



POST CONSTRUCTION STORM WATER RUNOFF

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MANAGEMENT OF THE DISCHARGES – POST CONSTRUCTION

4.6 – MS4 OPERATOR MUST DEVELOP PROGRAM TO ADDRESS DISCHARGES OF POST CONSTRUCTION STORMWATER RUNOFF FROM NEW DEVELOPMENT OR REDEVELOPMENT.

MUST INCLUDE STRATEGY TO MANAGE A PROGRAM, MONITOR COMPLIANCE AND, AS NECESSARY, ENFORCE VIOLATIONS OF THE ORDINANCES.

DEVELOP AND UPDATE ORDINANCES OR OTHER REGULATORY MECHANISM.

ORDINANCES MUST AT A MINIMUM

ADDRESS POST CONSTRUCTION STORMWATER RUNOFF INCLUDING, BUT NOT LIMITED TO:

- ANY NEW DEVELOPMENT AND/OR REDEVELOPMENT WITH LAND DISTURBANCE OF 1 OR MORE ACRES.
- NEW RETAIL GASOLINE OUTLETS OR NEW MS4 FUELING AREAS MUST INSTALL MEASURES TO REDUCE **LEAD, COPPER, ZINC, AND POLYAROMATIC HYDROCARBONS IN STORMWATER RUNOFF.**

PERFORMANCE STANDARDS

- INCORPORATE PERFORMANCE STANDARDS INTO **ORDINANCE OR OTHER RESOURCE DOCUMENTS**. THE PROGRAM, AT A MINIMUM, MUST:
 - ESTABLISH DESIGN CRITERIA TO REDUCE POLLUTANTS MEETING OR EXCEEDING **CSGP** REQUIREMENTS
 - DEVELOP A LIST OF STORMWATER MANAGEMENT MEASURES AND STANDARDS FOR IMPROVING WATER QUALITY. (STRUCTURAL OR NON STRUCTURAL AND LOW IMPACT)

POST CONSTRUCTION STORMWATER MANAGEMENT MEASURES

- POST CONSTRUCTION STORMWATER MANAGEMENT MEASURES MUST BE IMPLEMENTED TO MANAGE STORMWATER RUNOFF/DISCHARGES TO ADDRESS **QUALITY AND QUANTITY**.
 - RUNOFF RATE MUST MEET LOCAL REQUIREMENTS
 - POST CONSTRUCTION RUN-OFF DISCHARGE MUST AT A MINIMUM **NOT EXCEED PRE-DEVELOPMENT DISCHARGED BASED ON A TWO YEAR, TEN YEAR, AND ONE HUNDRED YEAR PEAK STORM EVENTS.**
 - RUNOFF MUST BE MANAGED TO MINIMIZE POLLUTANTS THAT ARE ASSOCIATED WITH THE FINAL LAND USE.
 - UTILIZE **ONE OR MORE POST-CONSTRUCTION MEASURES WORKING IN TANDEM OR A SERIES** TO TREAT STORMWATER RUN-OFF.

POST CONSTRUCTION STORMWATER MANAGEMENT MEASURES

- RUNOFF MUST BE MANAGED TO MINIMIZE POLLUTANTS THAT ARE ASSOCIATED WITH THE FINAL LAND USE.
- UTILIZE **ONE OR MORE POST-CONSTRUCTION MEASURES WORKING IN TANDEM** OR A SERIES TO TREAT STORMWATER RUN-OFF.

PROPER POST CONSTRUCTION MEASURE SELECTION

- DESIGN AND DEVELOPMENT STRATEGIES MAY BE SELECTED AND INCORPORATED INTO A PLAN. WHICH MAY INCLUDE:
 - LOW IMPACT DEVELOPMENT AND GREEN INFRASTRUCTURE
 - INFILTRATION MEASURES (CONSIDER WHAT TYPE OF POLLUTANTS ARE ASSOCIATED WITH THE USE AND RUNOFF.)

OPERATIONAL AND MAINTENANCE PLAN

- DEVELOP AND IMPLEMENT WRITTEN **OPERATIONAL AND MAINTENANCE PLAN** FOR ALL STORMWATER STRUCTURAL MEASURES (MS4 AND PRIVATE) TO ENSURE “LONG-TERM OPERATION AND MAINTENANCE OF THE MEASURES.

