**Hans de Bruijn** Fresh Creek Technologies, Inc. Sr. Environmental Manager <u>hdebruijn@freshcreek.com</u> Cell: 717-826-4371 <u>www.freshcreek.com</u> Phone: 800-741-9486 1384 Pompton Ave. #2 Cedar Grove, NJ 07009

## From the Preamble:

The Department is committed to considering the public's comments in a rulemaking process that is open and observes the privacy rights of commenters. A person desiring to comment on the proposed rulemaking or the Stormwater Management Guidebook must file comments, in writing, not later than ninety (90) days after the date of publication of this notice in the *D.C. Register*.

For the proposed rules, comments should identify the commenter and be clearly marked "Stormwater Rule" and either: (1) mailed or hand-delivered to Attn: Brian Van Wye, Natural Resources
Administration, 1200 First Street, N.E., 5th Floor, Washington, D.C. 20002, Attention: Stormwater Rules; (2) e-mailed to <u>SWRule@dc.gov</u>, with the subject indicated as "Stormwater Rule Comments"; or (3) comments may also be delivered in person orally or in writing at the public hearings, which will be announced in a separate *D.C. Register* notice.

**For the proposed Stormwater Management Guidebook,** copies may be obtained electronically from the Department website at <a href="http://ddoe.dc.gov/proposedstormwaterrule">http://ddoe.dc.gov/proposedstormwaterrule</a>. Due to the length of the document, DDOE will not be providing hard copies. A copy may be reviewed at DDOE's office by arrangement by contacting <a href="https://www.swift.com">SWGuidebook@dc.gov</a> with subject line "Arrange to review Guidebook" or by calling 202-727-5160. Written comments on the SWMG should be clearly marked "Stormwater Guidebook" and emailed to <a href="https://www.swift.com">SWGuidebook@dc.gov</a> or mailed to the following address, which can also be used for hand delivery: DDOE, Attn: Rebecca Stack, Natural Resources Administration, 1200 First St. NE, 5<sup>th</sup> Floor, Washington, D.C. 20002.

## Public Comment from Hans de Bruijn, 933 Mondale Road, Lancaster, PA 17601, Phone 717 392 1480 e-Mail; hdebruijn@comcast.net

Dear Mr. Van Wye and Mrs. Rebecca Stack;

Restoring the natural water cycle by means of evapotranspiration and infiltration means the swept up solids from urban surfaces is not washing down with the run off either. The proposed rules and guidance document do not clearly recognize this severe accumulation of solids. (i.e. sediment, trash, heavy metals, nutrients, leaf-litter and traffic dust etc.) Clear methods with scientifically proven success, to intercept these pollutants as called for in the NPDES Permit 000221 are not listed. When the buyer/permit holder must meet simple "pass or fail" criteria as specified below the cost to meet the requirement becomes an incentive to seek more efficiency methods in retaining water where it falls, e.g. Green Roofs, pervious pavements, street sweeping, rain-gardens, gray water systems etc. This means creating jobs to providing these up-stream facilities and maintaining them for long term operational efficiency, or facing the violation fine.

I suggest that the storm-water discharge limits are quantified by matching them with obtainable values. For example we do not know exactly what will be in the run off, but trash, oil, organics and sediment etc. can be easily separated by size and gravity followed by filtration.

- 1. Size separation: Require all run-offs to pass through openings no larger than nominal 0.25 inches. This is done by placing nets, bar screens or metal screens or other substantially equal method in the flow at locations that are near the end of the outfall pipes; preferably below grade in a vault to allow maintenance crews to collect the separated matter and to keep vandals from damaging the systems. The screen size dictates what will be captured, regardless its density. Therefore the rule should stipulate: All run off shall pass through a ¼" openings prior to discharge from the conveying conduit. The collected material shall be removed by maintenance crews when the collected material blinds the openings and causes more than five inches of pressure loss across the collection device.
- 2. Gravity separation: Require all water quality run-offs to be exposed to gravity separation. This stratifies the water between two layers of pollutants. Sediment on the bottom and floating matter on the top. This is done by many ingenious methods, many of which have been developed for the potable water industry and sanitary industry. Therefore the rule should stipulate: All run-off shall pass through a gravity separation facility, where the Q/A<sup>1</sup>, or Surface Overflow Rate (SOR) does not exceed 10 gpm/ft<sup>2</sup> during the water quality flow event. Exceeding events shall direct the flow to discharge un-treated without loss of previously collected matter. Separated accumulated matter shall be collected by maintenance services to maintain water quality flow intensity without loss of the separated matter.
- 3. Filtration: Require all water quality run-offs allowed under post construction permits be exposed to filtration. Therefore the rule should stipulate: The water quality flow shall be filtered prior to discharge from the permitted site. The filtering period may be extended to 24 hours from the beginning of the rain event and the water quality volume may be detained or retained for groundwater recharge or evapotranspiration.

