

Water Quality Based Permit Limit Procedure

Facility Name:	Cruise Ships
Permit Number:	0
Outfall Number:	1

Parameter Copper ug/L

Ocean QBELS	
Receiving Water Type	ocean
Coefficient of Variation (Daily Maximum)	1.45
Coefficient of Variation (Monthly Average)	1.45
Significant Figures	2
Acute Dilution Factor	28
Chronic Dilution Factor	28
Human Health Dilution Factor	28
Acute Water Quality Criterion	4.8
Chronic Water Quality Criterion	3.100
Human Health Water Quality Criterion	0.000
Number of Effluent Samples Per Month	2

Maximum Daily Limit (MDL) 87 ug/L

Average Monthly Limit (AML) 56 ug/L

Fresh Water QBELS	
Receiving Water Type	fresh
Coefficient of Variation (Daily Maximum)	1.45
Coefficient of Variation (Monthly Average)	1.45
Significant Figures	2
Acute Water Quality Criterion	4.8
Acute Dilution Factor	28
Acute Wasteload Allocation	0
Chronic Water Quality Criterion	#####
Chronic Dilution Factor	28
Chronic Wasteload Allocation	0
Human Health Water Quality Criterion	0.000
Human Health Dilution Factor	28
Human Health Wasteload Allocation	0
Number of Effluent Samples Per Month	2

Maximum Daily Limit (MDL) 130 ug/L

Average Monthly Limit (AML) 56 ug/L

Ocean			
Acute Wasteload Allocation	WLA _a	134.4	
Chronic Wasteload Allocation	WLA _c	86.8	
Human Health Wasteload Allocation	WLA _h	0	
Acute Long Term Average	LTA _a	19.924256	1 hour
Chronic Long Term Average	LTA _c	23.64331	4 day
Human Health Long Term Average	LTA _h	0	WLA _h =LTA _h =AML
Limiting Long Term Average	LTA _{LIM}	19.924256	

Fresh Water			
Acute Wasteload Allocation	WLA _a	134.4	
Chronic Wasteload Allocation	WLA _c	86.8	
Human Health Wasteload Allocation	WLA _h	0	
Acute Long Term Average	LTA _a	19.924256	1 hour
Chronic Long Term Average	LTA _c	23.64331	4 day
Human Health Long Term Average	LTA _h	0	WLA _h =LTA _h =
Limiting Long Term Average	LTA _{LIM}	19.924256	

Significant Figures For LTA/MDL/AML	134.000
	86.800
	#NUM!
	19.900
	23.600
	#NUM!

fresh ocean

1.45
1.45
1.45

Significant Figures For LTA/MDL/AML	134.000
	86.800
	#NUM!
	19.900
	23.600
	#NUM!

		19.900
	86.8	86.800
	56.09452	56.100
Logic for Ocean AML	56.09 57.86667	56.09452
Logic for Human Health	56.10 86.80	56.100 86.800
Logic for Limiting LTA		19.92426 23.64331 *

1.45

		19.900
	134.24	134.000
	56.03	56.000
Logic for Human Health	56.00 134.00	56.000 134.000
Logic for Limiting LTA		19.92426 23.64331 *