Maeda Corporation



Upgrading of Ting Kok Road Pumping Station No. 5

Monthly EM&A Report No. 10 for October 2006

> November 2006 Report no: 01284R0302

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Maeda Corporation



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Monthly EM&A Report No. 10 for October 2006

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Approver:	Guiyi Li		
Report no:	EA01284R0302	Date:	November 2006

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Certified by Landfill Gas Team Leader Alexi Bhanja



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1 Executive Summary

Drainage Services Department (DSD) awarded the contract for the Upgrading of Ting Kok Road Pumping Station No. 5 to Maeda Corporation in September 2005. Maeda appointed Hyder Consulting Limited as the Contractor's Landfill Gas (LFG) Team during the construction period. The construction contract commenced in September 2005 and the total construction period is approximately 28 months.

This report recorded the results and findings of the required EM&A works undertaken during October 2006. All relevant mitigation measures and requirements were implemented. There have been no exceedances in Action/Limit (A/L) Levels at any of the locations monitored under the EM&A programme.

An 11m-deep borehole, designated "M1", was installed by the Contractor to provide an "early warning" of potential LFG problems that could affect surface trenches, but does not form part of the EM&A programme. The Contractor has noted the monitoring results from M1 and will take them into consideration when planning surface trench works in the vicinity.

Manhole M2 was dismantled in July 2006 because of planned works and therefore monitoring at M2 has been terminated since July 2006. However, LFG has never been detected at M2 and so it is not considered that termination of monitoring at this location will have any significant impact on the overall effectiveness of the environmental monitoring programme, as monitoring at manhole M3 will continue.

Environmental Protection Department (EPD) has not conducted any site visit in the reporting period.

Event and Action Levels

The baseline monitoring results documented in the baseline monitoring report for the Project (our report ref.: EA01284R0022) provided the A/L Levels for LFG impact monitoring and also the Action Plan. For methane, A/L Levels are 0.5%/1.0%; for carbon dioxide, A/L Levels are 0.5%/1.5%; and for oxygen, A/L Levels are 19.0%/18.0%.

Complaint Log

There were no non-compliances in terms of the EM&A programme during the reporting period and no complaints regarding LFG were received.

Reporting Changes

There have been no reporting changes during the reporting period.

Future Key Issues

Based on anticipated construction activities for next month, on the construction programme and on the review of relevant Contractor's method statements by the LGT, no significant future key issues in terms of LFG have been identified at this time.



2 Introduction

2.1 Basic Project Information

Upgrading of Ting Kok Road Pumping Station No. 5 (TKRPS) under North District and Tolo Harbour Sewerage, Sewage Treatment and Disposal – High Priority Works is implemented based on the findings of the Study *Review of North District and Tolo Harbour Sewerage Master Plan*.

The purpose of the Project is to upgrade the existing TKRPS to cope with the sewerage needs of both existing and future developments along Ting Kok Road up to Tai Mei Tuk. The design pumping capacity of TKRPS has to be increased from 2,888m³/day to 11,520m³/day in order to serve the increasing sewage flow along Ting Kok Road. The Project is of high priority and needs to commence as soon as possible because full commissioning of the upstream sewerage facilities along Ting Kok Road is dependent on the completion of this Project.

The proposed scope of works includes construction of a new pumping station, laying of about 350m long twin 450mm diameter rising mains and 250m long 600mm diameter gravity sewer, and demolition of the existing pump pit. The main pumping station, transformer room, gravity sewers, manholes and boundary wall (except the twin rising mains) will be located outside the existing passive vent trench of Shuen Wan Landfill and the three existing Landfill Gas (LFG) monitoring probes within the Project site will not be affected by the works.

Six village houses are located about 60m away from the boundary of the proposed pumping station. The proposed pumping station upgrading works therefore constitute a Designated Project under type F.3(b)(i) in Schedule 2 of the Environmental Impact Assessment Ordinance. A Project Profile (PP) for direct application of the Environmental Permit (EP) (Application No.DIR-115/2005) was approved by the Environmental Protection Department (EPD) in March 2005 and an EP (EP-212/2005) was granted in April 2005, prior to the commencement of the upgrading works.

Drainage Services Department (DSD) awarded the contract for the upgrading of TKRPS to Maeda Corporation in September 2005. Maeda appointed Hyder Consulting Limited as the Contractor's Landfill Gas Team (LGT) during the construction period. CH2M HILL Hong Kong Limited is the Independent Checker (Landfill Gas) (IC(LG)) of the project. The construction contract commenced in September 2005 and the total construction period is approximately 28 months.

Close proximity of the Project to Shuen Wan Landfill (within the 250m Consultation Zone of Shuen Wan Landfill) may also suggest the possibility of landfill gas being released during excavation works for substructure of pumping station, transformer room and associated rising mains and gravity sewers. As such, a *Report on Landfill Gas Hazard Assessment* has been prepared previously (as Appendix E to the PP) in accordance with EPD's *Landfill Gas Hazard Assessment Guidance Note* and the *Practice Note for Professional Persons – Landfill Gas Hazard Assessment for Development Adjacent to Landfills*.



2.2 Management Structure and Project Organisation

The Engineer (DSD) is responsible for overseeing the construction works and ensuring that they are undertaken by the Contractor (Maeda) in accordance with the specification and contractual requirements. The Contractor shall report to the Engineer. The LGT is employed by the Contractor and responsible for conducting the EM&A programme. The IC(LG) shall advise the Engineer on LFG issues related to the Project.

The key personnel contact names and telephone number are summarised in Table 2-1. The project organisation is shown in Appendix 1.

Party	Position	Name:	Tel. No.:
Project Proponent and	Project Manager	Raymond LEE	2594 7457
Engineer – DSD	Engineer's Representative	Tim TSOI	2594 7460
Contractor – Maeda	Site Agent	George CHEUNG	9268 1918
LGT – Hyder Consulting	LGT Leader	Alexi BHANJA	2911 2916
IC(LG) – CH2M HILL	IC(LG)	Aldex LEE	2507 2203

 Table 2-1
 Contact Details for Key Project Personnel

2.3 Construction Programme

Construction programme of the Project is attached in Appendix 2. As can be seen, all works carried out during the reporting period have been carried out with the required LFG control measures in place (e.g. LFG monitoring for "hot works").

2.4 Works Undertaken during the Month

Works undertaken during the reporting period included:

- Construction of gravity sewer and rising main
- Excavation
- Installation of walings and struts
- Pile head cutting and installation of pile head steel plate
- Construction of sub-structure

3 Environmental Status

3.1 Works Undertaken during the Month with Illustrations

Works undertaken during the reporting period are identified in Section 2.4. Illustrations of these works, such as location of works, etc., are provided in Appendix 3.



3.2 Project Area and Monitoring Locations

The site is located at Ting Kok Road in Tai Po, and the major items to be constructed are located outside the existing passive vent trench of the adjacent Shuen Wan Landfill, which has been restored and is currently being monitored.

The impact monitoring locations specified in the *Report on Landfill Gas Hazard Assessment* comprise "utilities' manholes and chambers" (i.e. fixed locations for purposes of environmental protection) and at excavations of 1m depth or more (i.e. variable locations for purposes of worker safety).

