

B. Stormwater Quality Protection

The following design guidelines for construction Best Management Practices and permanent stormwater quality protection conform to the City's Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) permit, issued by the State of California Regional Water Quality Control Board by Order R2-2009-0074 for Municipal Regional Permit Number (MRP) CAS612008. Developers are responsible for reviewing and complying with the MRP conditions, available at http://www.swrcb.ca.gov/rwqcb2/board_decisions/adopted_orders/2009/R2-2009-0074.pdf.

1. Definitions:

Active Treatment System: A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment in stormwater.

Best Management Practices (BMPs): Methods providing the most effective, practical means of preventing or reducing pollution from non-point sources, such as pollutants carried by urban runoff. These can be structural (e.g., devices, ponds) or non-structural (e.g., policies to reduce imperviousness). Non-structural BMPs rely predominantly on behavioral changes rather than construction. Structural BMPs are engineered or constructed features that manage stormwater quality.

Detached Single-family Home Project: The building of one single new house or the addition and/or replacement of impervious surface associated with one single existing house, which is not part of a larger plan of development.

Development: Construction, rehabilitation, redevelopment, or reconstruction of any public or private residential project (whether single-family, multi-unit, or planned unit development); or industrial, commercial, retail or other nonresidential project, including public agency projects.

Construction Site: Any project that conducts soil disturbing activities including, but not limited to, clearing, grading, paving, stockpiling, and excavation. Construction sites are all sites with disturbed or graded land area not protected by vegetation, or pavement, that are subject to a building or grading permit.

Erosion Control: Erosion is the wearing away of soil due to wind or water. Construction accelerates erosion and can cause water pollution when soil sediments are carried with stormwater runoff.. Erosion controls include vegetation, such as grasses, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.

Good Site Management: Practices designed to reduce or eliminate the addition of pollutants to construction site runoff through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions. Also known as Good Housekeeping BMPs.

Impervious Surface: A surface covering or pavement of a developed parcel of land that prevents the land's natural ability to absorb and infiltrate /stormwater. Impervious surfaces include, but are not limited to, roof tops; walkways; patios; driveways; parking lots; storage areas; impervious concrete and asphalt; and any other continuous watertight pavement or covering. Landscaped soil and pervious pavement, including pavers with pervious openings and seams, underlain with pervious soil or pervious storage material, such as a gravel layer sufficient to hold at least the design volume of rainfall runoff are not impervious surfaces.

Low Impact Development (LID): LID is a combination of source control, site design, and site treatment measures that yield a runoff hydrograph mimicking the site's predevelopment hydrology. LID principles include preserving and recreating natural landscape features and treating stormwater as a resource rather than a waste. Examples include use of rain barrels and cisterns, green roofs, permeable pavements, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes.

Maximum Extent Practicable (MEP): The standard for implementing stormwater management actions to reduce pollutants in stormwater. Clean Water Act (CWA) 402(p)(3)(B)(iii) requires that municipal stormwater permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the State determines appropriate for the control of such pollutants." Also see State Board Order WQ 2000-11.

Municipal Regional Permit (MRP): State of California NPDES municipal stormwater permit CAS612008 effective December 1, 2009 regulating all aspects of municipal stormwater management, including development and redevelopment.

Non Stormwater Management: Control of discharges that do not originate from precipitation events to prevent pollution. These discharges can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Notice of Intent (NOI): The application form by which dischargers seek coverage under General Permits. The State of California has a general stormwater permit for construction sites that disturb soil of 1 acre or more and small linear underground/overhead projects disturbing at least 1 acre, but less than 5 acres (including trenching and staging areas).

Regulated Project: A new development or redevelopment of any of the following types:

- Until December 1, 2011, any project creating and/or replacing 10,000 square feet or more of impervious surface (collectively over the entire project site) until December 1, 2011,

- After December 1, 2011, any project creating and/or replacing 5,000 square feet or more of impervious surface (collectively over the entire project site),
- Auto service facility (SIC 5013, 5014, 5541, 7532-7534, and 7536-7539);
- Retail gasoline outlet;
- Restaurants (SIC 5812); or
- Uncovered parking lot, either stand-alone or part of any other development project, including the top uncovered deck of a multi-floor parking structure.

Regulated Projects do not include detached single-family home projects that are not part of a larger plan of development and do not include projects that are solely interior remodel, exterior repair such as roof replacement, or pavement treatment or overlay within the footprint of the existing pavement.

Run-on and run-off Controls: Measures to prevent overland flow of stormwater into or out of a construction site. These may include barriers and drainage swales.

Sediment Control: Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. They include those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (e.g., silt fence, sediment basin, fiber rolls, etc.).

Site Design Measures: Incorporation of hydrologic concepts for stormwater management into site layout to reduce impact of development on stormwater quality. Examples include surrounding clustering structures with undeveloped areas, disconnecting areas of impervious surfaces, and avoiding development in sensitive areas such as along creek banks.

Source Control Measures: Barriers or other control measures that limit transport of pollutants from sources into stormwater runoff. Examples included covered waste or hazardous material storage or dispensing areas, and plumbing contaminated discharges to the sanitary sewer