

Review of Baseline Data against Pre-established Action Level for Same-Day Control

Existing Updated EM&A Manual specifies Action and Limit Level for same-day control as being 120% and 130% of control station respectively.

The tables below show the existing difference between upstream and downstream stations from baseline data.

The data shows a significant percentage of both Turbidity and SS results already exceeding the arbitrary 120% Action Level relative to control station, which implies that the specified 120% and 130% Action and Limit Levels have limited applicability for this site.

Turbidity (NTU) - Tung Chung Stream (West)

Date		Upstream (control)	Mid / Down stream (impact)	% Difference
09/08/21	WQM4 vs midstream (WQM2)	1.4	0.4	29%
11/08/21		1.3	1.5	115%
13/08/21		2	3.5	175%
16/08/21		1.5	0.8	53%
18/08/21		1.8	1.5	83%
20/08/21		2.3	1.7	74%
23/08/21		1.6	1.7	106%
25/08/21		2	1.6	80%
27/08/21		2.7	2.3	85%
30/08/21		3.1	3.9	126%
01/09/21		4.8	6.4	133%
03/09/21		3.4	3.4	100%
09/08/21	WQM4 vs downstream (WQM6)	1.4	0.9	64%
11/08/21		1.3	1.1	85%
13/08/21		2	1.9	95%
16/08/21		1.5	1.3	87%
18/08/21		1.8	1.5	83%
20/08/21		2.3	1.9	83%
23/08/21		1.6	1.7	106%
25/08/21		2	1.6	80%
27/08/21		2.7	3.2	119%
30/08/21		3.1	3.1	100%
01/09/21		4.8	29.9	623%
03/09/21		3.4	3.3	97%

**Total % baseline data exceeding 120% difference
between upstream and downstream 17%**

Turbidity (NTU) - Tung Chung Stream (East)

Date		Upstream (control)	Mid / Down stream (impact)	% Difference
09/08/21	WQM5A vs midstream (WQM3A)	1.2	1.7	142%
11/08/21		1.1	1.2	109%
13/08/21		2.5	2.1	84%
16/08/21		2	1.4	70%
18/08/21		2	1.6	80%
20/08/21		1.9	2.1	111%
23/08/21		1.8	2.8	156%
25/08/21		1.7	1.8	106%
27/08/21		2.6	2.9	112%
30/08/21		3.1	3.2	103%
01/09/21		10	13.1	131%
03/09/21		2.7	4.4	163%
09/08/21	WQM5A vs downstream (WQM7)	1.2	1	83%
11/08/21		1.1	1.6	145%
13/08/21		2.5	1.9	76%
16/08/21		2	1.7	85%
18/08/21		2	2	100%
20/08/21		1.9	1.8	95%
23/08/21		1.8	1.8	100%
25/08/21		1.7	1.4	82%
27/08/21		2.6	3.1	119%
30/08/21		3.1	2.8	90%
01/09/21		10	21.7	217%
03/09/21		2.7	3.1	115%

**Total % baseline data exceeding 120% difference
between upstream and downstream 25%**

SS (mg/L) - Tung Chung Stream (West)

Date		Upstream (control)	Mid / Down stream (impact)	% Difference
09/08/21	WQM4 vs midstream (WQM2)	0.5	1	200%
11/08/21		2.2	1.3	59%
13/08/21		0.7	1	143%
16/08/21		0.5	0.9	180%
18/08/21		0.5	1.3	260%
20/08/21		0.7	0.8	114%
23/08/21		0.6	1.2	200%
25/08/21		0.7	1.2	171%
27/08/21		0.9	1.8	200%
30/08/21		0.7	2.2	314%
01/09/21		1.3	4.2	323%
03/09/21		0.8	0.9	113%
09/08/21	WQM4 vs downstream (WQM6)	0.5	1	200%
11/08/21		2.2	1.2	55%
13/08/21		0.7	1.3	186%
16/08/21		0.5	1	200%
18/08/21		0.5	0.8	160%
20/08/21		0.7	0.8	114%
23/08/21		0.6	1.2	200%
25/08/21		0.7	1.2	171%
27/08/21		0.9	1.7	189%
30/08/21		0.7	0.9	129%
01/09/21		1.3	20.5	1577%
03/09/21		0.8	0.8	100%

**Total % baseline data exceeding 120% difference
between upstream and downstream 75%**

SS (mg/L) - Tung Chung Stream (East)

Date		Upstream (control)	Mid / Down stream (impact)	% Difference
09/08/21	WQM5A vs midstream (WQM3A)	0.9	1.3	144%
11/08/21		0.8	6.8	850%
13/08/21		1.8	2.4	133%
16/08/21		0.7	1.7	243%
18/08/21		0.6	1.2	200%
20/08/21		0.8	1.7	213%
23/08/21		0.7	2.3	329%
25/08/21		0.7	1.7	243%
27/08/21		0.8	2.2	275%
30/08/21		0.7	1.4	200%
01/09/21		4.2	10.6	252%
03/09/21		0.7	0.9	129%
09/08/21	WQM5A vs downstream (WQM7)	0.9	2.2	244%
11/08/21		0.8	1.2	150%
13/08/21		1.8	2.2	122%
16/08/21		0.7	1	143%
18/08/21		0.6	0.7	117%
20/08/21		0.8	1.3	163%
23/08/21		0.7	1.2	171%
25/08/21		0.7	1.5	214%
27/08/21		0.8	1.1	138%
30/08/21		0.7	4.2	600%
01/09/21		4.2	8.8	210%
03/09/21		0.7	1.8	257%

**Total % baseline data exceeding 120% difference
between upstream and downstream 96%**

*Highlighted cells show values > 120%