An 11m-deep borehole, designated "M1", was installed by the Contractor (in addition to contract requirements) to provide an "early warning" of potential LFG problems that could affect surface trenches. It is not intended that M1 forms part of the EM&A programme, since conditions deep below the surface do not fall within the scope of the EM&A programme (i.e. manholes and excavations >1m).

In terms of fixed monitoring locations, the Baseline Report identified two existing manholes (M2 and M3). Manhole M2, however, was dismantled in July 2006 because of planned works and therefore monitoring at M2 has been terminated since July 2006. LFG has never been detected at M2 and so it is not considered that termination of monitoring at this location will have any significant impact on the overall effectiveness of the environmental monitoring programme, as monitoring at manhole M3 will continue. There are no other suitable manholes within the site that can be monitored in lieu of M2.

The fixed monitoring location is shown in Table 3-2:

Monitoring Station ID	Description	Purpose
M3	Existing Manhole (2m deep)	EM&A programme

Table 3-2 Fixed Monitoring Locations for LFG EM&A

In terms of variable monitoring locations, these vary from month to month, depending on site activities.

Project area is shown in Appendix 3 and the fixed monitoring location is shown in Appendix 4.

4 Brief Summary of EM&A Requirements

4.1 Monitoring Parameters

During the construction phase, impact monitoring of LFG is to be carried out in accordance with the *Report on Landfill Gas Hazard Assessment* at the selected locations. LFG parameters to be monitored comprise oxygen, methane and carbon dioxide. Temperature is also recorded but this is not a LFG parameter.



4.2 Monitoring Equipment

Table 4-3 shows the equipment list for LFG monitoring.

Equipment	Manufacturer / Serial Nos.		
Gas Analyser GA 2000	Geotechnical Instruments / GA 08277		

 Table 4-3
 Equipment List for LFG Monitoring

4.3 Event and Action Levels/Plans

The baseline monitoring results documented in the baseline monitoring report for the Project (our report ref.: EA01284R0022) provided the Action and Limit (A/L) Levels for LFG impact monitoring and also the Action Plan. As per the *Report on Landfill Gas Hazard Assessment*, and in keeping with the standard presentation of LFG EM&A in other projects, both the A/L Levels and Action Plan are shown in the same table.

Table 4-4 shows the combined A/L Level and Action Plan for the Project, to be triggered if the LFG criteria are exceeded at fixed location M3, or at any of the variable locations:

Parameter	A/L Level		Action Plan
	<19%	Ι	Ventilate to restore oxygen to > 19%
Oxygen	<18%		Stop works Evacuate personnel/prohibit entry Increase ventilation to restore oxygen to >19%
	>10% LEL (i.e. > 0.5 % by volume)		Prohibit hot works Ventilate to restore methane to < 10% LEL
Methane	> 20% LEL (i.e. > 1% by volume)		Stop works Evacuate personnel/prohibit entry Increase ventilation to restore methane to < 10% LEL
	>0.5%	Ι	Ventilate to restore carbon dioxide to <0.5%
Carbon Dioxide	>1.5%	- - -	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore carbon dioxide to >0.5%

 Table 4-4
 Action and Limit Levels and Action Plan for Landfill Gas

4.4 Mitigation Measures & Requirements in Contract Documents

Measures for mitigating LFG hazards during the construction works have been stated clearly in the *Report on Landfill Gas Hazard Assessment*, which forms part of the contract documents Specification. Relevant excerpts could be referred to the Project Profile for Upgrading of Ting Kok Road Pumping Station No. 5.

Section 5 and Appendix 5 summarise the mitigation measures and requirements as well as the implementation status.



5 Implementation Status of LFG Control Measures

The status of the mitigation measures implemented by the Contractor is listed in Appendix 5. All LFG hazard control measures have been implemented as stipulated in the contract documents and in the *Report on Landfill Gas Hazard Assessment*.

6 Monitoring Results

Calibration records for the equipment used for LFG monitoring are provided in Appendix 6. Original *Field Measurement Recording Sheets* are provided in Appendix 7.

6.1 Early-warning Location M1

During the reporting period, LFG was monitored at M1 to give an "early warning" of potential LFG problems. M1 is an 11m-deep borehole and the carbon dioxide and methane concentrations may reflect possible influence of LFG at depth below the site. Monitoring results are shown in Table 6-5, below. Location M1 is not subject to EM&A and so A/L Levels are not applicable.

Monitoring	(%)	Temperature			
Station ID	Date	Methane	Carbon Dioxide	Oxygen	(°C)
M1	27 October 2006	0.1	0.5	19.8	26.5

Table 6-5Monitoring Results at M1

Considering the location of M1 adjacent to a restored landfill, the recorded levels are within expected norms and are not cause for concern. Notwithstanding, the Contractor has noted these concentrations and will take them into consideration when planning surface trench works in the vicinity.

6.2 Fixed Location M3

During the reporting period, LFG was monitored at the fixed location M3 for purposes of environmental protection. This is shown in Table 6-6, below:

Monitorina	Monitoring Gas Concentration (%)					
Station ID	Date	Methane	Carbon Dioxide	Oxygen	Temperature (ºC)	
M3	27 October 2006	0	0.3	19.9	27.1	

Note : bold indicates an exceedance of Action Level and bold indicates exceedance of Limit Level

Table 6-6 Monitoring Results at M3



Appendix 4 shows the position of each fixed monitoring station. There were no exceedances of A/L Levels at the fixed location during the reporting period.

6.3 Variable Locations

During the reporting period, LFG was also monitored at variable locations (for purposes of worker safety). These locations were within Portions 4 to 7 as shown in Appendix 3. A total of 465 readings for each of carbon dioxide, methane and oxygen were taken for safety-related reasons, including excavation and hot works. There were no exceedances for A/L Levels at any variable locations during the reporting period.

LFG monitoring results for variable locations are provided on the *Field Measurement Recording Sheets* in Appendix 7.

7 Report on Non-Compliance and Complaints

EPD has not conducted any site visit in the reporting period.

There were no non-compliances during the reporting period and no complaints regarding LFG were received.

8 Others

8.1 Future Key Issues

Construction activities for next month are anticipated to include:

- Excavation
- Diversion of existing drain
- Construction of gravity sewer and rising main
- Installation of walings and struts
- Construction of sub-structure and super-structure

Based on the above, on the construction programme (shown in Appendix 2) and on the review of relevant Contractor's method statements by the LGT, no significant future key issues in terms of LFG have been identified at this time.

LFG monitoring will be continued and the tentative monitoring schedule at fixed locations for the next three months is shown below:

- 1 November 2006
- 1 December 2006
- 3 January 2007



8.2 Comments, Recommendations and Conclusions

The LFG mitigation measures adopted by the Contractor during the reporting period are considered have been implemented in a satisfactory manner and there have been no exceedances in A/L Levels.

