

CHAPTER 12

BEST MANAGEMENT PRACTICES

SECTION 12.01 GENERAL

This Section of the Specifications contains requirements for land development and construction activities, as well as design criteria and guidelines for those performing such activities. The purpose of this Specification is to minimize the introduction of pollutants into the storm drainage system, provide a means to monitor and control discharges into the storm drain system, and to comply with the State and Federal laws and regulations regarding these discharges. This specification includes best management practices applicable to development and construction activities, and also includes various plan submittal requirements. The Public Works Director or City Engineer has the authority to modify the requirements of the Best Management Practices (BMPs) as needed to accomplish reasonable and effective storm water pollution prevention objectives.

SECTION 12.02 STORM WATER QUALITY CRITERIA

Requirements for construction activities associated with proposed and existing developments are as follows:

- A. Prior to discharging storm water, it must be treated to reduce discharges of sediment, oils, floatables and other pollutants. In public facilities, the type of treatment system used should be approved by the Public Works Director or City Engineer. On private sites other methods may be proposed.
- B. Lehi City encourages the use of the BMP fact sheets included within the Lehi City Design Standards and Public Improvement Specifications. The following BMPs are required to be a part of all Storm Water Pollution Prevention Plans (SWPPP):

| Best Management Practice | BMP Code |
|---|-----------------|
| * BMP Inspection & Maintenance | BMPIM |
| * Contaminated or Erodible Surface Areas | CESA |
| * Concrete Waste Management | CWM |
| * Dust Controls | DC |
| * Portable Toilets | PT |
| * Spill Clean-Up | SCU |
| * Vehicle and Equipment Fueling | VEF |
| * Waste Disposal | WD |
| Note: There is no list of BMPs that are required on all Post Construction Storm Water Pollution Prevention Plans. | |

- C. In addition to the required BMPs listed above, other BMPs from the Lehi City Design Standards and Public Improvement Specifications that apply to a given development should be used (see table below). Lehi City also encourages the use of practices in addition to those contained in the Lehi City Design Standards and Public Improvement Specifications that may be suitable for a given development. Engineering judgment must be used in selecting BMPs for a given development.

| Best Management Practice | BMP Code |
|--|-----------------|
| Brush or Rock Filter | BRF |
| Catch Basin Cleaning | CBC |
| Construction Road Stabilization | CR |
| Construction Sequencing | CS |
| Constructed Wetlands | CW |
| Diversion Dike | DD |
| Detention/Infiltration Device Maintenance | DIDM |
| Erosion Control Blanket | ECB |
| Extended Detention Basins | EDB |
| Geotextiles and Mats | GM |
| Grading Practices | GP |
| Grassed Swales | GS |
| Hydromulching | HM |
| Inlet Protection – Concrete Block | IPC |
| Inlet Protection – Excavated | IPE |
| Inlet Protection – Gravel | IPG |
| Inlet Protection – Silt Fence or Straw Bale | IPS |
| Minimize Directly Connected Impervious Areas | MDCIA |
| Material Storage | MS |
| Mulching | MU |
| Outlet Protection | OP |
| Oil/Water Separators & Water Quality Inlets | OWS |
| Preservation of Existing Vegetation | PEV |
| Parking Lot Design | PLD |
| Parking Lot Sweeping/Vacuumping | PLSV |
| Rock Check Dams | RCD |
| Riprap | RR |
| Sediment Basin | SB |

| | |
|---|-------|
| Sand Bag Barrier | SBB |
| Stabilized Construction Entrance and Wash Area | SCEWA |
| Slope Drain | SD |
| Storm Drain Flushing | SDF |
| Silt Fence | SF |
| Seeding and Planting | SP |
| Surface Roughening | SR |
| Sediment Trap | ST |
| Straw Bale Barrier | STB |
| Temporary Drains and Swales | TDS |
| Temporary and Permanent Seeding | TPS |
| Temporary Stream Crossing | TSC |
| Note: There is no list of BMPs that are required on all Post Construction Storm Water Pollution Prevention Plans. | |

D. The following practices are specifically prohibited as further defined within Chapter 13.44 of the Lehi Municipal Code:

1. Covering any portion of a curb, gutter or sidewalk with mud dirt or debris and failing to remove the mud, dirt or debris before leaving the site.
2. Washing any vehicle or equipment in a manner that (a) leaves concrete, mud, dirt or debris on a public or private street or on any portion of the public right-of-way, or (b) allows concrete, mud, dirt or debris to enter the storm drain system.
3. Unlawful obstruction of storm drainage appurtenances.
4. Non-storm runoff, pollutants, or illicit discharges or connections.
5. Prohibited storage and littering.

