



THE CHARTERED INSTITUTION OF
WATER AND ENVIRONMENTAL MANAGEMENT
HONG KONG

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WQO Review
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**Re: First Stage Public Engagement Document
for the Review of the Marine Water Quality Objectives**

The current Water Quality Objectives (WQO) was established in the 1980s and there is a need to review the WQO based on the existing conditions and expectations by the public. The Chartered Institution of Water and Environmental Management Hong Kong (CIWEM HK) appreciates and supports the government's review of the marine WQO's, and would like to express our views comments to this exercise.

General Comments

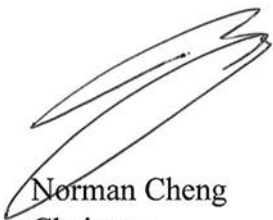
- The review should have a holistic view of the hydrodynamic conditions as well as the overall pollution loadings (natural and anthropogenic inclusive) of the Pearl River Delta region as a whole. Assessment on the pollution attributes from HKSAR vs HKSAR + its neighbours should be quantified spanning through a reasonably foreseeable planning horizon and subsequent studies should be carried out to determine the right measures and levels of action for various pollution management vehicles to be developed.
- Beneficial / intended planning use of various part of the marine water should be re-demarcated according to the specific hydrodynamic regime of the HKSAR waters.
- The review should not ignore the attributes of hydraulic and pollution contributions from inland waters (streams, nullah and major stormdrain discharges). That is, the WQOs for inland waters should also be considered in reviewing those for the marine waters.
- The review of marine WQOs should give consideration to practicability of various planning and management initiatives taking account of the global contribution of pollution loads from PRD and local developments, natural seasonable variations in water quality, carrying capacity of the ecosystem and relevant waste and wastewater treatment technology available.

- Where beneficial uses (existing and planned) are in proximity to one another, more conservative approach should be adopted with a view to protecting the more delicate ecosystems.
- Comprehensive review of the WQO would warrant institutional support to marine and aquatic ecology research and the establishment of updated ecology databank.
- The proposed risk assessment approach as for protecting only 80% of species / ecosystem integrity should be subjected to critical analysis and sound justifications. The relevant risk assessment criterion of individual parameters should also be clearly set out; and in any case risk criteria as to protecting against observable adverse effects should be applied as far as practicable.
- Planning and assessment guidelines should be developed to guide the project assessment practitioners in carrying out future impact assessments.

Specific Comments

- WQOs for toxicants and persistent chemicals, numeric criteria should be provided as far as practicable instead of being descriptive.
- Where mariculture uses are intended, water quality objectives should also be developed in the context of human health protection against risk (e.g. ingestion of seafoods), long term exposure to chronic toxicity, acute diseases, and bio-accumulation along the food chain. Attention should be given to primary prevention that is one of the most important aspects of public health.
- Currently there are different microbiological standards for waters supporting bathing and secondary contact recreational use. In fact, one could hardly eliminate the possibility of getting intimate contact with water (e.g. ingestion, skin contact) in using secondary contact water. Examples include wind surfing and Dragonboat racing, etc. It is suggested that the two sets of standard should be combined to avoid confusion to the general public.
- The study of “Results of 2003 Indicator Organisms Study” by Lauren Walker-Coleman, Florida Department of Environmental Protection, found that E.Coli appeared to be the most difficult of the indicators, E.Coli, Enterococci and fecal coliforms, to meet the standards. It is recommended that the current bacterial indicator should be maintained.

Yours sincerely,



Norman Cheng
Chairman
CIWEM HK 2009/2010