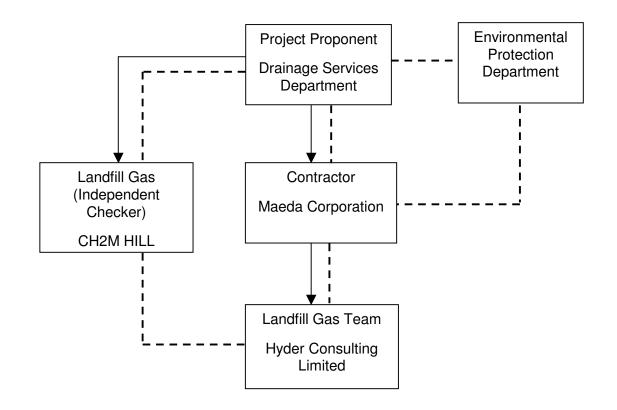
The EM&A programme is considered to have performed acceptably and there are no recommendations for improvements or modifications at this time.

In conclusion, there have been no significant issues relating to LFG hazard during the reporting period.



Project Organisation





– – – – Line of communication



Line of Authority



Construction Programme



Location of Works and Project Area



Fixed Monitoring Locations



Updated Implementation Schedule



Calibration Records

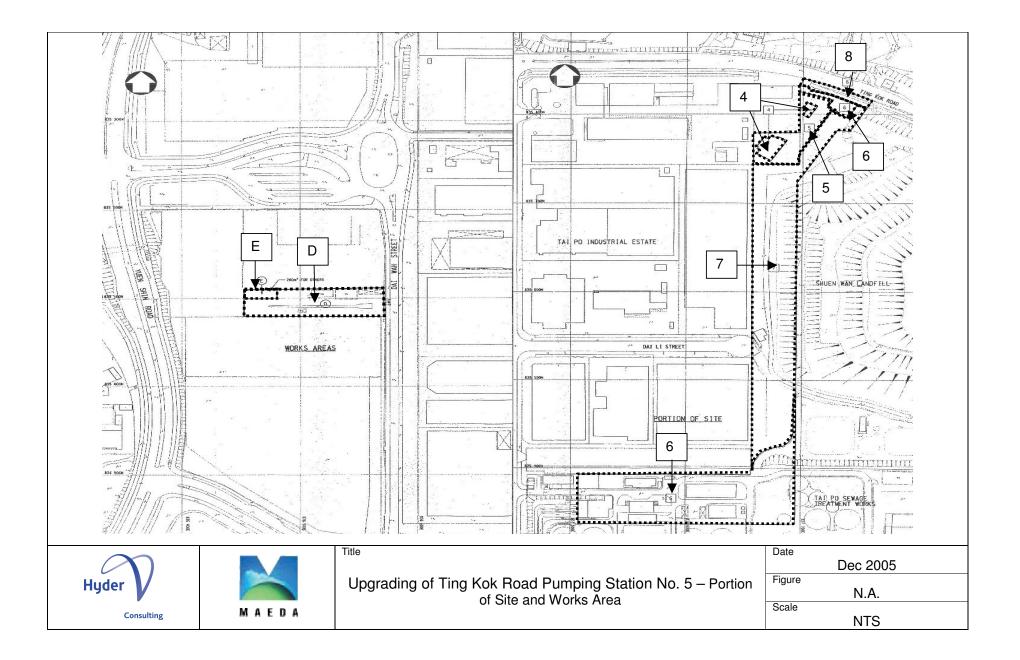


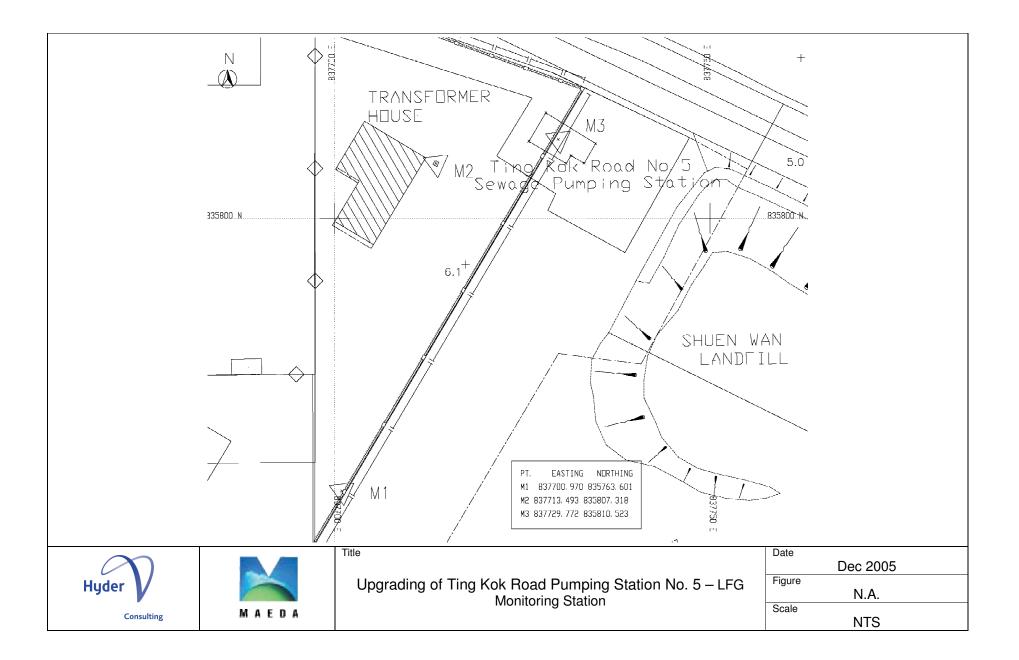
Field Measurement Recording Sheets

		<u>i</u> .			Maeda Corporation Contract No. DC/2005/01 Expansion of Shek Wu Hui Sewage Treatment Works and Upgrading of Ting Kok Road Pumping Station No.5 <u>Master Programme (Rev. 4)</u>
0 0	Task Name				
75	Stage 4 (MH10 - Existing Manhole)	Duration 37 days	Start Tue 06/11/28	Finish Preda Tue 07/1/9 774	
6	CCTV Inspection	5 days	Wed 07/1/10	Mon 07/1/15 775	
17	Ting Kok Road Pumping Station No. 5 (Pipeworks)	100 days	Tue 07/4/3	Fri 07/7/27	
18	Laying Sewer MH6 - MH5 (by trenchless method)	4 days	Tue (17/4/3	Fri 07/4/6 769	4/3 7/27
19	Construction of MH6	3 days	Sat 07/4/7	Tue 07/4/10 778	
0	Construction of MH5	3 days	Wed 07/4/11	Fri 07/4/13 779	
1	Sheet Piling and Excavation (Type E & F)	30 days	Tue 07/4/3	Mon 07/5/7 769	
2	Laying Sewer MHS - MH4	8 days	Sat 07/4/14	Mon 07/4/23 780	4/3 2000 0//
3	Construction of MH4	7 days	Tue ()7/4/24	Tue 07/5/1 782	
1	Laying Sewer MH4 - MH3				4/24 🗄 5/1
5	Construction of MH3	7 days	Wed 07/5/2	Wed 07/5/9 783	5/2 5/9
5	· · · · · · · · · · · · · · · · · · ·	7 days	Thu 07/5/10	Thu 07/5/17 784	5/10
7	Laying Sewer MH3 - MH2	5 days	Fri 07/5/18	Wed 07/5/23 785	5/18 5/23
	Construction of MH2	7 days	Thu 07/5/24	Thu 07/5/31 786	5/24
3	Laying Sewer MH2 - MH1	5 days	Fri 07/6/1	Wed 07/6/6 787	6/ 1 /6/6
°	Construction of MH1	7 days	Thu 07/6/7	Thu 07/6/14 788	677 🖥 6/14
)	Laying Sewer MH4 - F2	6 days	Fri 07/6/15	Thu 07/6/21 789	6/15
	Modification of F2	5 days	Fri 07/6/22	Wed 07/6/27 790	6/22 6/27
2	Laying Sewer P/S - MH6	7 days	Thu 07/6/28	Thu 07/7/5 791	6/28 17/15
	Testing of pipeline	5 days	Fri 07/7/6	Wed 07/7/11 792	7/6
	Laying Sewer P/S - Existing box culvert	5 days	Thu 07/7/12	Tue 07/7/17 793	7/12
	Connection to existing box culvert	5 days	Wed 07/7/18	Mon 07/7/23 794	7/18 17/23
	CCTVInspection	4 days	Tue 07/7/24	Fri 07/7/27 795	7/24 17/27
	Remaining Works for P/S and T/H	142 days	Thu 07/3/1	Mon 07/8/13	3/1 2/13
	Civil works for E&M installation (Cable Ducts & Draw Pits)	135 days	Fri 07/3/9	Mon 07/8/13	3/9
53	External Finishes	120 days	Thu 07/3/1	Wed 07/7/18	3/1
æ	Roofing Finishes	43 days	Thu 07/3/1	Thu 07/4/19	
2.	Key Date of Section 7 of the Works	1 day	Fri 07/7/27	Fri 07/7/27	3/1 4/19
	Section 8 - All Remaining Works	183 days	Thu 07/4/26	Sat 07/11/24	◆ 7/127
	E&M installation (by Others)	157 days	Thu 07/4/26	Thu 07/10/25	4/26
+-+	External Cable Duct, Drainage & Catchpit	55 days	Tue 07/8/14	Tue 07/10/16 798	4/26
E	Construction of Boundary Wall	58 days	Tue 07/8/14	Fri 07/10/19 798	8/14
	Demolition of Existing Boundary Wall	7 days	Sat 07/10/20	Sat 07/10/27 805	8/14
	Road Paving			-	10/20 🗍 10/27
		21 days	Sat 07/10/20	Tue 07/11/13 804,8	10/20
	Testing and Commissioning (by Others) Connection to MH F2	80 days	Wed 07/8/15	Thu 07/11/15	8/15
		7 days	Mon 07/7/23	Mon 07/7/30	7/23 📓 7/30
	Connection to MH1	7 days	Mon 07/7/23	Mon 07/7/30	7/23 圖→7/30
	Demolition of existing pumping pit	7 days	Tue 07/7/31	Tue 07/8/7 809,8	7/31 💁 a/7
	Grouting for Existing Sewer & Manhole	30 days	Wed 07/8/8	Tue 07/9/11 811	873 (111
	Landscaping	30 days	Wed 07/9/12	Tue 07/10/16 812	9/12 www.
	Establishment works		Wed 07/10/17	Sat 07/11/24 813	10/17
.	Key Date of Section 8 of the Works	l day	Sat 07/11/24	Sat 07/11/24	◆ 11/24
	STRATCH CONTRACTOR				
/ion 06/8	V28 Task Critical Task			Summary Bolled II	ary Rolled Up Critical Task Rolled Up Progress External Tasks Rolled Up Milestone Split Project Summary

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Section	Environmental Protection Measure	Status	Location	Implementation Agent	Implementation Stage	Relevant Legislation & Guidelines
