

Mixing Zone Monitoring

| | ANZECC Guideline Ecosystem Protection | ANZECC Guideline Recreational Protection |
|-------------|--|---|
| Temperature | NA | NA |
| Chlorine | NA | NA |
| Copper | 0.0013 | 1 |
| Lead | 0.0044 | 0.05 |
| Nickel | 0.07 | 0.1 |
| Zinc | 0.015 | 5 |

SIX MONTHLY BAY SURVEY TESTING RESULTS (WINTER 2009)

OUTFALL: W1

| PARAMETERS | UNITS | 0m | 100m | 200m | 300m | 400m | 500m | No.9 Bouy | SW1 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| SURFACE TEMPERATURE | deg. C | 18 | 14 | 12 | 12 | 12 | 12 | 12 | 12 |
| TOTAL RESIDUAL FREE CHLORINE | mg/L | 0.1 | 0.1 | <0.1 | 0.1 | 0.1 | <0.1 | 0.1 | <0.1 |
| COPPER | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| ZINC | mg/L | 0.008 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |

OUTFALL: W3

| PARAMETERS | UNITS | 0m | 25m | 50m | 75m | 100m |
|---------------------|--------|--------|--------|--------|--------|--------|
| SURFACE TEMPERATURE | deg. C | 12 | 12 | 12 | 12 | 12 |
| COPPER | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| ZINC | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |

OUTFALL: W5

| PARAMETERS | UNITS | 0m | 30m | 60m | 90m | 120m |
|---------------------|--------|--------|--------|--------|--------|--------|
| SURFACE TEMPERATURE | deg. C | 21 | 14 | 13 | 12 | 12 |
| COPPER | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| ZINC | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |

OUTFALL: W4

| PARAMETERS | UNITS | 0m | 20m | 40m | 60m | 80m |
|------------------------------|--------|--------|--------|--------|--------|--------|
| SURFACE TEMPERATURE | deg. C | 15 | 15 | 13 | 12 | 12 |
| TOTAL RESIDUAL FREE CHLORINE | mg/L | 0.1 | 0.1 | 0.1 | <0.1 | 0.1 |
| COPPER | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| ZINC | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |

Mixing Zone Monitoring

| | ANZECC Guideline Ecosystem Protection | ANZECC Guideline Recreational Protection |
|-------------|--|---|
| Temperature | NA | NA |
| Chlorine | NA | NA |
| Copper | 0.0013 | 1 |
| Lead | 0.0044 | 0.05 |
| Nickel | 0.07 | 0.1 |
| Zinc | 0.015 | 5 |

SIX MONTHLY BAY SURVEY TESTING RESULTS (SUMMER 2009)

OUTFALL: W1

| PARAMETERS | UNITS | 0m | 100m | 200m | 300m | 400m | 500m | No.9 Bouy | SWI |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| SURFACE TEMPERATURE | deg. C | 29 | 29 | 25 | 25 | 24 | 24 | 23 | 24 |
| TOTAL RESIDUAL FREE CHLORINE | mg/L | <0.1 | 0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| COPPER | mg/L | 0.003 | 0.003 | 0.002 | 0.002 | <0.002 | <0.002 | <0.002 | 0.003 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | 0.009 | 0.008 | 0.006 | <0.002 | <0.002 | 0.004 | 0.008 | 0.007 |
| ZINC | mg/L | 0.017 | 0.016 | 0.016 | 0.015 | 0.013 | 0.013 | 0.012 | 0.024 |

OUTFALL: W3

| PARAMETERS | UNITS | 0m | 25m | 50m | 75m | 100m |
|---------------------|--------|--------|--------|--------|-------|--------|
| SURFACE TEMPERATURE | deg. C | 25 | 25 | 25 | 25 | 25 |
| COPPER | mg/L | <0.002 | 0.001 | <0.002 | 0.003 | <0.002 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.02 | <0.002 |
| NICKEL | mg/L | <0.002 | 0.003 | 0.010 | 0.017 | 0.012 |
| ZINC | mg/L | 0.014 | 0.014 | 0.015 | 0.020 | 0.014 |

OUTFALL: W5

| PARAMETERS | UNITS | 0m | 30m | 60m | 90m | 120m |
|---------------------|--------|--------|--------|--------|--------|--------|
| SURFACE TEMPERATURE | deg. C | 29 | 28 | 27 | 27 | 25 |
| COPPER | mg/L | 0.003 | 0.003 | 0.002 | <0.002 | <0.002 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | 0.004 | 0.013 | 0.013 | 0.006 | 0.007 |
| ZINC | mg/L | 0.019 | 0.016 | 0.016 | 0.003 | 0.003 |

OUTFALL: W4

| PARAMETERS | UNITS | 0m | 20m | 40m | 60m | 80m |
|------------------------------|--------|--------|--------|--------|--------|--------|
| SURFACE TEMPERATURE | deg. C | 26 | 25 | 25 | 25 | 24 |
| TOTAL RESIDUAL FREE CHLORINE | mg/L | <0.1 | <0.1 | <0.1 | 0.1 | <0.1 |
| COPPER | mg/L | 0.004 | 0.005 | 0.004 | 0.002 | 0.002 |
| LEAD | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| NICKEL | mg/L | 0.026 | 0.026 | 0.027 | 0.03 | 0.015 |
| ZINC | mg/L | 0.015 | 0.044 | 0.016 | 0.014 | 0.013 |