# Stormwater Requirements Overview

Planning & Development Department Last update: 11/21/19

To protect the San Francisco Bay, as well as rivers and creeks, construction projects in the City of Berkeley are required to comply with the Alameda County Clean Water Program. The measures of the Clean Water Program, designed to protect water quality by minimizing land disturbances and impervious surfaces, encourage infiltration into landscape and direct runoff into vegetated areas.

**What is needed to comply?**
The specific requirements for your project will vary depending on the amount of impervious surface that will be created or replaced. Impervious surface prevents the land's natural ability to absorb and infiltrate rainfall and includes pavement or coverings such as rooftops, walkways, patios, driveways, and parking lots. The Stormwater Requirements Checklists will assist with the planning and permitting process by helping to identify the pertinent stormwater requirements for your project.

All development projects, regardless of size, must implement Best Management Practices (BMPs) for reducing runoff during construction. Construction BMPs cover material storage, the cleanup of spills, equipment maintenance and other practices that will help keep dirt, debris, and other construction waste away from storm drains and creeks. Site design and source control measures to minimize stormwater runoff are also encouraged in all projects that create or replace impervious surface. For guidance on these measures, fact sheets are available at the Permit Service Center.

**Required Submittals**
Applicants for development projects, including single-family dwellings, which create or replace at least 2,500 $ft^2$ of impervious surface must complete one of the following Stormwater Requirements Checklists and submit it as part of obtaining zoning approval for a building permit application or as part of a zoning application such as a Use Permit.

**C.3 and C.6 Stormwater Requirements Checklist**: This Checklist is used for projects that create over 10,000 $ft^2$ of new/replaced impervious surface. It must also be used for projects with 5,000 $ft^2$ or more of new/replaced impervious surface that are one of the following Special Land Use Categories:

- Auto service facilities
- Retail gasoline outlets
- Restaurants
- Uncovered parking lots of at least 5,000 $ft^2$

When required as described above, the **C.3 and C.6 Stormwater Requirements Checklist** must be completed in its entirety. Checklist completion requires that:

✓ All Site Design Measures (Section II.B.) are incorporated where applicable into development plans,

- ✓ Appropriate Source Control Measures (Section II.C.) are selected and documented in plans,
- ✓ Construction BMPs (Section II.D. and as detailed in handout) are practiced, and
- ✓ Low impact development (LID) treatment measures, such as infiltration, rainwater harvesting and re-use, evapotranspiration, and biotreatment (Sections II.E. and II.F.) are used as described in the Checklist.

If the development project disturbs more than one (1) acre of surface, or less than an acre but is part of a larger development plan, the applicant must:

- ✓ Complete all sections and requirements of the **C.3 and C.6 Stormwater Requirements Checklist**
- ✓ Obtain a State General Construction Permit and submit a copy of the Notice of Intent to the City when obtaining zoning permits
- ✓ Submit a copy of the Storm Water Pollution Prevention Plan (available from the State Water Resource Control Board) that is required by the State General Construction Permit to the City prior to issuance of a building permit

**C.3.i Stormwater Requirements Checklist**: Smaller projects that create and/or replace 2,500 to 10,000 $ft^2$ of impervious surface (other than Special Land Use Categories listed above) should use this Checklist. No checklist is required for work within an existing footprint such as:

- Routine maintenance or repair projects such as exterior wall surface replacement or re-roofing that does not change the roof shape and slope (which would affect drainage),
- Interior remodeling projects, or
- Pavement resurfacing (pavement replacement is subject to the requirements).

The **C.3.i Stormwater Requirements Checklist** must be completed in its entirety and specifies that:

- ✓ At least one Site Design Measure (labeled a-f in Section II.A.) be incorporated into development plans,
- ✓ Source Control Measures (Section II.B.) are used to the maximum extent possible, and
- ✓ Construction BMPs (Section II.C. and as detailed in handout) are practiced.

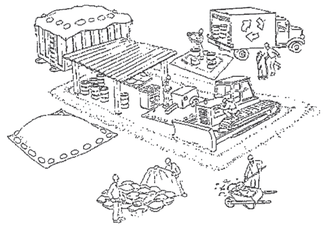
**Other Stormwater Requirements**

All projects with new landscape area of 500 $ft.^2$ or more, or renovated landscape of 2,500 $ft.^2$ or more, must also comply with the State Water Efficiency Landscape Ordinance, East Bay Municipal Utility District (EBMUD) Section 31 Water Service Regulation for Outdoor Water Use, and all applicable measures in the Bay Friendly Basics checklist.
See the City of Berkeley's webpage on Model Water Efficient Landscaping Ordinance for more information. Questions about State WELO requirements, EBMUD Section 31, and Bay Friendly Basics should be directed to the City's consulting Urban Forester, Darya Barar, at (925) 484-0211 or dbarar@bartlett.com.