6.1	Safety officer, trained in the use of gas detection equipment and landfill gas-related hazards should be appointed on site throughout the ground works phase. The Safety Officer should be provided with intrinsically safe portable instruments, appropriately calibrated and capable of measuring the following gases in the ranges indicated: methane 0-100% LEL and 0-100% by volume; carbon dioxide 0-100%;and oxygen 0-21%	Y				Code of practice on Safety and Health at Work in Confined Space. Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)
6.2	No smoking and naked flames should be allowed.	Y	Within			
6.2	No worker should work alone at any time in the confined area or any excavation trenches.	Y	the work site	Contractor	Construction	
6.2	Construction equipment should be equipped with a vertical exhaust at least 0.6m above ground level and/or with spark arrestors	Y				Landfill Gas
6.2	Electrical motors and electrical extension cords should be explosion-proof or intrinsically safe.	N/A				Hazard Assessment Guidance Note
6.2	Welding, flame-cutting or other hot works should only be carried out in trenches or confined spaces when controlled by a 'permit to work' procedure, properly authorized by the Safety Officer.	N/A				(EPD/TR8/97)
6.2	Forced ventilation should be required for workers, if in a trench deeper than 1m.	N/A				

Section	Environmental Protection Measure	Status	Location	Implementation Agent	Implementation Stage	Relevant Legislation & Guidelines
6.2	During piping assembly or conducting construction, all valves/seals should be closed as installed to prevent the migration of gases through the pipeline/conduit. Forced ventilation and gas monitoring should be performed before staff entering and working in large diameter pipe.		Within the work site	Contractor	Construction	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)
6.2	The Safety Officer should set down the monitoring frequency and areas prior to commencement of construction works.	Y				
6.2	Daily and routine monitoring should be carried out in all excavations.	Y				
6.2	All measurements in excavations should be made with the extended monitoring tube located not more than 10mm from the exposed ground surface. Monitoring should be performed properly to make sure that the area is free of landfill gas before any man enters the area.	Y				
6.2	For excavations deeper than 1m, measurement should be carried out:	N/A				
	 at the ground surface before excavation commences; 					
	 immediately before any worker enters the excavation; 					
	 at the beginning of each half working day (i.e morning and afternoon) for the entire period the excavation remains open; and 					
	 periodically through the working day whilst works are in the excavation. 					

Section	Environmental Protection Measure	Status	Location	Implementation Agent	Implementation Stage	Relevant Legislation & Guidelines
6.2	For excavations between 300mm and 1m deep, measurements should be carried out:	Y				
	 Directly after the excavation has been completed; and 					
	 Periodically whilst the excavation remains open. 					
6.2	The landfill gas precautionary measures involved with excavation and piping works should be included in the Safety Plan.	Y	Within the work site	Contractor	Construction	Landfill Gas Hazard Assessment
6.3	The cracks on the ground level at the working area should be monitored during ground-works construction	N/A				Guidance Note (EPD/TR8/97)
6.4	Where there are any temporary site offices, or any other buildings that have enclosed spaces with the capacity to accumulate landfill gas, then they should either:	Y				
	 Be located on an area which has been proved to be free of landfill gas and monitored manually by the Safety officer or an approved and appropriately qualified person to ensure that hazardous concentration of landfill gas does not occur; or 					
	 Be raised clear of the ground. If buildings are raised clear of the ground, a minimum, clear separation distance should be 500mm. 					
6.5	Such offices or buildings should be provided with some kinds of control of gas by mechanical means e.g. forced ventilation using fans or blowers.	Y				
6.6	Adequate fire extinguishing equipment, fire-resistant clothing and breathing apparatus (BA) sets should be made available on site.	Y				

