



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Governor

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BOB MARTIN
Acting Commissioner

February 8, 2010

Graham Bryant
Hydroworks, LLC
50 S. 21ST St., 2nd floor,
Kenilworth, NJ 07033

Re: Conditional Interim Certification for the Hydroguard by Hydroworks, LLC

Expiration Date: May 15, 2011
TSS Removal Rate: 50%

Dear Mr. Bryant:

The Stormwater Management Rules under N.J.A.C. 7:8-5.5(b) and 5.7(c) allow the use of manufactured treatment devices (MTDs) for compliance with the design and performance standards at N.J.A.C. 7:8-5 if the pollutant removal rates have been verified by the New Jersey Corporation for Advanced Technology (NJCAT) and have been certified by the New Jersey Department of Environmental Protection (NJDEP).

The certification process has been revised. The revised process places MTDs into five categories. The Hydroguard by Hydroworks, LLC has been qualified for Category IV, MTDs within the Testing Portion of the NJCAT Verification Process as of May 15, 2009.

The Hydroguard, shown in figure 1, is a hydrodynamic treatment system comprised of a manhole that establishes multiple flow paths to remove sediments from runoff.

The NJDEP received the submitted data demonstrating the above approved TSS Removal Rate, a maintenance plan required under Category IV, and a signed statement by the NJCAT Executive Director and the manufacturer indicating that the December 2003 Total Suspended Solids Lab Testing Procedure and the June 28, 2006 Particle Size Distribution Requirements have been met. This certification is based solely on the documentation submitted by Hydroworks and the verification of such documentation by NJCAT.

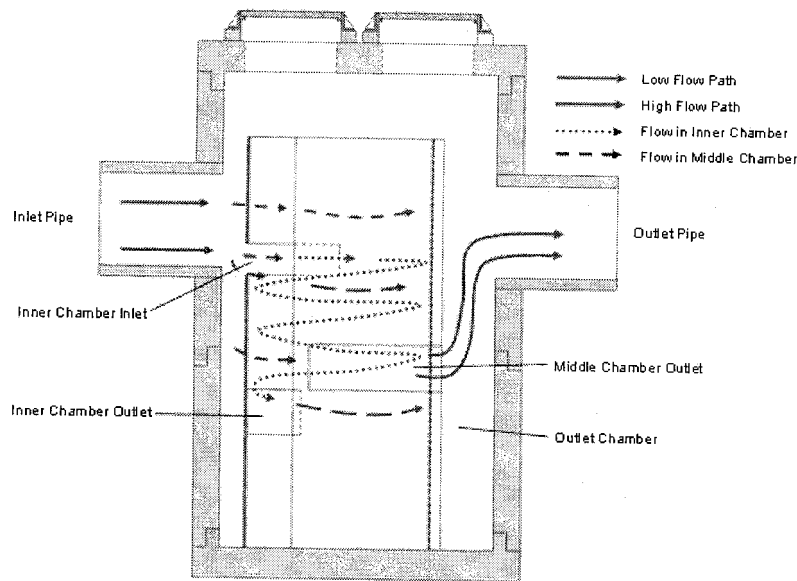


Figure 1 Hydroworks HG Operation – Profile View

The NJDEP certifies the use of the Hydroguard by Hydroworks, LLC at a TSS removal rate of 50%, subject to the following conditions:

1. The Hydroguard is designed according to the NJ Water Quality Design Storm in N.J.A.C. 7:8-5.5.
2. The various models and associated water quality flow capacities shall be sized for the peak flow of the New Jersey water quality design storm per N.J.A.C. 7:8-5, as shown in Table 1.

Table 1 Hydroworks HG Separator Dimensions* and Flow Rates

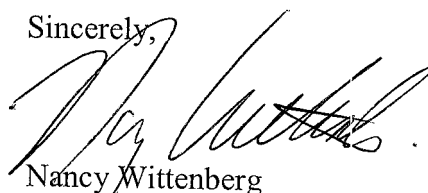
Model	Structure Inside Diam. (ft)	Inner Chamber Diam. (in)	Structure Depth (ft)*	Sediment Volume (ft ³) ⁺	Oil/Floating Trash Volume (ft ³) [gal]	Permanent Pool Wet Volume (gal)	Treatment Flow Rate (cfs) [gal]
HG 4	4	31.5	5	38	10 [76]	470	0.80 [359]
HG 5	5	40	5.5	64	16 [123]	808	1.25 [561]
HG 6	6	48	6	92	27 [203]	1269	1.80 [808]
HG 7	7	56	6.3	125	42 [313]	1823	2.45 [1100]
HG 8	8	63	6.7	163	61 [457]	2507	3.20 [1437]
HG 9	9	68.5	7.1	207	101 [754]	3371	4.05 [1818]
HG 10	10	78	7.6	268	119 [893]	4455	5.00 [2245]
HG 12	12	96	8.5	386	186 [1389]	7191	7.20 [3232]

3. The Hydroguard is certified as an off-line system only. Any flow above the New Jersey water quality design storm must be bypassed around the system.
4. A hydrodynamic separator, such as Hydroguard, cannot be used in series with another settling device to achieve an enhanced removal rate for total suspended solids (TSS) removal under N.J.A.C. 7:8-5.5.
5. The maintenance plan for sites using this device shall incorporate, at a minimum, the maintenance requirements for the Hydroguard shown in the attachment entitled "Hydroworks Hydroguard Maintenance Manual, Version 1.3"

In addition to the attached, the detailed maintenance plan must include all of the items identified in Chapter 8: Maintenance of the New Jersey Stormwater Best Management Manual. Such items include, but are not limited to, the list of inspection and maintenance equipment and tools, specific corrective and preventative maintenance tasks, indication of problems in the system, and training of maintenance personnel. Additional operation and maintenance information associated with this manufactured treatment device is available from the vendor to assist in the development of a complete maintenance plan.

Additional information regarding the implementation of the Stormwater Management rules N.J.A.C. 7:8 are available at www.njstormwater.org. Please contact Ms. Rhea Wienberg Brekke of NJCAT at 609 499 3600 ext. 227 if you have any questions.

Sincerely,



Nancy Wittenberg
Assistant Commissioner

Enclosure

c: Tom Micai, NJDEP
Mary Beth Brenner, NJDEP
Rhea Weinberg Brekke, NJCAT