

CITYWIDE BEST MANAGEMENT PRACTICES

CITY OF LOMPOC MUNICIPAL OPERATIONS BEST MANAGEMENT PRACTICES

In Designing and Planning City Projects, All City Departments Shall Strive to do the Following:

1. Preserve drainages in a natural state.
2. Where practical, use alternate paving material that allows percolation, such as gravel or turf-block.
3. Provide vegetation or other cover, such as gravel, in dirt areas, to prevent erosion and sedimentation.
4. Use low maintenance landscaping.
5. Remove existing mature vegetation only when absolutely necessary.
6. Prevent unnecessary disturbance by establishing clear limits to work zones, delineating limits of work and sensitive or critical areas. Critical areas, vegetation, trees, creek beds, and buffer zones, which are to be protected, shall be delineated in the field with fencing and/or survey tape.
7. Avoid construction on steep slopes, when practical.
8. Minimize cut and fill, as much as possible.
9. Align temporary and permanent roads and driveways along slope contours, where possible.
10. Phase large scale grading operations to minimize the amount of time disturbed areas are exposed.
11. Avoid excavation and grading during wet weather, when practical.

All City Operations Shall Comply With Each Of The Following Requirements.

Outdoor storage and hazardous materials storage.

1. Keep lids on all containers and store under cover.
2. Use secondary containment for hazardous materials and protect from rain. Store hazardous materials in an area where spills will not reach storm drains.
3. Label all hazardous materials according to hazardous waste regulations.
4. Do not combine wastes when storing them - this increases safety, recycling and disposal options and reduces disposal costs.
5. Never mix waste oil with fuel, antifreeze or chlorinated solvents.
6. Use secondary containment on all bulk fluids stored in amounts in excess of 55 gallons and wastes to prevent accidental discharge. Secondary containment includes, but is not limited to, berming around storage areas and use of absorbents.
7. Keep storage areas clean and dry. Conduct regular inspections of storage areas to detect leaks and spills.
8. Store new or used batteries securely to avoid breakage and acid spills during earthquakes. When stored outdoors, batteries shall be covered with plastic tarp to protect them from rain.
9. Recycle old batteries.
10. Wood products treated with chromated copper arsenate, ammoniacal copper zinc

arsenate, creosote, or pentachlorophenol should be covered with tarps. (Note: Electric Division poles and crossbeams fall under a Regional Water Quality Control Board exemption from this requirement.)

11. Cover stockpiled soil, construction materials and waste with plastic sheeting or temporary roofs, where practical.
12. When procuring new refuse containers, purchase containers with lids.

Construction, Grading and Erosion Control

1. Minimize clearing and grading activity. Clear and grade only during dry weather, when possible.
2. Construct stabilized access roads and entrances.
3. Use appropriate methods to ensure that soil is not tracked onto City streets such as gravel entrances, street sweeping and tire washes, as necessary.
4. Identify all storm drains, drainage swales and creeks located near construction areas, make sure all subcontractors are aware of storm drain locations and the need to prevent pollutants from entering them.
5. Use berms or drainage ditches to capture and divert natural run-off away from the construction site.
6. Protect storm drain inlets from sediment-laden run-off. Storm drain inlet protection devices include but are not limited to, sandbag barriers, filter fabric fences, block and gravel filters and excavated drop inlet sediment traps.
7. Use as little water as possible for dust control during grading operations.
8. If soil stockpiles are to be stored in high wind areas, consider use of a chemical dust suppressant.
9. Use installed straw bale barriers, silt fencing, sand bag barriers, brush or rock filters, temporary sediment basins, sediment traps or temporary vegetation on slopes to reduce run-off velocity and trap sediments. Do not use asphalt rubble or other demolition debris for this purpose.
10. Earth dikes, drainage swales and ditches, slope drains and subsurface drains, velocity dissipation devices, flared culvert end sections, check dams, slope roughening, terracing and rounding, shall be used to ensure proper drainage and soil retention once a project is completed or when a phase of a project is completed.
11. When cleaning sediments from streets, driveways and paved areas on construction sites, use a standard dry sweeper with a water system to control dust, wherever possible. Dispose of solids at the landfill, and run the remaining swept material through a clarifier, with approved sediment/oil separators. Dispose of the clean water into the storm drain and dispose of the residual oils as hazardous waste.
12. Install cover materials such as vegetative debris, mulch, crushed stone, geo-textile, fabric erosion control blankets, soil stabilizers, and temporary seeding and planting to reduce erosion during and after clearing and grading operations.
13. When dewatering a site, remove sediment from the discharge, using filtration methods or if the site is large enough, use a discharge pond to allow the clear water to percolate into the groundwater table leaving sediments on the surface. If the material is drilling mud, or testing indicates that it is contaminated, dispose of it as required by law.
14. Clean up leaks and spills on the construction site immediately.
15. When placing or removing concrete, ensure that wet concrete, cement and its components, or concrete dust do not enter storm flows.