Section	Environmental Protection Measure	Status	Location	Implementation Agent	Implementation Stage	Relevant Legislation & Guidelines
6.7	Periodic environmental monitoring report with LFG control measures evaluation during construction phase should be provided by contractor and submitted to SP/DSD and EPD.	Y				
7.1	When service voids, manholes or inspection chambers within the proposed site are entered for maintenance, monitoring and a checklist system of safety requirements should be performed before entry.	N/A	Manhole/ chamber	DSD	Operation	Code of Practice on Safety and health at Work in Confined Spaces
7.2	A procedure should be developed as part of the station operation to respond to gas detector alarms. The detection system should be maintained and calibrated regularly in accordance with the manufacturer's recommendations. In the event of a power failure, the detectors should have an 8-hour battery back-up system, and the procedures should indicate for manual monitoring in the station in the event of prolonged power failure (or longer than 8 hours).	N/A	Pumping station			
7.3	Forced ventilation should be used if methane of more than 0.5% (by volume) in the internal atmosphere (e.g. in service voids, manholes, inspection chambers or rooms as mentioned above) in detected.	N/A	Manhole/ chamber/ pumping station			
7.4	No person should enter or remain in a confined spaces or trenches where the carbon dioxide concentration exceed 1.5% (by volume).	N/A				
7.5	Oxygen concentration should be monitored and no person should enter or remain in any confined spaced or trenches where the oxygen content of air has fallen below 18% by volume.	N/A				

Section	Environmental Protection Measure	Status	Location	Implementation Agent	Implementation Stage	Relevant Legislation & Guidelines
7.6	All the access to these confined spaces would be restricted only to authorize personnel who should be aware of the LFG hazard. No member of general public should be permitted or allowed to access these confined spaces, manholes or inspection chambers.	N/A				

Note:

Y – Implemented

N – Not Implemented

N/A - Not Applicable



COPY

Environmental Management Division

CALIBRATION REPORT

Completion Date

Client : Maeda Corporation Address : Tai Po Site Office, Ting Kok Road, Tai Po

Report No. : Page No. : Issue Date :

: 22/08/2006

: CR 000075 : 1 of 2 : 23/08/2006

Received Date : 19/08/2006 Approved Signatory : Grace Ting Remarks :

Calibration Results:

Item	:	Gas Analyser model GA 2000, Geotechnical Instruments
Serial No.	:	GA 08277
Calibration Method	:	In house method (calibrated and checked with certified gas standards)
Date of Calibration	:	22/08/2006

Results:

Oxygen

· " .	Expected, %	Reading, %
	0.0	0.0
	7.7	7.1
	20.0	19.8

Methane

Expected, %	Reading, %
0.0	0.0
16.6	15.6
31.6	30.4
44.8	45.3
60.0	60.3

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 香港總部
 香港尖沙咀郵政信箱99027號•香港九龍達之路78號生產力大樓





COPY

Environmental Management Division

CALIBRATION REPORT

Client : Maeda Corporation Address : Tai Po Site Office, Ting Kok Road, Tai Po		Report No. Page No. Issue Date	: CR 000075 : 2 of 2 : 23/08/2006
Received Date : 19/08/2006 Approved Signatory : Grace Ting Remarks :	Completion Date	: 22/08/2006	

Calibration Results:

		0.0	0.0
Carbon Dioxide		Expected, %	Reading, %
Results:	:		
Date of Calibration	:	22/08/2006	
Calibration Method	:	In house method (calibrated an	d checked with certified gas standards)
Serial No.	:	GA 08277	
Item	:	Gas Analyser model GA 2000,	Geotechnical Instruments

Empeeted, 70	reouting, 70
0.0	0.0
11.1	10.6
21.3	21.1
30.1	31.2
40.0	39.9

Hong Kong Head Office 香港總部 TST P.O. Box 99027 Hong Kong • HKPC Building, 78 Tat Chee Avenue, Kowloon, Ho Tel: (852) 2788 5678 • Fax: (852) 2788 5900 • Telex: 32842 HKPC HX 香港尖沙咀郵政信箱 99027號 • 香港九龍達之路78號生產力大樓

Name of sit Date of mea	surement:	P/s No.	7	· .	· · ·	1. 1	Sampli	ng equipment	Ised.	Dation - 111	
	. 0	3/10/06			• .	•		• · · · · · · · · · · · · · · · · · · ·		Dates calibrated	<u>d</u>
					, ,		GA 200	:		22/08/06	
• •											
Sample	. Date of	Sampling	The With With	inthor	Pe	rimeter on-site a		nonitoring hol	es	l:	
Iocation Portion: 4	measurement	time	con	dition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)		
<u>тоткой. 4</u> \/ ·	03/10/06	08-514-	AND TO		79.4		0	20.1	26.4	Remark	
Portion 5	· · · ·	08.16		and the second s		ь	0	20.5		3m depth	-
IOTTION S	<u>\/</u> .	71280		/	79.4		0.	20.5	26.K	biting depth	
Portion 7		- 08118.		j	79.5		0	20.4	26.7		_
10/100 /	1	09:19		Uper -	1 St . T. Rey Provent	the second se	0	20.4	263	- 4m depth- Bm depth	
11		08:20		TE in miller	79.6	0.	0	205	26.7	3m depth 5m depth	-
17	· \/	08:21		7	78.6	1 K Q	ð í	20.1-1	26.1	4m depth	-
Portion 6		08.122		/	19.6	- 1 D	0	20.3	26.4	2m. depth	-
11	1	08:23	1 1	11: 11: 11: 11: 11: 11: 11: 11: 11: 11:	.78.4	i D	·p	20.1	26.1	2m: depth	-
		00:24			79.4	. D	0	205	26.6	Im depth	
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		1	1	in a part of		· · · · · · · · · · · · · · · · · · ·		1		······································	-
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la		·····			· · · · · · · · · · · · · · · · · · ·	1					-
eld Technic	10 1/	4 1 1		2		2. 11 4 1 1	n n Di saing		1	· · · · · · · · · · · · · · · · · · ·	

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Particular Snecification

PS/APP 1.18 - 15

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ANNEX A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

The / Pls No. 5 Name of site: Date of measurement: 03/10/06

here and here	
Sampling equipment used:	Dates calibrated
	Dutos canorateu
GA Dovo-	
	22/08/06

