

EXECUTIVE SUMMARY

Introduction

This is the eleventh monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the “Low Level Radioactive Waste Storage Facility at Siu A Chau” (the Project). This report documents the findings of Environmental Monitoring and Audit (EM&A) Works conducted in between 1st and 31st July 2004 inclusively.

The major site activities undertaken in the reporting month were:

- Construction of Retaining Wall;
- Construction of Superstructure (Main Building and Substation/Electric Rooms); and
- Construction of Permanent Jetty.

Environmental Monitoring and Audit Works

Environmental monitoring for the Project was performed regularly as stipulated in the EM&A Manual and the results were checked and reviewed. A monthly site audit for this reporting month was conducted on 28th July 2004. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

Summary of the non-compliance of the reporting month is tabulated in Table I.

Water Quality Monitoring

Water quality monitoring was conducted as scheduled in the reporting month except on 16th July 2004. The monitoring on this date was cancelled due to hoisting of Tropical Cyclone Warning Signal No. 8.

Routine Water Quality Monitoring

A total of fifteen events showing exceedances of Action/Limit Levels for suspended solids (SS) were recorded at the monitoring stations W1, W2 and W3 on 13th, 14th, 20th, 23rd, 26th, 27th and 30th in the reporting month.

There was no exceedance of Action/Limit Levels for turbidity recorded at the monitoring stations W1, W2 and W3 in the reporting month.

A total of forty-nine events showing exceedances of Action/Limit Levels for dissolved oxygen (DO) at the monitoring stations W1, W2 and W3 were recorded on 7th, 8th, 9th, 13th, 14th, 20th, 26th, 27th and 30th in the reporting month.

12-hr Continuous Water Quality Monitoring

For the continuous water quality monitoring at station WS, there was no event showing exceedances of Action/Limit levels for turbidity while events showing exceedances of Action/Limit levels for DO levels were recorded on 13th, 14th, 23rd, 26th, 27th and 30th in the

reporting month.

According to the ET's investigation, no direct evidence demonstrating that the exceedances of Action/Limit levels for SS on 13th, 14th, 23rd and 26th were caused by the Project was identified. The cause of exceedances might be due to the high natural background outside Sum Wan, as the SS levels of station W1 (the closest monitoring station to the Project area) were lower than those of stations W2 (Control Station during the mid-ebb tide) and W3 (Control Station during the mid-flood tide).

However, Limit Level exceedances of SS were recorded during ebb-tide on 20th, 27th and 30th July 2004 at stations W1 and W2. The exceedances were likely due to the Project works as the SS levels of station W1 were higher than that of station W2. Moreover, during the site audit on 28th July 2004, a yellow plume of sediment which was likely generated by the Project works was observed around the jetty. The exceedances were therefore considered to be valid.

All the exceedances of Action/Limit levels for DO were unlikely due to the Project owing to the high water temperature during the reporting month. It is understood that the concentration of DO decreases with the increasing water temperature.

Table I summarizes the number of exceedances recorded in the reporting month.

Table I Summary Table for Non-compliance Recorded in the Reporting Month

| Parameter | No. of Events Exceeding | | No. of Exceedances due to the Project | Action Taken |
|----------------------|-------------------------|-------------|---------------------------------------|---|
| | Action Level | Limit Level | | |
| <i>Station W1-W3</i> | | | | |
| DO (mg/L) | 11 | 38 | 0 | N/A |
| Turbidity (NTU) | 0 | 0 | 0 | N/A |
| SS (mg/L) | 1 | 14 | 6 (on 20, 27 & 30 July 2004) | ET Leader informed all relevant parties and identified the cause of exceedances. The Contractor was urged to avoid the direct discharge of effluent into the sea during piling works. Proper mitigation measures were recommended to the Contractor to improve the situation: <ul style="list-style-type: none"> • totally surrounded by tarpaulin sheets to prevent the effluent from splashing into the sea; • surrounding the works area with sufficient clean sand bags to avoid direct runoff from entering the sea; • collecting and diverting the effluent to the sedimentation tank prior to discharge; • clearing the unnecessary materials and equipment on the jetty to provide sufficient space for carrying out the piling works; and • installing a curtain on the right hand side of the jetty when |

| Parameter | No. of Events Exceeding | | No. of Exceedances due to the Project | Action Taken |
|-------------------|-------------------------|-------------|---------------------------------------|--|
| | Action Level | Limit Level | | |
| | | | | viewing from the Facility to confine the plume dispersion. |
| Station WS | | | | |
| DO (mg/L) | 6 | | 0 | N/A |
| Turbidity (NTU) | 0 | | 0 | N/A |

Environmental Licensing and Permitting

License/Permits granted to the Project include the Environmental Permit (EP), the Further Environmental Permit (FEP), the Water Discharge License (WDL) and Construction Noise Permit (CNP) for the Project. A new CNP (CNP No. GW-UW0313-04) was issued to the Project in this reporting month.

Complaints and Prosecutions

No environmental complaint or prosecution was received in this reporting month.

Status of Waste Management

The Waste Management Plan (WMP) was accepted with conditions by EPD on 30th September 2003 and the Contractor resubmitted WMP (Rev. B) on 9th October 2003.

No C&D materials generated was collected in the reporting month. The waste management should follow the procedures in the approved WMP.

Key Information in the Reporting Month

Summary of key information in this reporting month is tabulated in Table II.

Table II Summary Table for Key Information in the Reporting Month

| Event | Event Details | | Action Taken | Status | Remark |
|---|---------------|--------|--------------|--------|--------|
| | Number | Nature | | | |
| Complaint received | 0 | --- | N/A | N/A | --- |
| Changes to the assumptions and key construction / operation activities recorded | 0 | --- | N/A | N/A | --- |
| Status of submissions under EP | 0 | --- | N/A | N/A | --- |
| Notifications of any summons & prosecutions received | 0 | --- | N/A | N/A | --- |
| <p><u>Future Key Issues:</u></p> <p>Major site activities for the coming month include:</p> <ul style="list-style-type: none"> • Permanent site formation; • Boulder stabilization works; • Construction of superstructure; and • Construction of permanent jetty. <p>The anticipated environmental impacts will be mainly on dust and noise due to earthworks, and surface runoff during rainy days and the water quality associated with the marine construction activities.</p> | | | | | |