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WEST KOWLOON TRANSFER STATION

CONTRACT NO.: EP/SP/21/94

GREASE TRAP WASTE TREATMENT FACILITY

ON-SITE ODOUR PATROL ASSESSMENT **REPORT**

FOR

COMMISSIONING AND OPERATIONAL PHASE OCTOBER 2008 TO JANUARY 2009

11 February 2009

SECTION 1 INTRODUCTION



South China Transfer Limited (SCTL) was granted an environmental permit (No: EP – 247/2006) to construct and operate a designated project – Development of a Grease Trap Waste Treatment Facility (GTWTF) at West Kowloon Transfer Station (WKTS) on 24 April 2006. The GTWTF was satisfactorily constructed, tested and commissioned. The operational phase of GTWTF commenced on 23 December 2008.

In accordance with the specific conditions of section 2 of the EP, SCTL (the permit holder) shall employ a qualified odour panelist to patrol and monitor the odour level at the site boundary of WKTS twice daily during the operating hours of the facility for the first two months after the commissioning of the Project and for the first month during normal operation of the Project to ensure compliance with the odour limit of 2 Odour Units (OU) within the site boundary of the WKTS. In the event of exceedance of the odour limit, the Permit Holder hall improve the existing air scrubbing system to contain the odour level at the site boundary of WKTS to within 2 Odour Units. (Condition 2.1)

SCTL shall also need to deposit with the Director, within 2 months after the operation of the Project, 3 hard copies and 1 soft copy of the monitoring record on the odour levels and any action taken to reduce the odour level as set out in Condition 2.1 above. (Condition 2.2)

I send the Authority herewith the odour monitoring results as required above-mentioned. In summary, all the odour monitoring results were below the compliance limit of 2 OU. Please refer to the attached reports for details.

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SECTION 2 SUMMARY OF ODOUR PATROLLING RESULTS FROM OCTOBER 2008 TO JANUARY 2009 AT SITE BOUNDARY OF WKTS

(FIRST 2 MONTHS AFTER COMMISSIONING OF GTWTF: 23 OCT – 22 DEC 08 FIRST MONTH DURING NORMAL OPERATION OF GTWTF: 23 DEC 08 – 22 JAN 09)

The odour monitoring program mentioned in the EP was undertaken from October 2008 to January 2009 by a qualified odour panelist from the Hong Kong Polytechnic University (HKPU) at five locations at the site boundary of the WKTS as shown in figure 2. The assessment is conducted twice daily at a time randomly scheduled during operating hour including the peak hour. (For methodology, patrol result and other details, please refer to the full report prepared by HKPU as attached.)

2.1 SUMMARY OF RESULTS - OCTOBER 2008

A summary of the on-site odour assessment in October 2008 is presented in table 1 below. There are five monitoring location OD1 -OD5 at the site boundary of WKTS. (A detailed report for the odour assessment by HKPU is attached for reference).

Table 2.1.1 Summary of Average Odour Intensities Recorded at Each Monitoring location for October 2008

Location	OD1	OD2	OD3	OD4	OD5
Range of Odour Intensity	<2	<1	<2	<1	<2
	(0-1.5)	(0-0.5)	(0-1.5)	(0-0.5)	(0-1.5)
Mean of Odour Intensity in October	0.80	0.00	0.40	0.19	0.81
Mean of Odour Intensity in September	0.85	0.05	0.27	0.30	0.82
Compliance Limit	2	2	2	2	2

Note: The mean values are in arithmetic mean.

There was no exceedance in odour intensities among five locations of the site boundary of the station.

Compared with the results of Sept, the mean odour intensity at location OD 1, OD 2, OD 4 and OD 5 decreased 0.05, 0.05, 0.11 and 0.01 respectively, while that at location OD 3 increased 0.13

Table 2.2.1 Summary of Average Odour Intensities Recorded at Each Monitoring location for November 2008

Location	OD1	OD2	OD3	OD4	OD5
Range of Odour Intensity	<2	<2	<2	≤1	<2
	(0-1.5)	(0-1.5)	(0-1.5)	(0-1)	(0-1.5)
Mean of Odour Intensity	0.75	0.13	0.24	0.18	0.66
in November					'
Mean of Odour Intensity in October	0.80	0.00	0.40	0.19	0.81
Compliance Limit	2	2	2	2	2

Note: The mean values are in arithmetic mean.

There was no exceedance in odour intensities among five locations of the site boundary of the station. The average odour intensity at the site boundary is within the odour compliance limit of 2

Compared with the results of October, the mean odour intensity at location OD 1, OD 3, OD 4 and OD 5 decreased 0.05, 0.16, 0.01 and 0.15 respectively, while that at location OD 2 increased 0.13.

