**The Surface Skimmer and Other BMPs**

**Used to Improve the Quality of Storm Water**

**Discharged from Sediment Ponds and Basins**

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1. Introduction

EPD requirements

2. Background

Particle movement and settling in ponds and basins

The problem: discharge from perforated riser pipes

The current alternative: the surface skimmer

3. Characteristics of the surface skimmer

Variations from the original design

How does the surface skimmer function?

Testing and evaluation of the surface skimmer

4. Installation

Layout configuration

Flow control

Ease of management

5. Maintenance

Accessibility

Clogged pipes

6. Removal of a surface skimmer

7. Additional BMPs to improve discharged water quality

Pond inlet – to minimize flow energy

Baffles – to extend the detention time

Shoreline protection – to minimize shoreline erosion

Polymers – to accelerate particle settling

8. Summary

* Surface skimmers are very effective if installed correctly and augmented with other BMPs
* Depending on the make and model, skimmers have differing discharge characteristics
* Installation will determine the ease of maintenance.
* Control of the discharge can be absolute, by installing a shut-off valve.
* Skimmers, by themselves are an improvement over perforated vertical riser pipes.
* The discharge quality of water from a pond can be improved by installing ancillary BMPs.