		1. 1			· · ·				
Q'arrara 1 a				Pe	rimeter on-site ar	1d/or off-site i	noniforing ho		j.
Sample location	, Date of	Sampling	weather		Flammableland	Carbon	hist material to farmers		· · · · · · · · · · · · · · · · · · ·
······································	measurement	time	condition.	Balance gas (%)	(methane %)	1 A.	Oxygen (%)		
Portion 4	03/10/06	13:21	All the second second	79. F.	D	· · · · ·		Temp (°C)	Remark
N7 .	1 xr			Les and Ter Land		<u> </u>	20.6	30.7	3m depth
Portion 5		13:23		1	0	6	20.3	30.7	6.5m depth
V				79.1		6	20.4	30.6	
Portion 7	1. J.	-13:24	-	- 19.1 ·		0	20,4	30,6	
'		13:24	The	- 1 1 19 7 9 W 19 19 19 19 19 19 19 19 19 19 19 19 19	· · · · · · · · · · · · · · · · · · ·	0	20.6	30.7	(en depth
<u>`'</u>		13:26		78.4	O · .	D	20.6		- 3m depth
<u></u>	N 1	13:27		78.4	NO ALLER	Ŏ.	20.5	30.6	5m depth
<u></u>	(X) ·	13:28		79.4	- + D			30,6	lem depth
Portion 6	117	13:29		79.6		0	20 1	30.6	2m depth
Y		13:30	The search of th			<u> </u>	20.5	30,6	2m : depth
		15-20	/	79.5-	. 0	0	20.6	30.6	Im depth.
				the second se	· · · · · · · · · · · · · · · · · · ·				Alpth.
		1 1 1			······································	-		· · · · ·	
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Field Technician:

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Checked by: 1 2 4

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Annex A

ANNEX A Landfill Gas Monitoring – Field Measurement Recording Sheet (Sample)

SUPER VISION

Name of site: TkR /	Plenter.	 		
Date of measurement:		· .		Sampling equipment used: Dates calibrated
	04/10/06	· .		Dates calibrated
	, , , 0	 •		GA: 2000
•			÷	GA 2000 22/08/06

	1		T							
Sample	, . . Date of	1 G1		- 1	Per	imeter on-site ar	1d/or off-site i	nonitoring hol	es	<u>.</u>
location	measurement	Sampling time	Weat	her		Flammable gas	Carbon	and another that the state atom a		
Portion 4			A		Datance gas (%)	· (methane %)	dioxide (%). O	· · ·	Temp (°C)	Remark
17.		08:08:5		in the sect of the		- <u>Ma</u>	·	20.3	26.4	3m depth
Portion 5		08:09		······································	79.5		0	20.3	26.4:	6.tm depth
D 1, 7		08:10			79.5		0	20.4	<u>26.4</u>	itm depth
Portion 7	04/10/06	08:11.	y Fine	itan Gil	1 31 795 Press	a side s	0.	20.4	26.4	<u>4m depth</u>
×7		08:12		· · · · · · · · · · · · · · · · · · ·	79.6	0	0	20.3	26.4	3m depth
N/		08-14		····	79.4		0	20:4	26.4	4m depth
Portion 6		08:15			79,5	··· 0	0	. 20.5	26.4	2m depth
<u> </u>	1 1 12	08:16			79.4	0	0	20.4	26.4	2m dipth
			the second s					20.5	26.4	In depth.
	·····		· · · · · · · · · · · · · · · · · · ·	the first		· · · · · · · · · · · · · · · · · · ·			,	:
				· · · · · · · · · · · · · · · · · · ·			-			
		4, <u>1</u> ,			S					

Checked by:

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Field Technician:

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Annex A

Annex A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: $7\kappa R / P/s N_{o} S$ Date of measurement: 04 / 10 / 06BA 2000 22 / 04 / 10 / 06

	:	·	1							
				- ,	Pei	imeter on-site at	nd/or off-site i	nonitoring hol	es	i:
Sample location	Date of measurement	Sampling		ather		Flammable	Carbon	head and the shade the logic about a		
	11casurement		- r=cono	lition	Balance gas (%)	(methane %)	dioxide (%)	Oxygen (%)	Temp (⁰C)	Remark
Portion 4		43: 10	Asta		7.9.4	0.	0	20.5	31.2	3m deptu
1.		13:17:5-	汤门。小	時代の	and free Conner	\mathcal{O}	0	20.3	21,2	A 4 4
Portion 5	· · · · · · · · · · · · · · · · · · ·	13:12			79.6		0	20.5	21,2	6.5m depth
()		13-13			74.6	- 0	. ()	20.5		1.tm depth
Portion /	-04/10/ph	13:16.	11 A. 11 F. C. 19		and all all and and and	T ARE THE O	0	20.4	<u>\$1'\$</u> 31'2	3m depth
<u></u> /	/ ///	13:25		.0	79.1-		0	20.4		A A A A A A A A A A A A A A A A A A A
1		13:16:	1		74.1	1 ()	New Or N	20.51	31.2	5m depth
1		13:17			701				31.3	4m depth
Portion 6		13-18	ः इ. २.ख्र भू		1-1·6		0	. 20.3	313	2m aepth
11		13:19			79.6	1.0	0	20.3	31.3	2m depth
		15:1]			79.1	<u>· 0</u>	B	20.4	31-2	Im depth
				· · · · · · · · · · · · · · · · · · ·						
			17						,	
-		· · · · · · · · · · · · · · · · · · ·								
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	r	,		0	· · · · ·	ار بر بار از بر 	·····	·····	h	۱ <u>ــــــــــــــــــــــــــــــــــــ</u>
Field Techni	cian: K	KIK	1			·			\wedge	No.
		0.100	A A		• • •		Checke	d by:		1
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			4.	1				!		1

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ANNEXA

PS/APP 1.18 - 15

Annex A

ANNEX A Landfill Gas Monitoring – Field Measurement Recording Sheet (Sample)

Name of site: TKR P/S N.J.			, <u>k</u>	
/1		. :	Sampling equipment used:	Dates calibrated
Date of measurement:				
5/10/06	·			
27(0106.	•	- -	AA-2000	22 18/06-
· .	•	· .		

.			- 		. 1	Per	imeter on-site ar	nd/or off-site i	nonitoring hol	es	<u>i</u> .
	Sample	Date of	Sampling	Wea	ther		Flammablelgas	Carbon	The second second star by a star of the second s		
	location	measurement	time	cond	ition	Balance gas (%)	(methane %)		Oxygen (%)	Temp (°C)	Remark
}	Port non 4	5/10/06	B: 4			71.3	C.	0	20.4	27.2	3m digth
-	· · ·	+ t)	812-			in for an	0	0	20,4	272	G.Sm depth
	Tortions	· · · · · · · · · · · · · · · · · · ·	8.20			795		Ö .	254	27.3:	1.5m dath
	<u>()</u>	· e ł · ·	5217			<u> </u>	Ø	. O	205	27.3.	4m derth
r	Tertan	× 1	8-22	······································	ing of	·····		Ö	2:0-6	273	3h denth
	1		8-24	· · · ·			· · · · · · · · · · · · · · · · · · ·	Ċ	2:04	274	5n death
	(1	r ,	8123			792	0	**** O	20.6-1	21.5	4m lowth
	t1	: ٢,	8:26			-79.3		Ū .	226	215	2m. denth
	Partino	ं र •	8:1-8	n S F		79.5	io .	· 0	20,4	275	2m denth
	< `	· ()	8231	: · · · · · · · · · · · · · · · · · · ·		79.3	0	U	20.6	276	In depth
							, 1 . í				in output
							· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
			1				· · · ·		· · ·		
		-					· · · · · · · · · · · · · · · · · · ·				
		,	,	\cap	t 1	· ····································	t in the second s		L	·	
	Field Techn	ician:	LVN	Sec.			· · · · · · · · · · · · · · · · · · ·	Clippelly	d by:	\sim	Ma .
		i i				· · · ·	- , In	CIICOR	»u u y. <u> </u>		RSO
			1		• •	•••••					n au
				,	,		• •		•		

