

US EPA ARCHIVE DOCUMENT

**Table 1.** Rhode Island MS4/Wetlands Compliance, Baseline ( $n_1=100$ ) and Postcertification ( $n_2=51$ ) Compliance Performance Comparisons

EBPI No.	EBPI Description	Baseline		Postintervention		Statistical Comparison	
		Sample Size $n_1$	Proportion $p_1$	Sample Size $n_2$	Proportion $p_2$	% Change <sup>a</sup>	$P^b$
A1	Did you notify DEM prior to the commencement of site alterations?	46	0.34	13	0.71	37	0.029 <sup>c</sup>
A3	Did you record your permit/letter of authorization in the land evidence records of the City or Town of your project within 10 days of receipt of the permit?	45	0.76	11	0.80	5	0.794
A4	Did you erect or post a sign with the permit number resistant to the weather and at least 12 x 18 inches, which boldly identifies the initials DEM?	45	0.51	13	0.71	20	0.201
A5	Have you properly identified and marked the limits of disturbance (LOD) detailed on the approved site plans?	45	0.55	14	0.84	29	0.039 <sup>c</sup>
B1	Do you have a copy of the Storm Water Pollution Prevention plan (SWPP) on site at all times?	82	0.34	46	0.76	42	5E-06*
B2	At least once every 7 days and with 24 hours after significant rain events, do you inspect all stormwater control measures, etc.?	82	0.30	43	0.64	34	2E-04*
C1	Have you installed erosion controls to cover all potential erosion hazards on site?	95	0.54	49	0.77	24	.004 <sup>c</sup>
C2	Have you installed sediment controls in all disturbed side slopes and downslopes that may direct runoff to adjacent properties or water bodies?	85	0.62	42	0.87	25	.002*
C3	Have you made provisions for wind erosion and dust control?	63	0.73	38	0.86	13	0.081
C4	Have you made sure that nearby stormdrains are protected to prevent any sediment/pollutants from entering the drains?	75	0.52	34	0.76	25	0.013 <sup>c</sup>
C5	Have material stockpiles been stabilized or isolated?	73	0.69	41	0.78	9	0.192
C6	Are you properly maintaining BMPs such as filter fabric, hay bales and silt fencing?	94	0.40	47	0.65	25	.004*
C8	Do you remove any visible sediment or debris at drains and discharge locations?	60	0.41	29	0.85	44	5E-05*
D1	Does the site have graveled access entrance and exit drives as well as parking areas to reduce tracking of sediment from vehicles?	83	0.54	39	0.72	18	0.048 <sup>c</sup>
D2	Do you have containers in place for the storage and disposal of waste material?	60	0.80	38	0.93	13	0.088
D3	Are hazardous material spill kits in place and do you have enough materials as prescribed in the SWPP to adequately prevent spills?	46	0.52	39	0.65	13	0.187

D5	Do you perform good housekeeping, making sure that exposure of all debris and trash to precipitation is minimized by cleaning up daily?	93	0.81	45	0.82	1	0.670
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**NOTES:** <sup>a</sup> Calculated as  $100(p_2 - p_1)$

<sup>b</sup> *P* values calculated with the Fisher Exact test online, available at: <http://www.quantitativeskills.com/sisa/statistics/fisher.htm>;

*P* values only calculated for performance indicators showing improvement (1-tailed test).

<sup>c</sup>  $P \leq .05$

\* Statistically significant following application of the Simes-modified Bonferroni adjustment for multiple comparisons.

**Bonferroni Adjustment (Post Cert vs. Baseline)**

	1	5.00E-06	.05/17	0.003	*
	2	5.00E-05	.05/16	0.003	*
	3	2.00E-04	.05/15	0.003	*
	4	0.002	.05/14	0.004	*
	5	0.0039	.05/13	0.0038	P≤.05
	6	0.0035	.05/12	0.0042	*
	7	0.013	.05/11	0.005	P≤.05
	8	0.029	.05/10	0.005	P≤.05
	9	0.039	.05/9	0.006	P≤.05
	10	0.048	.05/8	0.006	P≤.05
	11	0.081	.05/7	0.007	
	12	0.088	.05/6		
	13	0.187	.05/5		
	14	0.192	.05/4		
	15	0.201	.05/3		
	16	0.670	.05/2		
<b>k =</b>	17	0.794	0.05		