SECTION 12.03 CONTENTS OF STORM WATER POLLUTION PREVENTION PLAN

A. The purpose of the Storm Water Pollution Prevention Plan is to control storm water runoff and reduce pollutants within the storm water runoff during construction by accomplishing the following:

1. Controlling soil erosion.
2. Controlling discharge of sediment into storm drainage facilities or offsite areas.

3. Preventing illicit discharges into on-site soils, into storm drainage facilities or offsite areas.
 4. Preventing uncontrolled discharge of storm water to adjacent property
 5. Controlling dust and construction waste.
- B. The Storm Water Pollution Prevention Plan is to be submitted with the site plans or improvement plans, and is to contain at least the following elements:
1. Existing and proposed contours as shown on the grading plan.
 2. Existing and proposed storm drainage improvements.
 3. Best management practices to accomplish the purpose of the plan should show the following for each BMP specified, as applicable:
 - a. Location and extent of specified BMP.
 - b. Timing of implementation.
 - c. Duration of implementation.
 - d. Any information in addition to or different from that shown on the BMP fact sheet as necessary to employ the BMP on the site.
 4. BMP Fact sheets or other descriptive material for all specified BMPs.
 5. Show the following for all proposed vegetation or re-vegetation:
 - a. Location and type of vegetation or re-vegetation.
 - b. Timing of vegetation or re-vegetation, possibly in terms of planting season or number of days following commencement of grading.
 6. Sequencing of construction activities and BMPs.
 7. Name, address & telephone number of individual who has responsibility for implementation and maintenance of the plan.
 8. If there are lots within the area that are subject to the Hillside Preservation Zone (as defined in Section 12-A of the Lehi City Development Code), the plan also must meet the requirements of Section 12-A.030, and Sections 12-A.060 thru 12-A.100 of the Lehi City Development Code.

SECTION 12.04 CONTENTS OF POST CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN

- A. The purpose of the Post Construction Storm Water Pollution Prevention Plan is to control storm water runoff and reduce pollutants in storm water runoff after

construction is complete and the developed site is in operation. This is achieved by accomplishing the following:

1. Controlling soil erosion.
 2. Controlling discharge of sediment into storm drainage facilities or off-site areas.
 3. Preventing illicit discharges into on-site soils, storm drainage facilities or off-site areas.
- B. The Post Construction Storm Water Pollution Prevention Plan is to be submitted with the site plans or improvement plans. It shall be contained on a plan sheet of its own, rather than being a part of another plan sheet, and is to contain at least the following:
1. The site plan, including vicinity map, proposed contours, permanent storm drainage improvements, and landscaping.
 2. An indication as to which of the existing BMPs (shown on the Storm Water Pollution Prevention Plan) may be modified or removed in conjunction with the BMPs being proposed as part of the Post Construction Storm Water Pollution Prevention Plan.
 3. Best management practices to accomplish the purpose of the plan. Examples of appropriate BMPs may include those addressing operation and maintenance of storm drainage quality control facilities, operation and maintenance of storm water discharge control facilities, maintenance of landscaping, good housekeeping practices, etc.
 4. Show the following for each BMP specified:
 - a. Location and extent of specified BMPs, as appropriate.
 - b. Detailed schedule of execution for each specified BMP, in terms of starting time, duration, frequency, etc., as appropriate.
 - c. Any information in addition to or different from that shown on the BMP fact sheets as necessary to employ the BMPs on the site.
 5. BMP fact sheets or other descriptive material for all specified BMPs. BMP fact sheets associated with the Post Construction Storm Water Pollution Prevention Plan are to be on a separate sheet from those that are part of the Storm Water Pollution Prevention Plan.
 6. The following statement shall prominently appear on all Post Construction Storm Water Pollution Prevention Plans:

The holders of the business license at this site (or owner of the lot over one acre if there is no business license) are responsible to perpetually follow this Post Construction Storm Water Pollution Prevention Plan. Failure to follow the plan may result in the City refusing to renew business licenses or take other action against the property owner.

The objectives of the Plan are to:

1. Control soil erosion.
2. Control discharge of sediment into storm drainage facilities or off-site areas.
3. Prevent illicit discharges into on-site soils, into storm drainage facilities or offsite areas.

If the objectives of the Plan are not being met, the site operator or owner shall make adjustments to the Plan as needed to accomplish its purposes.

Lehi City encourages adjustments to the plan that enhance effective storm water management. However, significant reduction of practices contained in the plan is to be accomplished through formal modification of the plan and resubmission to the Development Review Committee for approval.

SECTION 12.05 REVIEW PROCEDURES FOR STORM WATER POLLUTION PREVENTION PLAN AND POST CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN

The Storm Water Pollution Prevention Plan and the Post Construction Storm Water Pollution Prevention Plan will be submitted to Lehi City with the development plans. They will be reviewed along with the development plans, with storm water quantity and quality benefits in mind. The review procedure will be the same as for subdivision improvement plans and site plans, as outlined in Sections 10 & 11 of the Lehi City Development Code.

SECTION 12.06 CONCLUSION

Inasmuch as the construction and post construction related best management practices will generally be carried out by those in the private construction industry, they will be implemented as specified in the approved Storm Water Pollution Prevention and Post Construction Storm Water Pollution Prevention plans as development occurs. Refer to Chapter 13.44 of the Lehi City Municipal Code for additional guidance regarding the inspection and enforcement of specific BMP activities throughout the construction and post construction process.

This section within the Lehi City Design Standards and Public Improvement Specifications satisfies, in part, two of the six minimum control measures established by the Storm Water Phase

II Rule. PART 7, SUMMARY OF BEST MANAGEMENT PRACTICES AND MEASURABLE GOALS, shows how the best management practices correlate with the six minimum control measures.