



# A QUICK REVIEW OF MS4 PERMIT REQUIREMENTS

## What Do Districts Need To Do First



### Background

- Phase II “Final Rule” covers all small municipal separate storm sewer systems (MS4s) located within an “urbanized area”.
- MS4 is a conveyance or system of conveyances (catch basins, gutters, ditches, storm drainage systems, channels) designed or used for collecting storm water, which is not a combined sewer, and which is not part of a publicly owned Treatment Works.
- An urbanized area (UA) is a land area comprising one or more places, central places, and the adjacent densely settled surrounding area, urban fringe, that together have a residential population density of at least 1,000 people per square mile.
- Any and all operators of small MS4s located within the boundaries of the UA are covered under the Phase II “FinalRule”, regardless of political boundaries. Operator of small MS4s located outside of the UA are subject to potential designation into Phase II MS4 program by the NPDES permitting authority.



- Federal regulations allow two permitting options for storm water discharges; individual permits and general permits.
- State Water Resources Control Board (SWRCB) elected to adopt a statewide general permit for small MS4s in order to efficiently regulate numerous storm water discharges under a single permit. The “General Permit” was adopted on April 30, 2003.
- Schools and Community Colleges must comply.
- School Districts have been defined as “non-traditional” small MS4s.
- No fees are anticipated at this time.



## General Permit Requirements

- GP effectively prohibits the discharge of material other than storm water that are not “authorized non- storm water discharges”, or authorized by a separate NPDES permit.
- Intent of a program is to:
  - Reduce the discharge of pollutants to the “Maximum Extent Practicable (MEP)”
  - Protect water quality, and
  - Satisfy the appropriate water quality requirements of the Clean Water Act.
- In order to satisfy this intent, each MS4 must develop, implement and enforce a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants from their MS4 to the “MEP” to protect water quality requirements of the “Clean Water Act”.



- MEP is general a result of emphasizing pollution prevention and source control Best Management Practices (BMPs) as the first lines of defense in combination with structure treatment methods, where appropriate, serving as additional lines of defense.



## Storm Water Management Program

- The SWMP must include the following six minimum control measures:
  - Public education and outreach
  - Public participation and involvement
  - Illicit discharge detection and elimination
  - Construction site run-off control
  - Post construction run-off control
  - Pollution prevention/good housekeeping
- Districts must choose appropriate “Best Management Practices” (BMPs), measurable goals and time lines for each one of the control measures.
- Devise a program with a variety of short and long term goals.



- Measurable goals are objective markers or milestones that will be used to track the performance and effectiveness of the selected BMPs in reducing pollutants to the MEP.
- Measurable goals should contain the following elements:
  - Description of actions you will take to implement each BMP.
  - What do you anticipate to be achieved by each goal.
  - The frequency and dates for such actions to be taken.
- Establish a baseline against which future progress at reducing pollutants to the MEP can be measured.



- Consider developing measurable goals based on:
  - Tracking implementation over time.
  - Measuring progress in implementing the BMP
  - Tracking total numbers of BMPs implemented (i.e., the number of people changing their behavior due to receipt of educational material)
  - Tracking program/BMPs effectiveness (i.e., evaluating a public education campaign's effectiveness at reaching and informing the target audience to determine whether it reduces pollutants to the MEP)



### Some other considerations:

- Consider your objective for each minimum goal. It should be based on what is known about existing pollutant sources and what is required by the minimum measure. The objective can be something you can quantify or it can be a goal or purpose statement.
- Review the possible programs that are currently in place for each minimum measure. Consider coordinating with other agencies, non-profit groups, etc. to identify existing initiatives that can be used as part of the SWMP.
- Select BMPs that complement each other and work toward meeting each minimum measure.
- For each BMP develop expeditious milestones for implementation. Include a timeframe and a quantity to measure.



- When will you start implementing the BMP
- What institutional funding and legal issues, if any, do you need to solve before implementation can occur.
- How will you keep track of the program's implementation. Recommend developing a matrix, spreadsheet (use a database format with the capability to produce robust reports)



Please remember that:

- The SWMP needs to be a flexible program which allows for evolving and refining program goals throughout the five year permit term and its subsequent permit cycles. For example, if you are a District with a number of your schools having a topography which creates erosion problems, you may want to focus more on the construction and post-construction measures. Conversely, if most of your schools are built on relatively flat parcels of land, perhaps you want to focus on a robust illicit discharge detection/elimination and good house keeping measures.



Regional Water Quality Control Board (RWQCB) does not anticipate that the SWMP be fully implemented upon the submittal of the Notice of Intent (NOI), however, it is expected that the program contain sufficient information so that the Board's staff and other interested parties understand the BMPs that will be implemented over a five (5) year period.



