

Memo to CMA

The purpose of this memo is to advise the CMA of the changes the Council subcommittee has finally agreed to following consultation with industry and consideration of the issues on the proposed review of the Trade Waste Bylaw. These changes will now be put to the full council for adoption and the new bylaw is expected to become operative from 1 January 2007.

Issue	Current position in existing bylaw	Proposed in Consultation Document	Agreed outcome with Review Panel	See note
Peak to Off-peak volume ration	3:1	Change to 1.5:1 over 3 years	Change to 2:1 over 4 years	1
Change to correct suspended solids measure	Using old non-standard filter paper	Change to IANZ Accredited test for suspended solids	Change to IANZ Accredited test for suspended solids	2
BOD vs COD	BOD	Change to charging for COD	Remain with a BOD charge	3
Charging model	Based on 6 year rolling average for Volume BOD and Suspended solids	Three year rolling average for volume, one year for BOD and Suspended Solids	Five year rolling average for volume, BOD and Suspended Solids	4

1. Peak to Off-peak

The proposal to change to a lower ratio was to ensure fairness for ‘peak’ dischargers who would in effect have to pay 3 times the average volume charge as more and more dischargers moved to off-peak. The agreed outcome of a reduction in the ratio to **2:1 over 4 years** is a good balance of fairness and encouragement to industry to pursue further off peak discharge which is desirable for the plant operation. The reduction from 3:1 to commence from 1 July 2008 at the first step rate of 2.75:1.

2. Change to Suspended Solids Measurement

This change is to bring CCC into line with the industry standard. The correct test method (required under the Laboratories IANZ Accreditation) will collect approximately twice the amount of solids but the charge rate is halved so that on average industry will not pay any more for suspended solids discharged. A full year of data shows that the difference between the two test methods is a factor of two.

Individual industries waste will vary but on average the ratio is two to one. It is proposed to use the new test method as soon as the bylaw becomes operative.

3. BOD vs COD

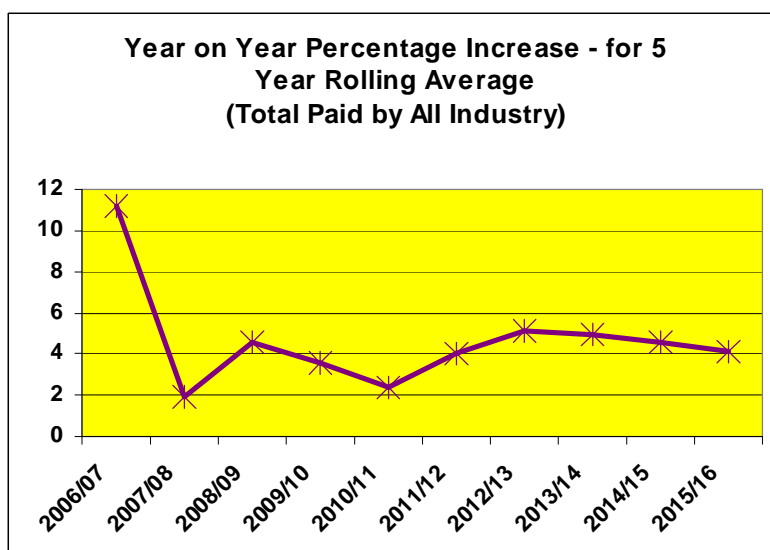
The sub-committee has agreed with the submitters that the Council continue to charge for the load component on the basis of BOD. While the industry standard is towards charging for COD as this test is more accurate and immediate (2 hours rather than 5 days) the Council can still measure an industry's COD to gauge the effect on the plant processes. It is likely that only major industry dischargers will be measured for COD (to gauge impact on plant performance) in addition to being measured for BOD for charging purposes. The BOD measured will continue to be on the basis of settled BOD, with the bylaw limit of 600 gm/m³ applied. The Council still retains the option of entering into a special agreement with any industry discharging to the sewer to meet any special circumstances.