**4.6 (D) MS4 GENERAL PERMIT REQUIREMENTS

OPERATIONAL AND MAINTENANCE PLAN

- MUST BE ENFORCEABLE AND INCLUDE ONE OR MORE OF THE FOLLOWING:
 - WRITTEN CONDITIONS FOR RESIDENTIAL PROPERTIES OPERATED BY A HOMEOWNER'S ASSOCIATION OR OTHER ENTITY
 - ANY OTHER LEGAL AGREEMENT THAT ASSIGNS PERMANENT RESPONSIBILITY FOR MAINTENANCE OF STRUCTURAL STORMWATER MANAGEMENT MEASURES.

OPERATIONAL AND MAINTENANCE PLAN

- OWNER/OPERATOR SIGNED STATEMENT ACCEPTING RESPONSIBILITY FOR MAINTENANCE WHEN THE PROPERTY IS LEGALLY TRANSFERRED.
- WRITTEN CONDITIONS IN A SALES OR LEASE AGREEMENT REQUIRING RECIPIENT TO ASSUME RESPONSIBILITY FOR MAINTENANCE

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- STORM WATER QUALITY MAINTENANCE AGREEMENT
 - ASSIGNS THE MAINTENANCE RESPONSIBILITIES TO ENTITY, HOA, OR LAND OWNERS.
 - PROVIDED AT THE TIME THE SWPPP IS REVIEWED
 - AGREEMENT HAS TO INCLUDE MANUFACTURERS SPECS, MAINTENANCE REQUIREMENTS ETC.
 - AGREEMENT IS SIGNED, NOTARIZED, RECORDED AND CROSS REFERENCED WITH THE DEED/PLAT ETC.
 - SWPPP APPROVAL IS NOT ISSUED UNTIL THE AGREEMENT IS RECORDED.

INSPECTION PROGRAM

- ADMINISTER AN INSPECTION PROGRAM TO ENSURE ALL POST CONSTRUCTION MEASURES ARE MAINTAINED AND OPERATIONAL.
- DEVELOP WRITTEN PROCEDURES AND PROCESS TO INSPECTION POST CONSTRUCTION MEASURES TO ENSURE THEY ARE MAINTAINED AND OPERATIONAL.
 - DEVELOP FORMS, CHECKLIST FOR INSPECTIONS AND A METHOD TO NOTIFY RESPONSIBLE INDIVIDUALS OF COMPLIANCE.
 - INSPECT 100 PERCENT OF ALL MEASURES BY THE END OF THE PERMIT CYCLE.

INSPECTION PROGRAM

- INSPECTION MEASURES THAT WERE IMPLEMENTED AT THE TIME OF ADOPTION OF ORDINANCE
- INSPECTION ALL MEASURES FOR WHICH COMPLAINTS ARE RECEIVED. TAKE ACTION OR ENFORCEMENT MEASURES
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CITY OF EVANSVILLE INSPECTIONS

SPREAD SHEET OF ALL POST CONSTRUCTION MEASURES SINCE IMPLEMENTATION
OF ORDINANCE (2011)

SPREADSHEET FOR POST CONSTRUCTION MEASURES WAS CREATED AS THE
PLANS WERE REVIEWED AND APPROVED

CERTIFICATE OF OCCUPANCY NOT PROVIDED UNTIL THE MEASURES ARE
INSPECTED AT THE END OF CONSTRUCTION PHASE



INSPECTIONS

- SPREADSHEET INFORMATION:
 - PROJECT NAME,
 - LOCATION
 - TYPE OF MEASURE
 - OWNER/RESPONSIBLE PARTY
 - ADDRESS OF OWNER/RESPONSIBLE PARTY
 - DATE OF APPROVAL OF SWPPP

CITY OF EVANSVILLE INSPECTIONS

- DIVIDE THE LOCATIONS INTO GEOGRAPHIC AREAS.
- CREATE FORMS FOR EACH MEASURE
- CREATE A FORM LETTER TO NOTIFY OWNER OF DEFICIENCIES.
- CREATE A FILE FOR EACH LOCATION WITH ALL INSPECTION RECORDS ETC.
- FOLLOW UP WITH AN INSPECTION IF CORRECTIONS ARE NEEDED.



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Questions are the path to learning