16. Refuel and perform emergency repairs on vehicles and heavy equipment in a designated, protected location. Protect the soil from leaks and spills. If refueling or repair must be done away from the fuel station or garage, try to do so away from storm inlets, storm channels and the river.
17. Ensure that spill kits are readily available to construction sites and vehicles.
18. If a spill of any size occurs on dirt, notify the Lompoc Fire Department and the Certified Unified Program Agency (CUPA) at 686-8166. Aerate, remediate or dispose of as required by the Certified Unified Program Agency Representative (CUPA).
19. Wash vehicles at an appropriate off-site facility. If equipment must be washed, on-site, do not use soaps, solvents, degreasers, or steam cleaning equipment, and prevent wash water from entering the storm drain.
20. Cover construction materials, stockpiled soil, and waste with plastic sheeting or temporary roofs, prior to expected rain. Sweep and remove materials from surfaces that drain to storm drains, the river and channels, prior to expected rain.
21. Place refuse containers and recycling receptacles around construction sites to reduce litter.
22. Recycle or reuse leftover materials whenever possible.
23. Dispose of all wastes properly. Material that cannot be recycled or reused must be taken to the landfill, hazardous waste collection facility or shipped as hazardous waste.
24. Train employees and supervisors to implement these requirements.
24. When transporting material to and from the construction area, cover or reduce the height of loads so that earthen material and debris do not blow out of the truck.
25. Avoid flushing streets with water. If flushing street or wet cleaning is required, sweep and remove debris beforehand, plug storm inlets, collect wash water and dispose of as required by law. Alternately, allow wash-water to drain to the storm drain and collect it downstream at a manhole or storm drain clean out and dispose as required by law.
26. If drilling is to occur near a watercourse, ensure that all appropriate permits are obtained.

Paint Work

1. Never clean brushes or rinse paint containers into a street gutter, storm drain or creek or where they will end up in a gutter, storm drain, or creek.
2. When finished painting, use up water-based paint in brushes and then rinse them into the sanitary sewer (indoor plumbing).
3. When stripping building exteriors with high pressure water, cover or berm storm drain inlets. If possible, collect building cleaning water and discharge to the sanitary sewer, if disposal is approved by Wastewater. If the substances test too high in critical elements to be disposed of in the sanitary sewer, dispose of wash water as a hazardous material.
4. If power washing or stripping surfaces painted with lead paint, block storm drains, contain and vacuum water and test water for lead. If lead above threshold levels is found, proper disposal methods shall be followed.
5. Once finished with oil based painting, paint out brushes to the extent possible, and filter and reuse thinners and solvents. Dispose of unusable thinners and residue as hazardous waste.
6. Return unused water based (latex) paint, properly contained, back to the supplier, or turn it in to the Household Hazardous Waste Collection Facility (HHWCF) where it will be processed and reused.
7. Dry latex paint and paint cans with dried latex paint may be disposed of in the garbage.
8. Take unwanted oil-based paint, paint thinners and sludges to the HHWCF or ship as hazardous waste.