4. Charging Model

The current charging calculation model uses a six year rolling average of costs, flows, and loads (two years budget and four years actual). This results in the charges "lagging" behind the true costs. The proposed change was aimed at addressing this lag effect by making the charges "more current". However this change does make year to year changes in the rates much more volatile (eg; due to asset revaluations and consequent effect on depreciation). The agreed position of changing to a **five** year rolling average (two years budget and three years actual for costs and five years actual for volume and loads) provides the smoothing effect on charge rate changes that industry need and brings industry slightly closer to paying the "up to date" costs.

Implementation of Charge Changes

Based on the expected volume, BOD and suspended solids discharged from industry in total, and using the agreed five year rolling average model the total all industry would pay would increase by 11% in the current year 2006/07 (if charged for the full year) and by a further 2% in the next year 2007/08.



The step increase of 11% is not likely to find favour with industry representatives.

An alternative option that smoothes the increase in rates (the increase in rates for volume, BOD and suspended solids for the current 2006/07 year), is pegging the 2006/07 rates to the as published rates in the consultation document, giving the following unit rate increases.

	Charge Rates (\$)		Percentage Increase
	Current Rates	As Published Rates for 2006/07	
Volume	0.2597	0.2783	7.2
BOD	0.1996	0.2033	1.9
Suspended Solids	0.3133	0.3253	3.8
**Suspended Solids (Modified)	0.1567	0.1627	3.8

The “as published rates” are all less than the five year rolling average rates required by the model for the current 2006/07 year.

**The suspended solids charge would be the modified suspended solids rate (half the old rate) to account for the change in suspended solids test method.

It is proposed to use the above “smoothed” option.

On the assumption the Bylaw becomes operative on 1 January 2007 these rates would apply from the first quarter of 2007, so in effect, industry would not have born any increase for the first six months of the 2006/07 year.

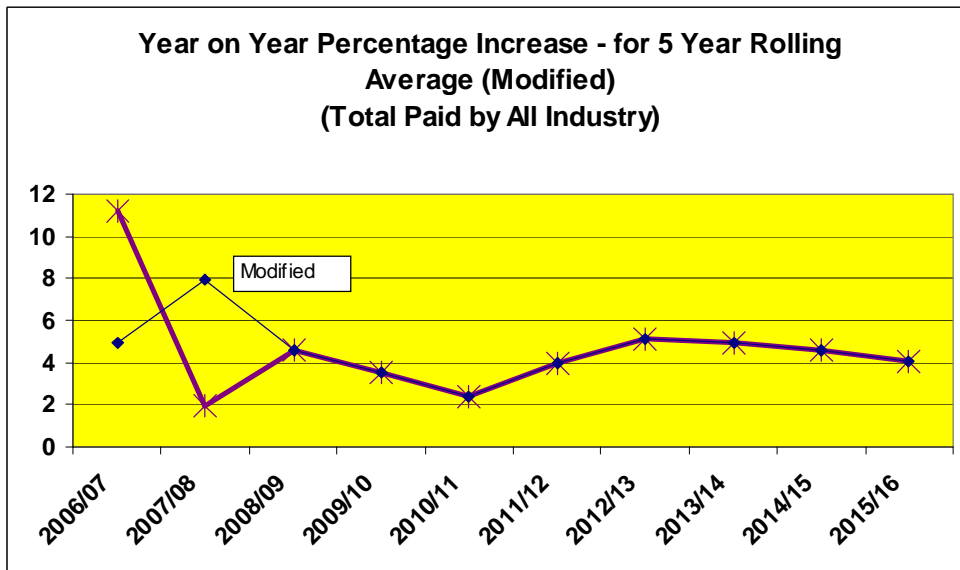
The rates that would then apply from 1 July 2007 would be the appropriate rates from the five year rolling average calculation, as follows.

	Charge Rates (\$)		Percentage Increase
	As Published Rates for 2006/07	2007/08	
Volume	0.2783	0.2918	4.8
BOD	0.2033	0.2181	7.3
Suspended Solids (Modified)	0.1627	0.1885	15.9

The 15.9 % increase in suspended solids charge (compared to the 3.8% increase in the upper table) is entirely due to the rolling method of calculation that drops one years low costs and one years high load and picks up the one years higher cost with relatively low load in the calculation.

