

Building Works at Kallang Whampoa Contract 74		
S/No	Queries	Response
1	What method to effectively prevent silty water from the site to reach the Kallang River?	<p>The best way to minimise erosion is to reduce the area of exposed earth surfaces on site through multiple phasing of earth works and paving of the construction access.</p> <p>For exposed earth surfaces, cover them with erosion control blankets or canvas covers where possible. For exposed earth surface which cannot be paved or covered, a proper sedimentation control measures need to be designed, installed and properly maintained throughout the construction period.</p> <p>Please refer to PUB's website for the best practices (ECM Best Practices PUB, Singapore's National Water Agency)</p> <p>HDB Project at Kallang Whampoa Contract 74 As highlighted in the presentation, the TSS sensors monitor the treated water being discharged from the treatment plants into public drain leading to Kallang River. Once the TSS readings exceed preset levels, the discharge valve is shut and the water is diverted back to the holding pond, thereby effectively preventing any silty water from reaching Kallang River.</p>
2	<p>Is the treated water from construction site being not to be discharged but reused on site supported by PUB?</p> <p>Any regulatory requirements on this?</p>	<p>NEA regulates or sets the standard of treated discharges into the water course while PUB processes the application of rainwater harvesting.</p> <p>For treated water from Silty Water Treatment Plants, the water can be used for non-potable purposes such as general washing of vehicles, dust control and landscape irrigation and the used water shall meet NEA standards for discharge to watercourse.</p> <p>Contractor shall ensure all treated water are used for non-potable purposes only.</p> <p>There shall be no inter-connection between the potable and non-potable water pipes. "Non-potable use only/not for drinking" shall be clearly marked/displayed along the pipes and at the points of use.</p>

3	Please advise the contingency measures the site implement when holding pond volume is high.	<p>The best way to avoid large holding pond is to reduce the amount of exposed earth surfaces on site by carrying out earth works in phases.</p> <p>In addition, QECP must ensure the design of ECM proposal complies with PUB's COP requirement and Contractor shall implement according to approved ECM plans on-site. ECMO shall be present on site to monitor the Implementation and Maintenance of the ECM proposal.</p> <p>For this project site, the volume of holding pond provided and capacity of the treatment plants installed were more than the design requirements. Additionally, the holding pond levels are monitored closely to ensure silty water is treated and discharged promptly to prepare for the next rainfall event.</p>
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P103 Design & Construction of Riviera Interchange Station and Tunnels for CRL – Punggol Extension

S/No	Queries	Response
1	Is there any measured data to show the effects of Baffle Flow Method, e.g. the measurement of the TSS at the Tank 1, 2 and 3?	The baffles reduced the TSS significantly in the subsequent tanks of the Holding Pond. The TSS readings in Tank 2 and Tank 3 were 40% and 90% lower respectively compared with Tank 1. (TSS readings were taken from the 3 tanks)
2	I would like to know more details regarding the AI Camera system for ECM	Project team is exploring the use of CCTVs to detect bare earth surfaces that generate silty water. More, information will be shared upon completion of a pilot project. (Still at exploratory stage)
3	What is highest level of TSS records?	The highest TSS recorded was 46 mg/l

GENERAL FEEDBACK

S/No	Queries	Response
1	How can discharge clean water to public drain if it is construction site? Any condition? E.g. if no construction vehicle in and out which could dirty the site.	<p>The excavation works shall be planned and implemented in stages to minimise bare erodible surfaces. With proper staging of works, site area with no exposed bare surface (i.e. fully turfed or paved with concrete) shall be segregated from any adjacent site areas with bare exposed surfaces. The segregated areas with clean runoffs can be discharged into public drain.</p> <p>Silty discharges generated from exposed surface areas shall be treated by ECM system to meet the legal limits before discharging into public drain.</p> <p>For vehicles entering and exiting the construction site, a vehicle wash bay shall be provided. The water used in the wash bay shall directed into a holding pond and be treated by ECM system to meet the legal limits before discharging into public drain.</p>
2	It's most helpful and appreciate if you share us this year's ECM award winners presentation slides for our reference and put in place of any good practices in our project.	Presentation slides will be uploaded onto the IES ECM website.
3	Quite disappointed as don't see the sharing from PUB as well as recognising the ECMO.	ECMOs were recognised as part of the ECM Project Team.
4	It is very good event to acknowledge the team who gave extra effort to protect environment! By the way, why IES does not recognise ABC-SILA as ABCWP?	ABCWP registered under IES are PE (Civil) recognised by PEB, while ABCWP registered under SILA are Accredited Landscape Architect.
5	Suggest to have more suppliers to exhibit their products.	Thank you for the suggestion, there were 5 exhibitors for ECM Night 2024.
6	Please provide details about how to apply this ECM awards, thanks.	The nomination forms for ECM awards are made available on IES website - Events and Courses Listing