PS/APP 1.18 - 15

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR PB NS Date of measurement:

5/10/2006

G t'	
Sampling equipment used:	Dates calibrated
GA 2000	221812006

	:	· · · ·	T		1			·		
		l			Per	imeter on-site ar	nd/or off-site i	nonitoring hol	es	
Sample	Date of	Sampling		ather		Flammable gas	Carbon	to be wanty which to a long a same a	No. No.	N
location	medsurement			and the second	Balance gas (%)	(methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Tostant	5/10/2006		AND FR	2.53.33	19.3		0	20.6	13.5.	Sin depth
().	t ,	-B244		ing and a	5	i, i i o	0	20.4	28.6:	
Portoon5	· · · · · · · · · · · · · · · · · · ·	3:4		· · · · · · · · · · · · · · · · · · ·	795		0	20.4		6.7m depth
()	· ~ · ·	13241			J.a.L		. 0		-28.5	1.5m depth
Portion	* * /	13-24-8.	118-156 A		1 1		0	20.2	-28.6	4m depth
-1		12>459		<u>.</u>	-944	0	0	201	-285	3h douth
41	×, · · ·	13/169			(() ····			20.5	-25.6-	5n depth
٤.	×,	B249					·	20:71	28-6	4m depth
DATI	· · · · · · · · · · · · · · · · · · ·	1	·· <	<u>(</u>	1105	0	0	20.P	28.7	2m donth
Yorkim h	× 1	B253		< · · · · · · · · · · · · · · · · · · ·	(1.4	1.0 .	· 0	20.7	28-5	2m depth
		13:45	×	1	19:4	. 0	Ø	20.5	2%	Im derth
	.,			·						
			1	in the second	·			1	1	:
	-	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				·····				· · · · · · · · · · · · · · · · · · ·
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	1/12	V to v	. L.	·	•				\wedge	/ /
Field Techni	1	K		···· · · ·	• • •		Checke	d by:	. Ya	TD .
	Sup	evers p.	1				· ·		Ň	RSO
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ANNEX A

Annex A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

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Name of site: TKR, P/S N.5. Date of measurement: 6/10/2006.

Sampling equipment used:	Dates calibrated
6A2000	22/8/2066

	:	· 1		······				•		
d'array 1					Per	imeter on-site at	nd/or off-site	nonitoring hol	Ad	j:
Sample location	Date of measurement	Sampli	ng We	ather	Balańce gas (%)	Flammable gas	Carbon	inter meritangian traingentaria		
Portion 4	6/10/2006	8 H	con	lition	Balance gas (%)		dioxide (%)	Oxygen (%)	Temp (°C)	Remark
[···	0110/1020				19.5		0	20.4	24.6	3m depth.
Porton 5	· i	<u>816</u>					Ç	204	246	6.5m dezzth
(1)	· ~) · · ·	-848 -848	e 7		79.5		0	20.4	24.5	1.5m desh
Parton	1 < 7	-071 A 520			79.4	· · · · · · · · · · · · · · · · · · ·	. O	20.5	24.6	4m depth
<u> </u>	1 * 1 :	8,20	h		79.5	and the second day of	0,	224	24.6	3m depth
۲.۱	×,1 .	821		17:	195	0.	0	224	z45	5m desoth
(,		8-122				j≿, Ø ∓		23:50	24,5	4m depoh
Portanto	2	822		- <u></u>	7124	······································	0	205	24.6	2 h deith
<	<. / L	: .		1. j. r	795.1.	1.0	0	224	24,6:	2 mi depth
		5035			1.5		Ő	20.4.	245	I'm dezoth
						· · · · ·				
		3		17	· · · · · · · · · · · · · · · · · · ·					:
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ANNEX A Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

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Name of site: TKR Pls N.5 Sampling equipment used: Date of measurement: Dates calibrated 6/10/2006 GA2000

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					Per	imeter on-site ar	nd/or off-site t	nonitoring hol	es	į.
Sample location	Date of measurement	Sampling time	We cone	ather		Flammable gas	Carbon	and marked that the other and		
Portion 4	6/10/2006			uuon	Balance gas (%)	<u>(methane %)</u>	dioxide (%)		Temp (°C)	Remark
[, .		Fill Fill	SF. t.		11-113 ·····	0		20.6	263	3 m ilesth
Portron 5	i . i	17:20	- 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	794	نيب. ن	0	205	263:	6.5m depth
C .	1	17:21	۲ .				0.	20.5	26.4:	15m depth
Portion	ţ,,	13223	::::::::::::::::::::::::::::::::::::::	tiper of	1. 1. T. C. P.		0	20.6	26.4	4 m douth
۲٦		17:25	· · · ·		-79 11	O L	0	20.6	26,2	Zm depth
< ر	< I	13-25		The second	794	0 · · · ·	<u> 0 </u>	205	263	5m depath
ς,	×, 1	1326	,; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	· · · · · · · · · · · · · · · · · · ·	+793	- + O	0	20,51	26.2	4-m depth
Fortin 6	· · · · · · · · · · · · · · · · · · ·	13-30	<u>۲</u>		-193	1:0	. 0	·	2(2	2m depth
ر .	· ' ' ·	13-22	· · · · ·		1. 7931	0	0	2000	26.4:	2m depth
			. t			,		2016	26.3	I'm doth
		L.				· · · · · · · · · · · · · · · · · · ·		· · ·		
	· · ·	1	4						·	
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Field Techni	cian: L	K.K.	!	, 			· · · · · · · · · · · · · · · · · · ·		Ň	N.S.
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Annex A

22/8/2006-

ANNEX A Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR PLS N.5. Date of measurement:		Sampling equipment used:	Dates calibrated
69-10-2006	· · ·		

G: A2000

Sample	Date of	Samilina	Weathe		Per	imeter on-site ar	1d/or off-site	nonitoring hol	es	<u>}</u> .
location	measurement	time	conditio	n	Balance gas (%)	Flammable gas	Carbon dioxide (%)	Ovigon(0/)		
Portion4	9/10/2006	8423	Andrew Formers		79.4	Jan S	0	20.5	Temp (°C) 25.5	Remark 3m degth
RI.		8524	SE ST	- 71 - Log	93	0	Ü	20.6	25.5	6.5m depth
Porton 5	- 1	8426	<u> </u>	i 	713		0	20.6	25.6	1.5m depth
PortronT	· = / · · ·	8:27			792	<u> </u>	U	20.7	25.6	the death
1 en right	1 = 1	822q	······································				0,	20.5	25.7	3m depth
CI	< (.	8720			11,7		O Start	20.5	25.5	5m douth
C1	· « (8228		· · · · ·	-1+02			20.7	25.5	4th desth
Partronb	<	\$522		i : :	79.4	i o	0	. 20.6	25.6	2n depath
<u> </u>	(1	8427			79.2	<u>0</u>	Ŭ Û	225	25.5	- Zon depth
		· · · · · ·						20.7	2/11	I'm desth
	· · · · ·							······································		<u>}</u> :
	······································							· · ·		
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eld Technic	clan: K	14.15	····	, \				d by:		m.