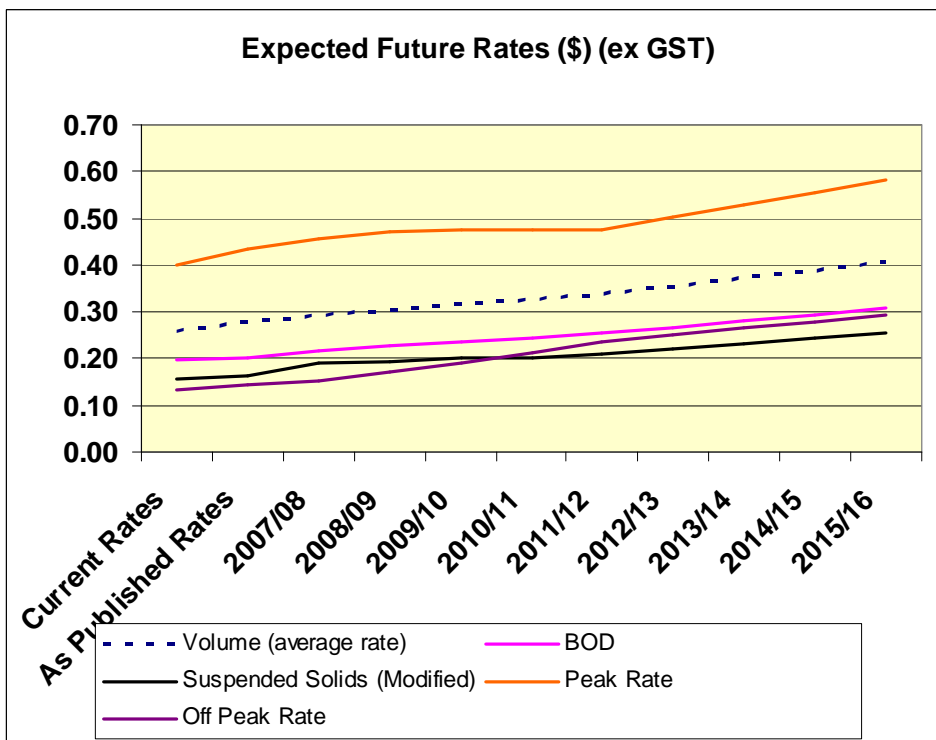
The above gives a simple and tidy method of providing some smoothing to the high initial increase in the first year. Note, individual industries will calculate their own costs based on the above recommended rates, however the following graph is provide to indicate how these recommended rate changes will impact on industry in total. The graph shows the original year on year percentage increase in total revenue from all

industry and the modified percentage increase based on the above rates. Actual increases for each industry will be different depending on their mix of volume BOD and suspended solids.



Expected Rate Increases into the Future.

The following chart shows the current rates, the published rates in the consultation documents, the proposed rates for the 2007/08 year and the expected rates for the following years.



Charge rates over next 10 years

	Current Rates	As Published Rates	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
BOD	0.1995	0.2033	0.2181	0.2291	0.2367	0.2446	0.2552	0.2682	0.2814	0.2942	0.3063
Suspended Solids (Modified)	0.1567	0.1627	0.1885	0.1952	0.2032	0.2034	0.2110	0.2218	0.2327	0.2433	0.2533
Peak Rate	0.4011	0.4300	0.4574	0.4709	0.4761	0.4755	0.4748	0.5018	0.5294	0.5567	0.5828
Off Peak Rate	0.1337	0.1433	0.1525	0.1712	0.1904	0.2113	0.2374	0.2509	0.2647	0.2783	0.2914
All figures GST Exclusive	bold non bold	fixed rates expected rates									

Note. The **bold** rates will be fixed on the adoption of the bylaw, while the rates from 2008/09 and after are the expected rates based on expected flows and loads and on current expected budgets.

M P Bourke

1 November 2006