## Comment regarding Hickey Run system:

I have been an integral part in the Hickey Sediment removal system and Trash interceptor. This system has the capability substantially do what is listed in item 1 and 2 above if the stop logs in the by-pass weir are properly installed and when the screens and sediment capture system are maintained. Since October 18, 2011 maintenance has not been consistent for reasons that are beyond my understanding.

<sup>&</sup>lt;sup>1</sup> Q is the flow in gallons/minute; A is the settling area projected on a horizontal surface of the cell(s) operating in parallel where  $Q_{in}$  is equal to  $Q_{out}$ .

Appendix A

Appendix A																	
	-7-	- 100	128	- 5.04*	co	BBLES	AS (U.S.	M	Intern of equiva	Sphe Gue	Tag Is	S-22 G-22 G-22 G-22 G-22 G-22 G-22 G-22	응룩	(Nevin,	(modifie Hjuistror		
	-6-	-50	64.0 53.9 45.3	- 2.52*		very	-2 1/2" - 2.12"	2.						- 200	in flow of 1m depth	-	
	-5-	-30 -	33.1 32.0 26.9 22.6	- 1.25"		coarse	-1 1/2" -1 1/4" -1.06"	1.05*				1. J.	- 50	1.00		-	
	-4-	-20 -	17.0 16.0 13.4 11.3	- 0.63*	ILES	medium	- 3/4" - 5/8" - 1/2" - 7/18"	742* 525*				- 100 - 90 - 80	- 40	- 100		-	
	-3-	10	9.52 8.00 6.73	- 0.32"	PEBE	fine	- 3/8" - 5/16" 265"	371° 3				- 70 - 60	- 30	- 80		-	
	-2-	-4 -	4.76 4.00 3.35	- 0.16*		very	4	4 5 6				- 50 - 40	- 20	- 60	- 100	-	
	-1-	2 -	2.88 2.38 2.00 1.63	- 0.08" Inches		(granules)	- 7 - 8 - 10 - 12	- 7 - 8 - 9 - 10				- 30		- 50		- 1	
	0-	1 -	1.41 1.19 1.00 .840	- 1		coarse	- 14 - 16 - 18 - 20	- 12 - 14 - 16 - 20	- 1.2	72	6	- 20	- 10 - 9	- 40	- 50 - 40	-	
	1-	5 -	.707 .545 .500 .420	- 1/2	9	coarse	- 25 - 30 - 35 - 40	- 24 - 28 - 32 - 35	86 59	- 2.0 - 5.6	- 1.5 - 4.5		- 7 - 6 - 5	- 30	- 30	-	
	2-	3	.354 .297 .250 .210	- 1/4	SAD	medium	45 50 60 70	- 42 - 48 - 60 - 65	42 30	- 15 - 43	- 13 - 35	- 4	4	Full scale testing at			
	3 -		.177	- 1/8		fine	- 80 - 100 - 120	- 80 - 100 - 115	215 155	- 120 - 35 <del>8</del>	- 91 - 240	- 1	- 2	show	n all 2	2.65 specific	
	4-	-	.058	- 1/16		fine	- 170 - 200 - 230	170 209 250	115 080	- 1000 - 2900	- 580 - 1700	0.5	- 0.5	gravit	ty sed	liment over	
	5-	05 04 03 -	.053 .044 .037 .031	- 1/32		coarse	- 325 - 400	- 325			- · · .	0,1		gpm/	ft <sup>2</sup> .	s settles at 10	
	6-	02	.016	- 1/64	5	medium	ale	by as scale	t to		8	- 0.023	(nlut	The v	alue i	is verv close	
_	7-	01	.008	- 1/128	ŝ	fine	penings mm sc	s differ ohi mm	bangula tz sand		tz sand	-0.01	R = 6	to 0.3	829 cr	m/sec which	
-: 0	8-	005	.004	- 1/256		very fine	aleve o om phi	from p	to sut		to sult d quar	- 0.0014	es Law	is equ	ual to	12.3 gpm/ft <sup>2</sup>	Ļ
diameters,	0	003		4000	AV	Clay/Silt boundary for mineral analysis	Some :	Sieve c as 2%	Applies		Applies	-0.001	Stok	The rel action	the ve	s, millime	eter es.
Chart also	9-	002 -	] .002	- 1/512	CL		dote:	dote:	lote: aut		dote:	0.00036		of tr	that	milligram	٦,
settling ve	10-	L.001-	.001	L <sub>1/1024</sub>	100	1	~	2-	~		-	-0.0001		2 1	,	L	

http://wooasnoie.er.usgs.gov/pubs/orzuu5-1048/ntmiaocs/rigures.ntm