

# **Industrial General NPDES Permit**



## **Monitoring Strategy Development**

**By**

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# Three Areas of Recommendation

- Monitoring and Reporting Requirements
- Revisions to the Permit Targets  
(benchmarks and action levels)
- Revisions to Response Requirements

# Monitoring & Reporting

## Four Categories of Revisions

- Sample Collection and Reporting Frequency
- Qualifying Monitoring Conditions
- Parameters Measured
- Auxiliary Monitoring Program

# Sampling & Reporting Frequency

## Recommendations:

- Monitor through the winter rather than quarterly; eliminate dry season
- Require minimum of 4 samples
- Reduce written reports to twice annually, rather than quarterly;
  - | Data Assessment Report (Spring)
  - | Implementation Report (Fall)

# Sampling & Reporting Frequency

## Benefits:

- Promotes better site evaluation and reduces reporting requirements
- Clearly distinguish between periods of monitoring and corrective actions
- Separates “improved” stormwater data to aid evaluation of BMPs

# Qualifying Storm Events



## Recommendations:

- Retain 24 hour dry period requirement
- Remove storm event size target
- Extend collection period to within first 6 hours of discharge

## Benefits:

- More flexibility should result in more complete data sets

# Parameters Measured



## Recommendations:

- Eliminate oil & grease and pH from standard requirements
- Include total lead and total copper for each rain event

## Benefits:

- No change in cost but emphasis on more critical parameters
- Simplifies monitoring/reporting; same parameters each time

# Auxiliary Monitoring Program



## Recommendation

- Establish an auxiliary monitoring program to address specific technical questions and to serve as an audit/training program for permittees

## Benefit

- Meets concerns of self-monitoring
- Technical issues can be addressed through specific, well-designed monitoring efforts
- Basis for periodic report/feedback to permittees

# Possible Auxiliary Program Tasks

- Direct evaluation of compliance with WQS
- Develop discharge appropriate translator values
- Assess special conditions; low flow & seasonal first flush
- Audit and feedback on monitoring
- BMP Effectiveness Evaluation
- Re-evaluate benchmark/adaptive management actions and triggers

# Advantages of Strategy

- Limits and better focuses reporting
  - ▣ Practical site assessment schedule
  - ▣ Promote better data evaluation
- Auxiliary program meets concerns of self-monitoring and also can address critical issues
- Should get more data; easier to collect samples and required minimum
- Enhances tracking of BMPs and formal acknowledgement of actions put in place

# Revisions to Permit Targets

## Recommendation:

Use 50<sup>th</sup> and 75<sup>th</sup> percentile as permit targets

## Benefits:

- Establishes targets that are all derived from the same source/method
- Technology-based/adaptive approach
- Use of both a benchmark and action level acknowledges high variability in the data
- Easy to explain and rationalize

# Revisions to Permit Targets



## Issues

- Significant reduction in all targets, except zinc which increases slightly
- Still does not guarantee compliance with WQS
- No precedence
- Organizational difficulties in implementing new permit features

# Response Requirement Goals



- Promote site evaluation; Avoid unproductive “do loops”
- Provide incentive to improve
- Promote traceable history of actions/results and feedback loops

# Existing Response Strategy

## LEVEL 1

Any sample above the BM;

- Identify potential contaminant sources
- Investigate source and operational control options
- Evaluated needed improvements and needed changes to SWPP
- Summarize results and modify SWPP (No report to Ecology)

## LEVEL 2

If two of previous 4 quarterly samples lies ABOVE AL;

- Identify potential contaminant sources; source tracking
- Investigate all available control options
- Implement control options
- Prepare report for Ecology outlining actions taken and planned

## LEVEL 3

If any 4 quarterly samples exceed AL;

- Requirements are essentially the same as Level 2 but intent (according to the FACT sheet) is that stormwater treatment be installed rather than just source controls.

# Recommended Approach~ Determining Level of Response

	Median between BM & AL	Median Above AL
Year 1	Level 1	Level 1
Any 2 consecutive years	Level 1	Level 2
Any 3 consecutive years	Level 2	Level 2
Any 4 consecutive years	Level 2	Level 3
When no improvements can be identified	Level 3	

# Recommended Approach~ Response Requirements

## LEVEL 1

If median lies above BM;

- Identify sources and source and operational control options
- Evaluate need for additional monitoring sites
- Implement control option(s) with high likelihood of reducing contaminant levels. Describe those implemented
- Summarize findings, decisions, actions in bi-annual report

# Recommended Approach~ Response Requirements

## LEVEL 2

- Develop a detailed plan for source tracking
- Implement source tracking program
- Develop a source control plan based on source-tracking results. The plan must include a prioritized list (that includes structural controls) and an implementation schedule.
- Implement corrective actions

# Recommended Approach- Response Requirements

## Level 3

- Perform thorough evaluation of site discharge and receiving water impacts, including; flow estimates and dissolved metal analysis
- Prepare detailed water quality assessment report
- Depending upon results, an individual permit may be required

# Advantages of Response Recommendations

## Benefits:

- Emphasis is on BM rather than AL
- Clear distinction between response levels
- Provides ample time and incentives yet sets a timeline for required action
- Facilities that demonstrate continued improvement can continue at Level 2
- Consequences for not attaining values below the AL are clear and costly

# Progress!!



- How is it adaptive?
  - ◆ Reflects new data
  - ◆ Provides method for periodic re-evaluation
  - ◆ Improves identification of actions/results
  - ◆ Build on feedback mechanism
- How is it more streamlined?
  - ◆ Less reporting
  - ◆ Fewer parameters
  - ◆ More efficient data entry
  - ◆ Simpler to understand and defend
- How does it better protect water quality?
  - ◆ Imposes continued improvements in discharge quality
  - ◆ Clearly defines timing expectations and consequences

# Discussion

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