9. Clean equipment including sprayers, and sprayer paint supply lines, at the end of each day, collecting and disposing of wash water and excess paint properly.

Cement and Concrete Work

1. Sawcut concrete in dry weather, whenever possible. Protect nearby storm drain inlets and water bodies with sandbags around inlets and work areas where debris could be introduced into a water body.
2. After removal, recycle concrete material and sweep area thoroughly.
3. Use as little water as possible during sawcutting operations. Block or berm around storm inlets, drainage channels and watercourses with sandbags or absorbent materials to contain slurry. If slurry enters the storm system, remove immediately.
4. When sawcutting to make repairs to utility lines or for other repairs, collect and deposit debris and earth away from any water and ensure that pollutants do not contact water from sawcutting or necessary repair work.
5. Remove sawcut slurry, with a shovel or vacuum or by sweeping when dry, as soon as possible.
6. Avoid mixing excess fresh concrete or cement mortar on-site.
7. Store dry and wet concrete materials under cover, protected from rain and run-off.
8. Washout concrete transit mixers only in wash out areas where water will flow into settling ponds of dirt, aggregate base or sand, located away from a watercourse. If possible, recycle wash-water by pumping back into mixers for reuse. Do not dispose of washout into storm system.
9. Whenever possible, reuse or recycle small amounts of excess concrete, grout and mortar. Allow excess to set in concrete forms and reuse or dispose of excess at the landfill.
10. Place tarps or drop-cloths under mixers when mixing concrete over impervious surfaces. Hose down mixers, tools, and other equipment in a dirt area where the rinse water can soak into the ground and not run into the creek or storm drain.
11. Sweep surfaces at the end of the day and dispose of swept materials properly.

Asphalt, Paving, Patching, Resurfacing and Surface Sealing

1. Apply paving, patching, resurfacing and surface sealing materials in dry weather, when there will be adequate time for materials to dry, unless emergency repair in rain is necessary.
2. After pavement removal, recycle paving and sweep area thoroughly.
3. When patching, resurfacing, sealing and removing asphalt, protect nearby storm drain inlets and water bodies with sandbags around inlets and around work areas where debris could be introduced into a water body.
4. Stockpile materials away from streets, gutter areas, storm drain inlets or watercourses. Cover or berm stockpiles in wet weather.
5. Pre-heat, transfer and load hot bituminous material away from drainage systems and watercourses.
6. Cover and seal storm drain inlets and covers, prior to applying seal coat, slurry seal etc. Leave covers in place until job is complete and all water has evaporated or drained. Clean collected material from covers and dispose of properly.
7. Designate a protected area for cleanup and proper disposal of excess paving and surfacing materials.
8. Avoid run-off when using water for dust control.
9. Sweep debris and dispose of properly when construction is completed.

10. Remove stockpiles as soon as possible after job is complete.
11. If it rains unexpectedly, cover stockpiles and divert run-off around construction, where possible.
12. Use as little water as possible during sawcutting operations. Block or berm around storm inlets, drainage channels and watercourses with sandbags or absorbent materials to contain slurry. If slurry enters storm system, remove immediately.
13. Remove sawcut slurry, with a shovel or vacuum or by sweeping when dry, as soon as possible.
14. Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) Drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from the area along the curb where sediment has accumulated by blocking a storm drain inlet.
15. Allow aggregate rinse to settle and pump water to sanitary sewer if allowed.
16. Recycle broken asphalt at a construction demolition facility.
17. Always park paving machines over drip pans or absorbent materials.
18. Clean patch and paving equipment, if possible, at the end of each day, at the Corporate Yard.

