

**RPSG – WHITE BOARD DISCUSSION  
19<sup>TH</sup> MARCH 2015**

CONCENTRATIONS (rather than tonnes per annum) except for micro-organisms  
Concentrations in mg/L = gm/m<sup>3</sup> = approximately = parts per million (ppm)

Option as per shortlist for water discharge ⇨ Contaminants ⇩	Current WWTP Treated Waster Discharges	1 UV+ Alum dosing for phosphorus removal plus flow balancing.  BASE CASE	2A BASE CASE + Disk Filter	2B BASE CASE + Sand Filter	2C BASE CASE + Membrane Filter	3A BASE CASE + De- Nitrification Filters	3B  Carbon Bed & Filters
Suspended Bardenpho Solids MBR (SS = TSS) Combine	23 1 16	12	10	5	0	Approx. 5	6-10?
Total Bardenpho Nitrogen MBR (TN) Combine	6.2 2.8 ≈ 5.0	4.0?	4.8	4.6	4.4	2.4	3.7
Total Bardenpho Phosphorous MBR (TP) Combine	3.3 2.0 2.9	0.72	0.37	0.23	0.18	0.18	0.2
Microrganisms  E Coli Combine  (MPN/100ml sample) Most Probably Number  Faecal Coliforms	4300	Say 80 To 800 Dependant on UV Dose etc Say 100-1000 <u>Mott M</u>	ditto	ditto	May not need UV  but virus question	ditto	ditto

Combined treated wastewater made up  
of 2/3 Bardenpho and 1/3 MBR



To decide  
based on  
receiving  
environment

Information – ex Mott Macdonald Report  
Dec 2014

NB – always some variation in Biological  
Treatment Performance