## Where In The Process Are We Now, What Do We Have To Do

- Districts are waiting for a notification by RWQCB that they are designated as a regulated small MS4.
- Once notified, the school district will have 180 days to submit a Notice of Intent (NOI) and their Storm Water Management Program (SWMP)



## Notice of Intent

- It is a two page document and per EPA it shall serve as the “Permit Application”
- Information about the “Agency”
- Permit Area
- Boundaries of coverage (include a site map)
- Billing Information
- K-12 School District exempt for fee purposes
- Discharge information
  - Applying for individual general permit coverage
  - Applying with one or more co-permittee
  - Separate Implementing Entity (SIE)
- SWMP
- Certification



## Let's Get Started

- Study and analyze your choice for the type of application. Filing as an individual permittee, with one or more co-permittees, or with a Separate Implementing Entity (SIE). Consider political and economical realities, pros and cons of each type of application. Consider long-range plans and balance it with possible short term possible funding shortages.
- Designate a program manager.
- Inform your boards about the requirements, timelines, cost impact to related modernization and new construction projects, monitoring and administration.
- Start a dialogue with all stakeholders. Start researching the roles and responsibility for each stakeholder. Involve all parties at an early stage. What can the Facility, M & O, Employee Relations, Personnel departments do to contribute? Do not forget about the educational side of the house. Also, if you are a district geographically crossing multi-city boundaries, you need to include all entities.



- Start researching available forms and questionnaires to be utilized for gathering information as related to current practices (ie., housekeeping practices, participation in a recycling program).
- Complete a preliminary investigation regarding your existing site conditions, programs, practices and operations and their effects on the quality of storm water.
- Consider the effects of existing elements or programs, if any, that are beneficial to improving the quality of storm water. As an example, reduction of debris or trash through a routine sweeping program.
- Think about strategies of how you will control pollutants in the storm water runoff and possible methodologies to plan, implement, monitor and report on the status of a series of BMPs addressing all elements of a SWMP.



- Some strategies will be simple to develop, for example, limiting to the BEP the level of authorized non-storm water discharges and developing guidelines to prevent non-authorized non-storm water discharge.
- Think about resources that need to be committed, technical abilities, political realities and other essential elements. Make the key decision. Do you want to file an NOI as a separate entity or do you want to be a co-permittee with other school districts or perhaps rely on a separate entity (SIE) to implement one or more of the six Minimum Control Measures. Please remember that all arrangements are subject to the approval of the RWQCB Executive Officer.



- Regardless of how you choose to file your NOI, in the upcoming months, there are several tasks which we could get started with:
- Prepare site/storm water maps. Use existing grading/drainage plans as a base map. Update the plans through records and site visits. Clearly show outline of existing and planned impervious and pervious areas, conveyance instruments (gutters, channels, catch basins, underground drain pipes), direction of flow and points of discharge. Mark locations for storage of chemicals, cleaning supplies, if any. Mark location of trash dumpsters and other pertinent information. (i.e., location of a machine shops in a high school)



- Research and examine existing programs in effect in your district or another permitted entity. Can you utilize any of these programs or include all or parts of it in your program or extend it to yours.
- Evaluate available resources such as checklists and guidelines to be used in various processes such as dry weather inspections for detecting illicit discharge or observing house-keeping practices. Can you modify these forms to better fit your needs?



#### **“Post-Construction” Control Measure:**

- Areas subject to high growth or serving a population of at least 50,000 must comply with a number of provisions. The “Design Standards” is one of these provisions.
- For school districts, we need to use “design standards” for developing parking lots, given that the lot will have an area of 5,000 square feet or more with 25 or more parking spaces and potentially exposed to storm water run-off.
- Start the process of determining which alternatives would best suit your needs for designing parking lots. Options vary from non- structural methods (i.e., vegetation practices) to structural facilities (i.e., infiltration/ex-filtration), or a combination. Many factors are involved: desired look of a facility, location of water tables, frequency of needed preventative maintenance, cost of parts and other factors. One thing is clear, you do not want to drain the school yards and open areas through the parking lots.
- Develop appropriate designs standards for out door materials storage and trash storage areas.



**“Construction” Site Storm Water Run-Off Control Measure:**

- Permittee must develop, implement and enforce a program to reduce pollutants in any storm water run-off to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre.
- Review existing specifications for construction projects addressing “NPDES” and upgrade as necessary. You need to address all necessary controls such as, erosion and sediment.
- Review practices and non-structural measures such as site management and house keeping plans which control non-sediment related pollutants. Designate area for equipment repair, solid waste plan, equipment wash down areas.
- Review available samples of checklists for monitoring programs. Decide on who do you want to conduct your monitoring and enforcement program. Who will administer the document control?
- Make sure you include the topic of construction site storm water discharges in your pre-construction meetings.



- Start working on the language for an enforceable ordinance (or other appropriate regulatory mechanism) related to enforcement including sanctions to ensure compliance with necessary erosion and sediment control measures.
- Think about which mechanisms you would like to put in place for the purpose of receipt and consideration of public input.
- Develop Standard drafting guidelines for plan review.



## What Is Next

- CASH will continue to work on this topic and develop guidelines and samples for districts' use during the next three to four months.