**Questions**

Questions about the Stormwater Requirements Checklist or other stormwater issues or requirements should be directed to the Department of Public Works at (510) 981-6409 or VChen@cityofberkeley.info.

# City of Berkeley's
# Pollution Prevention - It's Part of the Plan



## Make sure your crews and subs do the job right!

Runoff from streets and other paved areas is a major source of pollution and damage to creeks and the San Francisco Bay. Construction activities can directly affect the health of creeks and the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines and the project specifications will ensure your compliance with City of Berkeley requirements.

## Materials storage & spill cleanup

### Non-hazardous materials management

- Sand, dirt, and similar materials must be stored at least 10 feet (3 meters) from catch basins. All construction material must be covered with a tarp and contained with a perimeter control during wet weather or when rain is forecasted or when not actively being used within 14 days.
- Use (but don't overuse) reclaimed water for dust control as needed.
- Sweep or vacuum streets and other paved areas daily. Do not wash down streets or work areas with water!
- Recycle all asphalt, concrete, and aggregate base material from demolition activities. Comply with City of Berkeley Ordinances for recycling construction materials, wood, gyp board, pipe, etc.
- Check dumpsters regularly for leaks and to make sure they are not overfilled. Repair or replace leaking dumpsters promptly.
- Cover all dumpsters with a tarp at the end of every work day or during wet weather.

### Hazardous materials management

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecasted.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecasted within 24 hours.
- Be sure to arrange for appropriate disposal of all hazardous wastes.

### Spill prevention and control

- Keep a stockpile of spill cleanup materials (rags, absorbents, etc. ) available at the construction site at all times.
- When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- Dispose of all containment and cleanup materials properly.
- Report any hazardous materials spills immediately! Dial 911 or the City of Berkeley's Public Works Department by dialing 311

### Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking.

## Vehicle and equipment maintenance & cleaning

- Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or creeks.
- Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

## Earthwork & contaminated soils

- Keep excavated soil on the site where it will not collect in the street.
- Transfer to dump trucks should take place on the site, not in the street.
- Use fiber rolls, silt fences, or other control measures to minimize the flow of silt off the site.

- Earth moving activities are only allowed during dry weather by permit and as approved by the City Inspector in the Field.
- Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fast-growing grasses as soon as possible. Place fiber rolls down-slope until soil is secure.
- If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the Engineer for help in determining what should be done, and manage disposal of cntaminated soil according to their instructions.

## Architectural Copper

If project contains architectural copper use best management practices as detailed in the handout Requirements for Architectural Copper available at the lobby of the Permit Service Center.

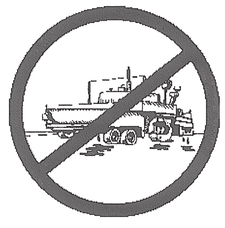
## Dewatering operations

- Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance.
- Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- Be sure to notify and obtain approval from the Engineer before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine what testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

## Saw cutting

- Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or sand/gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- If saw cut slurry enters a catch basin, clean it up immediately.

## Paving/asphalt work



- Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- Protect gutters, ditches, and drainage courses with sand/gravel bags, or earthen berms.
- Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.
- Do not use water to wash down fresh asphalt concrete pavement.

## Concrete, grout, and mortar storage & waste disposal

- Store concrete, grout, and mortar under cover, on pallets, and away from drainage areas. These materials must never reach a storm drain.
- Wash out concrete equipment/trucks off-site or into contained washout areas that will not allow discharge of wash water onto the underlying soil or onto the surrounding areas.

- Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal off site.

## Painting

- Never rinse paint brushes or materials in a gutter or street!
- Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink.
- Paint out excess oil-based paint before cleaning brushes in thinner.
- Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

## Landscape Materials

- Contain, cover, and store on pallets all stockpiled landscape materials (mulch, compost, fertilizers, etc.) during wet weather or when rain is forecasted or when not actively being used within 14 days.
- Discontinue the application of any erodible landscape material within 2 days of forecasted rain and during wet weather.

**Storm drain polluters may be liable for fines of $10,000 or more per day!**

For references and more detailed information:
www.cleanwaterprogram.org
www.cabmphandbooks.com

REVISIONS

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APPROVED

CITY OF BERKELEY ☆ PUBLIC WORKS AGENCY

POLLUTION PREVENTION

DATE

WORK ORDER NO.

SPECIFICATION NO.

SHEET NO. 2 OF

FILE NO.