

STATEMENT OF WATER QUALITY OBJECTIVES (MIRS BAY WATER CONTROL ZONE)
- CHAPTER 358U

LONG TITLE

Empowering section VerDate:30/06/1997

(Cap 358 Section 5)

[30 November 1990]

(L.N. 382 of 1990)

PARAGRAPH 1

VerDate:30/06/1997

The water quality objectives set out in column 1 of the Schedule are established for those parts of the Mirs Bay Water Control Zone set opposite those water quality objectives in column 2.
(Enacted 1990)

PARAGRAPH 2

VerDate:30/06/1997

In this statement-

"Fish Culture Subzone" means the area delineated as such on maps MBWCZ 1, MBWCZ 2 and MBWCZ 3;

"map MBWCZ 1", "map MBWCZ 2", "map MBWCZ 3", "map MBWCZ 4" and "map MBWCZ 5" mean a series of maps numbered as such and signed by the Secretary for Planning, Environment and Lands on 23 November 1990 and deposited in the Land Registry, Victoria; (8 of 1993 s. 30)

"marine waters" means all waters below the high water mark within the boundaries of the Mirs Bay Water Control Zone;

"Secondary Contact Recreation Subzone" means the area delineated as such on maps MBWCZ 1, MBWCZ 2, MBWCZ 3, MBWCZ 4 and MBWCZ 5;

"Water Gathering Ground Subzone" means the area delineated as such on maps MBWCZ 1 and MBWCZ 3.

(Enacted 1990)

SCHEDULE VerDate:30/06/1997

[paragraph 1]

Water Quality Objective

Part or Parts of
Zone

A. AESTHETIC APPEARANCE

(a) Waste discharges shall cause no objectionable odours or discolouration of the water.

Whole Zone

(b) Tarry residues, floating wood, articles made of glass, plastic, rubber or of any other substances should be absent.

Whole Zone

(c) Mineral oil should not be visible on the surface. Surfactants should not give rise to a lasting foam.	Whole Zone
(d) There should be no recognisable sewage-derived debris.	Whole Zone
(e) Floating, submerged and semi-submerged objects of a size likely to interfere with the free movement of vessels, or cause damage to vessels, should be absent.	Whole Zone
(f) Waste discharges shall not cause the water to contain substances which settle to form objectionable deposits.	Whole Zone

B. BACTERIA

(a) The level of Escherichia coli should not exceed 610 per 100mL, calculated as the geometric mean of all samples collected in one calendar year.	Secondary Contact Recreation Subzones and Fish Culture Subzones (L.N. 456 of 1991)
(b) The level of Escherichia coli should be zero per 100 ml, calculated as the running median of the most recent 5 consecutive samples taken at intervals of between 7 and 21 days.	Water Gathering Ground Subzones
(c) The level of Escherichia coli should not exceed 1000 per 100 ml, calculated as the running median of the most recent 5 consecutive samples taken at intervals of between 7 and 21 days.	Other inland waters of the Zone

C. COLOUR

(a) Waste discharges shall not cause the colour of water to exceed 30 Hazen units.	Water Gathering Ground Subzones
(b) Waste discharges shall not cause the colour of water to exceed 50 Hazen units.	Other inland waters of the Zone

D. DISSOLVED OXYGEN

(a) Waste discharges shall not cause the level of dissolved oxygen to fall below 4 milligrams per litre for 90% of the sampling occasions during the year; values should be calculated as water column average (arithmetic mean of at least 3 measurements at 1 metre below surface, mid-depth and 1 metre above seabed). In addition, the concentration of dissolved oxygen should not be less than 2 milligrams per litre within 2 metres of the seabed for 90% of the sampling occasions during the year.	Marine waters excepting Fish Culture Subzones
(b) The dissolved oxygen level should not be less than 5 milligrams per litre for 90% of the sampling occasions during the year; values should be calculated as water column average (arithmetic mean of at least 3	Fish Culture Subzones

measurements at 1 metre below surface, mid-depth and 1 metre above seabed). In addition, the concentration of dissolved oxygen should not be less than 2 milligrams per litre within 2 metres of the seabed for 90% of the sampling occasions during the year.

(c) Waste discharges shall not cause the level of dissolved oxygen to be less than 4 milligrams per litre.

Water Gathering
Ground Subzones
and Other
inland waters

E. pH

(a) The pH of the water should be within the range of 6.5-8.5 units. In addition, waste discharges shall not cause the natural pH range to be extended by more than 0.2 units.

Marine waters

(b) Waste discharges shall not cause the pH of the water to exceed the range of 6.5-8.5 units.

Water Gathering
Ground Subzones

(c) The pH of the water should be within the range of 6.0-9.0 units.

Other inland
waters of the Zone

F. TEMPERATURE

Waste discharges shall not cause the natural daily temperature range to change by more than 2.0 degree Celsius.

Whole Zone

G. SALINITY

Waste discharges shall not cause the natural ambient salinity level to change by more than 10%.

Whole Zone

H. SUSPENDED SOLIDS

(a) Waste discharges shall neither cause the natural ambient level to be raised by 30% nor give rise to accumulation of suspended solids which may adversely affect aquatic communities.

Marine waters

(b) Waste discharges shall not cause the annual median of suspended solids to exceed 20 milligrams per litre.

Water Gathering
Ground Subzones
and Other inland
waters of the Zone

I. AMMONIA

The un-ionized ammoniacal nitrogen level should not be more than 0.021 milligram per litre, calculated as the annual average (arithmetic mean).

Whole Zone

J. NUTRIENTS

(a) Nutrients shall not be present in quantities sufficient to cause excessive or nuisance growth of algae or other aquatic plants.

Marine waters

(b) Without limiting the generality of objective (a) above, the level of

inorganic nitrogen should not exceed 0.3 milligram per litre, expressed as annual water column average (arithmetic mean of at least 3 measurements at 1 metre below surface, mid-depth and 1 metre above seabed).

K. 5-DAY BIOCHEMICAL OXYGEN DEMAND

(a) Waste discharges shall not cause the 5-day biochemical oxygen demand to exceed 3 milligrams per litre. Water Gathering Ground Subzones

(b) Waste discharges shall not cause the 5-day biochemical oxygen demand to exceed 5 milligrams per litre. Other inland waters of the Zone

L. CHEMICAL OXYGEN DEMAND

(a) Waste discharges shall not cause the chemical oxygen demand to exceed 15 milligrams per litre. Water Gathering Ground Subzones

(b) Waste discharges shall not cause the chemical oxygen demand to exceed 30 milligrams per litre. Other inland waters of the Zone

M. TOXINS

(a) Waste discharges shall not cause the toxins in water to attain such levels as to produce significant toxic, carcinogenic, mutagenic or teratogenic effects in humans or fish or any other aquatic organisms, with due regard to biologically cumulative effects in food chains and to toxicant interactions with each other. Whole Zone

(b) Waste discharges shall not cause a risk to Whole Zone any beneficial uses of the aquatic environment. Whole Zone

(Enacted 1990)