanical sweeping must also be used as needed to clean up any material that gets tracked offsite.

Dumpsters and Portable Toilets

Dumpsters must be covered with a tarp at the end of each work day and area around dumpster must be kept clean. Dumpsters must be located onsite unless an Encroachmen Permit is obtained for placement in street. Portable toilets must have drip pans and be placed onsite so that any spills do not discharge offsite.

Building Materials/Staging Areas

Construction materials (including landscape materials) must be stored onsite. Building materials must be covered when not in use to prevent runoff caused by wind or rain



Liquid Storage

Paints, solvents, fuel and other liquids stored onsite must be contained and covered. It is illegal for contractors to wash out or dump liquid waste or residue in the street, storm drain or sewer. Use washouts or hazardous material drums to contain liquid waste and residue and dispose of this material properly.

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The following requirements are for installation of selected construction BMPs that apply year-round. (not just during the rainy season) to all projects.

- A. Pollution prevention where appropriate.
- B. Development and implementation of a site-specific run-off management plan.
- C. Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction.
- D. Minimization of exposure time of disturbed soil areas.
- E. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible.
- F. Limitation of grading to a "Maximum Disturbed Area" as determined by the County / City before either temporary or permanent erosion controls are implemented to prevent stormwater pollution. The County / City has the option of temporarily increasing the size of Maximum Disturbed Area by a set amount, if the individual site is in compliance with applicable stormwater regulations and the site has adequate control practices implemented to prevent stormwater pollution.
- G. Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible.
- H. Non-stormwater management measures to prevent illicit discharges and control stormwater pollution sources.
- I. Erosion Control BMPs shall be implemented.
- J. Wind erosion control BMPs (dust control) shall be implemented.
- K. Sediment control BMPs shall be implemented at all appropriate locations along the site perimeter, at all operational storm drain inlets and at all non-active slopes.
- L. Tracking control BMPs to control off-site sediment tracking shall be implemented and maintained.
- M. Waste management and materials pollution control BMPs shall be implemented to prevent the contamination of stormwater by construction wastes and materials.
- N. Non-stormwater BMPs shall be implemented to reduce or prevent the contamination of stormwater from construction activities.
- O. Weather tracking: projects shall monitor the National Weather Service (www.weather.gov) probability of precipitation. When a rain event is predicted (forecast predicts a greater than 50% probability of precipitation), the project must be inspected and BMPs must be maintained or deployed as needed to protect the project from discharging pollutants (CGP projects only).
- P. BMP failures must be repaired or replaced with an acceptable alternate as soon as it is safe to do so. Repairs or replacements must result in an adequate BMP, or additional BMPs should be installed to provide adequate protection.

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- Q. **Active exposed areas**: Sufficient materials needed for installation of "standby erosion and sediment control BMPs" shall be stored on site; this is necessary to protect all active exposed areas from erosion and also to reduce or prevent sediment discharges. The total active exposed area shall not exceed that which can be adequately protected by deploying "standby erosion control and sediment control BMPs" prior to a predicted rain event.
- R. **Inactive exposed areas**: All exposed areas not being actively worked in, shall be protected from erosion with temporary or permanent BMPs (erosion and sediment control). The ability to deploy standby BMP materials is not sufficient for these areas, erosion and sediment control BMPs must be actually deployed.
- S. **Completed areas**: Areas that have already been protected from erosion using permanent erosion control BMPs (physical or vegetation) are not considered "exposed". Deployment of permanent erosion control BMPs should commence as soon as practical on completed areas.
- T. Preservation of natural hydrologic features where feasible.
- U. Preservation of riparian buffers and corridors where feasible.
- V. Evaluation and maintenance of all BMPs, until removal is approved by the City.
- W. Retention, reduction, and proper management of all stormwater pollutant discharges on site to the Maximum Extent Practicable (MEP) standard.