Sweeping

1. Street sweeping schedule shall be based on factors such as traffic volume, land use, field observation of sediment and trash accumulation, and proximity to watercourses. The whole City shall be swept at least twice each month, with high traffic areas being swept once a week.
2. Use standard sweeper with minimal water use for dust control.
3. Notify the public of street sweeping schedule changes.
4. Maintain street sweepers for maximum effectiveness. Replace old sweepers with technologically advanced sweepers. Review existing sweepers for effectiveness to schedule for replacement.
5. Clean sweepers at a wash facility that drains to a clarifier tank with approved sediment/oil separators.
6. Dispose of street sweeping residuals at the City Landfill.
7. Do not leave street sweeping debris in piles along the road, especially near storm drain inlets or riparian areas.
8. Ensure that piles of swept material are not left adjacent to storm drains. Make a second pass with sweeper or hand sweep, if necessary.
9. If sweeper dewatering is necessary, discharge water to a clarifier tank.
10. Sweep City-owned parking lots at least once before the onset of the wet season.
11. Ensure that sweeper drivers are familiar with spill response requirements and that absorbents are either kept on sweepers or are readily available at all times.
12. Dispose of spill containment and remediation materials properly.

Storm Drains

1. Ensure energy dissipation below culvert outfalls.
2. All catch basins, inlets, debris basins and storm drain lines shall be inspected once a year and shall be maintained, as necessary.
3. Visual inspections shall be conducted during the dry season to identify problem areas of trash accumulation.
4. Inlets shall be inspected before and after the wet season. Clean all inlets before the wet season and clean inlets, after the wet season.

5. Inspect and clean storm drain pipes and inlets in areas affected by pollutant generating incidents such as fire or spills immediately, or at minimum, before the first rain.
6. If no evidence of chemical contamination of wastes collected during inlet cleaning is found, dispose of solid waste material at the landfill. If liquid material is obtained and potentially contaminated, run the material through a clarifier (portable/in-sink/Corporate Yard/other type) discharging clean water to the storm drain and disposing of the hazardous material properly, as required by law.
7. If there is evidence of chemical contamination in the sediment cleaned from the inlets, the sediment should be analyzed for pollutants, including lead, oil and grease and hydrocarbons. If concentrations are elevated, sediments should be disposed of as hazardous waste.

Solid Waste

1. Post no littering signs.
2. Provide litter receptacles and recycling containers in high use areas.
3. Clean out litter receptacles in high use areas frequently to prevent spillage.

Garage / Transit / Vehicle Maintenance

1. Perform major repairs at the Corporate Yard.
2. If refueling or repair must be done away from the fuel station or Corporate Yard, try to do so away from storm inlets, channels and the river.
3. Recycle used motor oil, diesel oil, vehicles fluids and parts, whenever possible.
4. Inspect equipment daily and repair any leaks, as soon as possible.
5. When receiving vehicles for parts or salvage, park them on a paved surface and immediately drain and collect gasoline and other fluids properly.
6. Use containers and drip pans when changing oil and antifreeze. Recycle oil and dispose of filters properly.
7. Check vehicles for leaks. Soak up any spills and leaks with absorbents and dispose of properly.
8. Develop and implement a spill response plan. Spill kits shall be stored on selected City vehicles and shall be readily available to all City operations and facilities. Dispose of spill containment and remediation materials properly.
9. If a spill occurs on dirt, excavate and remove soil. Aerate, remediate or dispose of as required by CUPA.
10. Ensure spill kits are carried on, or are readily available to all large equipment, including utility vehicles and those which have hydraulics.

Vegetation Management and Landscape Maintenance

1. Maintain vegetative cover on medians and embankments to prevent erosion.
2. Apply mulch or leave clippings in place to reduce run-off.
3. Limit the use of disking to areas which are flat. Only disk when necessary to amend clay or sandy soil to retain water, as frequent disking could contribute to sedimentation in run-off. If disking is necessary, disk early in the spring or fall and always prior to the rainy season. Incorporate mulch and water into the soil to help retain it in place, grade and compact soil once disking is completed.
4. Remove pruned vegetation from gutter, shoulder and storm drain inlets.
5. Avoid loosening the soil when manually or mechanically weeding.
6. Inspect irrigation systems to ensure that excessive run-off is not occurring.