2.3 SUMMARY OF RESULTS – DECEMBER 2008

Table 2.3.1 Summary of Average Odour Intensities Recorded at Each Monitoring location for December 2008

Location	OD1	OD2	OD3	OD4	OD5
Range of Odour Intensity	≤1	<1	≤1	<1	<2
	(0-1)	(0-0.5)	(0-1)	(0-0.5)	(0-1.5)
Mean of Odour Intensity in December	0.75	0.06	0.19	0.19	0.64
Mean of Odour Intensity in November	0.75	0.13	0.24	0.18	0.66
Compliance Limit	2	2	2	2	2

Note: The mean values are in arithmetic mean.

There was no exceedance in odour intensities among five locations of the site boundary of the station

Compared with the results of November, the mean odour intensity at location OD 2 and OD 5 decreased 0.07 and 0.02 respectively, while that at location OD 3 and OD 4 increased 0.05 and 0.01 respectively. On the other hand, the mean odour at location OD 1 remained unchanged and was 0.75.

2.4 SUMMARY OF RESULTS – JANUARY 2009

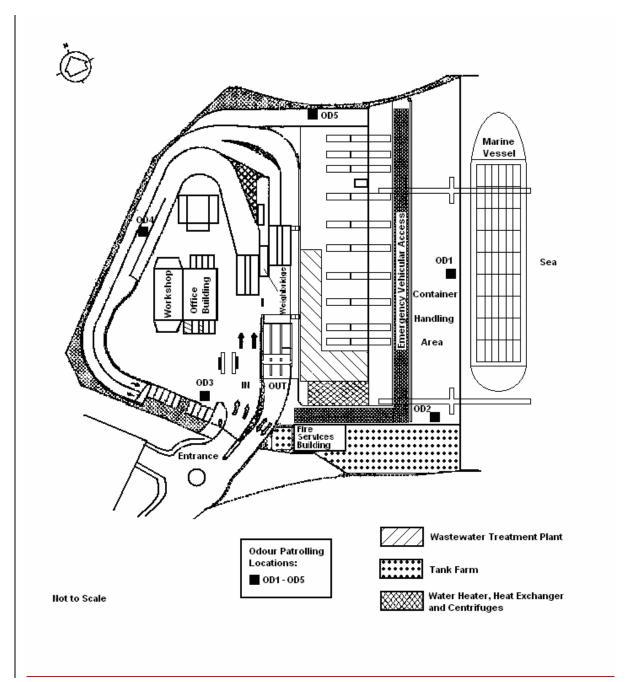
Table 2.4.1 Summary of Average Odour Intensities Recorded at Each Monitoring location for January 2009

Location	OD1	OD2	OD3	OD4	OD5
Range of Odour Intensity	≤1	<1	≤1	<1	≤1
	(0-1)	(0-0.5)	(0-1)	(0-0.5)	(0-1)
Mean of Odour Intensity in January	0.75	0.04	0.10	0.23	0.48
Mean of Odour Intensity in December	0.75	0.06	0.19	0.19	0.64
Compliance Limit	2	2	2	2	2

There was no exceedance in odour intensities among five locations of the site boundary of the station.

Compared with the results of December, the mean odour intensity at location OD 2, OD 3 and OD 5 decreased 0.02, 0.09 and 0.16 respectively, while that at location OD 4 increased 0.04. On the other hand, the mean odour at location OD 1 remained unchanged and was 0.75.

Figure 2 Location of odour patrolling



SECTION 3 CONCLUSION

All the odour monitoring result (October 2008 to January 2009) among all location at the site boundary of WKTS (OD 1 to OD 5) were all complied with the compliance limit of 2 OU. Moreover, there was no odour complaint received during this period.

The environmental assessment shows that the operation of the GTWTF will not cause adverse environmental impacts. According to the Project Profile, "with the designed odour management system, it is not anticipated that the operation of the proposed GTWTF will cause adverse odour impact to the identified ASRs." SCTL supports this anticipation as we are fully complied with the limit level. Environmental performance including air pollution control (odour) after the commencement of the GTWTF operation continues to be satisfactory.

Under the existing WKTS contract, daily patrolling is undertaken by a qualified odour panelist from HKPU at the site boundary of WKTS at a time randomly scheduled during the operating hours between 08:00 and 21:00 hrs. SCTL will continue the daily odour patrol externally (by HKPU) in accordance with the contract and internally by site staff. Odour patrol records will be submitted to EPD's Representative within 2 days of such patrol. Any abnormality like exceedance of Trigger Level, Action Level or Target Level or in case of receiving complaint, SCTL will follow the "Action Plan for Pollution Control" prepared by SCTL in 1998 and approved by EPD to ensure appropriate and effective remedial action will be implemented promptly. SCTL will continue to maintain good air quality, good housekeeping, routine floor cleaning and all other appropriate preventive measures to minimize the odour from the source as far as practical. Maintenance of scrubbers and ozone generators are put in high priority.