

Contract No. HY/2013/02  
Hong Kong-Zhuhai-Macao Bridge  
Hong Kong Boundary Crossing Facilities –Infrastructure Works Stage I (Western Portion)  
Investigation Report on Action Level or Limit Level Non-compliance

**Report No.** 003  
**Monitoring Date** 20-May-16

The Action and Limit Levels of suspended solids (SS) determined from baseline monitoring data is reproduced below:

Monitoring Parameter	Action Level (AL)	Limit Level (LL)
Depth averaged SS (in mg/L)	23.5	34.4

**Mid-Flood tide**

**Suspended Solids (SS) (in mg/L)**

Monitoring Station	Monitoring time	Measured depth averaged	Level Exceeded
SR4(N)	18:18	37.5	Limit

\*Monitoring was undertaken by the E.T. of Contract No. HY/2010/02

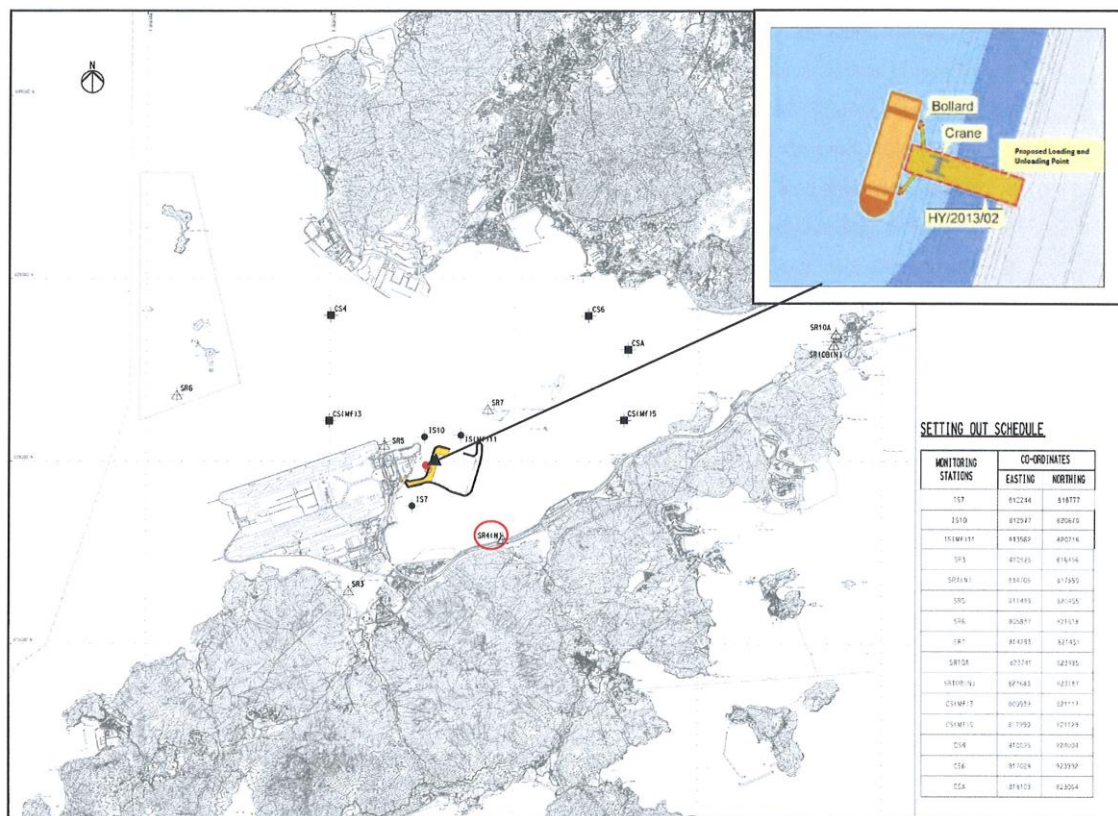


Figure 1 Location of Water Quality Monitoring Stations

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#### Investigation Results:

a) Causes of exceedance

Exceedance was not due to operation of the works under Contract No. HY/2013/02 because:

- It was confirmed that no any marine works was carried out at the temporary loading and unloading point in Portion A1 from 16 May 2016 to the water quality monitoring period on 20 May 2016 under Contract No. HY/2013/02 so that it was unlikely to generate any suspended solids to cause the SS exceedances recorded at SR4(N) during mid-flood tide on 20 May 2016. **Figure 1** showing the location of the Water Quality Monitoring Station where recorded exceedance and all relevant WQM stations.
- The exceedance was recorded during flood tide in which the direction of flow was flowing from east to west and the monitoring station SR4(N) is located at the south-east side and far away from the above mentioned works area. Secondly, suspended solids values recorded at Impact Station closer to the works (e.g. IS7) were below the Action and Limit Level during the same tide on the same day. Therefore it is unlikely that the exceedance recorded was contributed by the works under Contract No. HY/2013/02.
- The exceedance was considered as non-Project related.

b) Action required under the action plan

1. Repeat in situ measurement on next day of exceedance to confirm findings;
2. Identify source(s) of impact;
3. Inform IEC, Contractor, ER and EPD;
4. Check monitoring data, all plant, equipment and Contractor's working methods;
5. Discuss mitigation measures with IEC, ER and Contractor;
6. Ensure mitigation measures are implemented;
7. Increase the monitoring frequency to daily until no exceedance of Limit level.

c) Action taken under the action plan

1. Not applicable as SS was not measured in situ;
2. After considered the above mentioned investigation results, it appears that it was unlikely that the SS exceedance was attributed to the above mentioned work site of this Contract;
3. The exceedance was informed by IEC and ER;
4. Monitoring data, all plant, equipment and Contractor's working methods were checked;
5. Since it is considered that the SS exceedance is unlikely to be project related, actions 5-7 under the EAP are considered not applicable.

d) ET's conclusions and recommendations for mitigation

- All relevant water quality mitigation measurement was checked to be fully implemented.
- The Contractor was reminded to ensure all construction activities that generate wastewater with high concentrations of suspended solid (SS) should be collected to sedimentation tanks or package treatment



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systems for proper treatment prior to disposal.

- The Contractor was reminded to ensure that all silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly.

e) Contractor's actions to implement the mitigation

- All construction activities that generate wastewater with high concentrations of suspended solid (SS) like wheel washing etc. was collected to sedimentation tanks or package treatment systems for proper treatment prior to disposal.
- All silt removal facilities, channels and manholes was maintained and any deposited silt and grit was removed regularly.

ET Leader Signature & Date

14-Jun-16