7. Repair irrigation leaks as soon as they are identified.
8. If muddy water is being bailed out of an area, deposit it on landscaped areas, rather than in the storm system. Follow federal, state and local laws governing the use, storage and disposal of pesticides and herbicides.
9. Reduce or eliminate use of pesticides for prevention, using them to address known problems. Avoid use of copper-based pesticides.
10. Do not apply fertilizer, pesticides or herbicides if rain is expected.
11. Use and mix the minimum amount of pesticides and herbicides necessary.
12. Do not mix or prepare pesticides for application near gutters, storm drains, storm channels, creeks or the river.
13. Fully use pesticides, rinse containers and use rinse water as pesticide, dispose of unused pesticide as hazardous waste.
14. Replace existing vegetation with fire-resistant and native vegetation to reduce the need for herbicides.
15. Calibrate the pesticide/herbicide distributor to avoid excessive application.
16. Clean pavement and sidewalk before applying irrigation water, if fertilizer is spilled on these surfaces.
17. Follow federal, state and local laws governing the use, storage and disposal of pesticides and herbicides.
18. Minimize use of chemical fertilizers. Consider grasscycling or composting to assist in augmenting your fertilizers naturally. Limit fertilizer application to twice a year, fall and spring.
19. When watering, water in early morning or evening to minimize evaporation.
20. Use the least toxic pesticides and herbicides available. Read labels for warnings and use only as directed.

Additional requirements for construction.

- Proper use and disposal of toxic materials
- Erosion and sediment control measures
- Reduced tracking of sediment onto public and private streets
- Proper Dust control
- Preservation of existing vegetation wherever possible
- Adequate Sweeping schedule
- Maintaining all construction equipment to prevent oil or other fluid leaks.
- Keeping vehicles and equipment clean, preventing excessive buildup of oil and grease.
- Protection of the ground beneath staging, fueling and maintenance areas with impermeable materials. Placement of drip pans below equipment that is parked. Use of off-site repair shops whenever possible.
- Stockpiled spill cleanup materials readily accessible.
- Regular inspection of on-site vehicles and equipment for leaks and immediate repair.
- Checking incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Prohibiting leaking vehicles or equipment on-site.
- Use of designated areas away from drainages, if fueling must occur on-site.
- On-site fuel storage tanks located within bermed areas designed to hold the tank's volume. Retention area covered with an impervious material and installed in a manner that ensures any spills will be contained.
- Secondary containment always used, including drain pans or drop cloths to catch spills or leaks when removing or changing fluids.

- Use of drip pans for any oil or fluid changes.
- As little water as possible used while washing to avoid having to install erosion and sediment controls for the wash area. Use of designated, bermed wash areas to prevent wastewater discharge into storm water, creeks, rivers, and other water bodies. Use of phosphate free, biodegradable soaps.
- Steam cleaning not permitted on-site.
- Material handling areas kept free and clean of spills, leaks and deleterious material.
- All discharge points to off-site locations kept free of noticeable pollutant discharges and sediment.
- All internal discharge points provided with temporary and permanent inlet protection. Including a City approved method of silt removal and an oil and grease filter.
- Hazardous materials kept covered.
- Paved areas used for parking equipment whenever possible.
- Use of properly maintained sediment barriers such as gravel or sandbags, straw bales and rolls, silt fences and sediment traps/basins and storm drain inlet protectors to control sedimentation.
- Protection of all exposed slopes with acceptable soil stabilization practices.
- Keep all on-site traffic routes, parking and storage of equipment and supplies in designated areas.
- Properly maintain seeded and landscaped areas.
- Stabilized construction entrances and staging areas provided. A graveled entrance or equivalent provided to reduce tracking of soil onto streets.
- Sediment and debris swept from public streets adjacent to construction sites at the end of each day.
- Use of geo-textiles and fiber mats and mulch to maintain landscaping and seeding and reduce erosion.
- Velocity of flows through the site reduced using outlet protection / dissipaters, check dams and slope roughening.
- Diversion of run-off on construction sites using earth dikes, temporary drains and swales, and slope drain terracing.