Particular Specification

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PS/APP 1.18-15

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Annex A

Annex A

18/2006

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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

9-10-2006

Name of site: TKR P/S N.5. Date of measurement:

ANNEX A

	•	, i,		
		;	Sampling equipment used: Dates	calibrated
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1 ¹		:	GAJ000 22/5	12001
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				1	······································				
Sample				Pe	rimeter on-site ar	nd/or off-site i	nonitoring hol	es	<u>ī</u> :
location	Date of	Sampling	Weather		Flammable gas	Carbon	The matrix span tax spectrum a	Sea leas a	
	measurement	time	condition	Balance gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Tomm (°C)	
Portion 4	9.1/10/2006	13:216	and Fine	493	5 O			Temp (°C)	Remark
31.			the part of the second second second		<u>ba</u> O	0	20.6	26.2	3m depth
Portron 5		1.3511		193	U	0	20.6	26.3	6.5m darth
		13:19	1	79.4		0	20.5	12	
4	· (1 · · ·	13221	Č	193	······································	·		262:	1.5m depth
PortronT	141	1323	TP-TEC Support			<u> </u>	20.6	26,2	I'm douth
		1.1		1 margar	1 ISS 140	0.	20,7	26.3	3m denth
<u>e1</u>		1324		79.4	0	. 0	325	15	
()		13225	A CONTRACTOR	143		Series There		26.5	5m depth
G		1326		1 202	The second secon	0	20:71	26.4	4m douth
DII		1		192		Ü	. 20.6	2602	2m donth
Portronb		B:27		7954	10	· 0	22.5	26.4:	
	(4	13:22		792	- O	Ö	20,7		2n denth
								263	I'm death.
		L			· · · · ·				
			· · · · · · · · · · · · · · · · · · ·						:
				1) 					·
		to the second			·		· .		
1									
		ŀ	17			·	······································		
Field Tech	nician: K_ [K. K	1. 1	. ,					N.
			- line -	· · ·		Checke	d by:	A	260

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ANNEX A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR P/S Date of measurement: N.J.

Date of mea	surement:	Not.		•	· .	•	Samplit	ig equipment i	ised:	Dates calibrated
	. \ 0-	-10-2006	>		· · ·		GiA	2.000		22/8/2006.
			·	•		•				8/2000
					Per	imeter on-site ar	nd/or off-site i	nonitoring hol	es	<u>į:</u>
Sample location	. Date of measurement	Sampling		ther		Flammable gas	Carbon	and construction for the action of the		
Portion 4	10/10/2006	······································	1. • 1 f • • • • • • • • • • • • • • • • •	1010	Balance gas (%)	<u>~ (methane %)</u>	dioxide (%)		Temp (°C)	Remark
Q		8125	AND THE		terning for the second		0	20.6	258	3 m depth
Portron 5	i eq	8526	1.1.1.		79.4		0 0	205	25.8:	65m depth
RL 1	<u> </u>	8:27			79.5		. 0	2.24	25.7:	1.5m depth
Portion		8-27			1. 17. 7. 9. 4 PROVIDE	™ 15% ¹ O.	0	20.5	260	3m depth
*1		<u>8526.</u>			- 19,40 - 19,5		0	205	25.9	5m denth
()	. č. j	8:26			794	0. *1 . M 170	0	20:4-1	25.9	4m donth
Portronb	· · · · · · · · · · · · · · · · · · ·	8:27		1	795	i 0	. 0	<u>33.5</u> 20.4	26.0	2m depth
ــــــــــــــــــــــــــــــــــــــ		8229			79.6	Ö	0	20.3	25.8	im denth
					1	.'t 1		•	, , , , , , , , , , , , , , , , , , ,	
		· · · ·		Print pd.					· · · ·	:
		1						•		

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Sampling equipment used:

Field Technician:

Annex A

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ANNEXA Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample) TER P/S No. J Name of site: Sampling equipment used: Date of measurement: Dates calibrated 10/10/2006

		•		1					1 1 1 0
				Per	imeter on-site ar	d/or off gite	monitoria la 1		· · · · · · · · · · · · · · · · · · ·
Sample location	Date of measurement	Sampling time	Weather		Flammable gas	Carbon	and another affects does have a set of the	.es	
Portion4		13: 20	condition	Balance gas (%)	(methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
10110014		13: 20 FL 5-	A difference of the second sec	79.2			20.7	29.3	3m depth
Porton 5	· i ·	13 : 27		70.7		0	-20.7	29.4	6.5m depth
V		13:23		79.3	·	0.	206	29.4	1.5m depth
Portion 7		13:34	The second second	11.5 1.3 1.3 1.3 1.5	····0	0	20.6	<u> </u>	4m depth
~/	10/10/06	13:25	Fine	78.2		0.	20.6	-2 <u>5</u> <u>k</u>	3m depth
Ŋ	· · · · ·	13:26		19.3	0	<u> </u>	20.7	25.4	5m depth
V		13:27		79.2	0	0	20.7	27.4	from depth
Portionb	· / :	13:28	2	79.3	1.0	· 0	20.6	29.4	2m depth
V.		13:29		79.2	. 0	Ö	20.6	251.	2m depth
		· · · · ·					20.6		Im depth.
·					f		······································		<u>></u>
							·	·····	
				· · · · · · · · · · · · · · · · · · ·			· · ·		· · · · · · · · · · · · · · · · · · ·
		•		· · · · · · · · · · · · · · · · · · ·	to per to the second se	r ar Stolega e	· · · · · · · · · · · · · · · · · · ·	·	· · · · ·
ield Techni	cian: <u>K-K</u>	<u>, K</u>		· · · ·		•	d by:	· . /	And
	н ,	1) 1					۰، ۲۰۰۰ بر ۲ ۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰		RSO

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Annex A

22/08/06

PS/APP 1.18 - 15

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

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Name of site: TKR P/1. No.Y Date of measurement: "/10/2006

ANNEX A

·	. ;	Sampling equipment used:	Dates calibrated
· ·		GA 2000	
: ·	÷		22/8/200b

Sample					Per	rimeter on-site ar	nd/or off-site i	nonitoring hol	esi	P.
location	Date of measurement	Sampling	We	ather		Flammable gas	Carbon	and water allow the meaning of	··· · · ·	
Portion 4		time	-ir-cone	lition	Balance gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
tor flon 4	1/10/06	08.10	Addition of	1	79.3	Ð	6	20.6	25.3	3m depth
				The star when	ant R 2 and the	0	0	20.7	25.3	
Portion 1	· · · ·	Drill			78.3		D'	20.6	23.6	6.5m depth
1/	. 1/	08:13			78.3		. 0	20.6	23.9	1. tim depth
Portim 7		08:14		- 10 h	1 11 - 78.3 - Proven	5 15x 5.50	0	20.6		tim depth
11		08:11	- fun	2	78.2	· · · · · · · · · · · · · · · · · · ·	Ø		24.6	3m depth
·/		08:16			-18-2		New Office	20.7.	25.3	5m dopth
<u></u>	17	08:17	· · · · ·		78.2			20.7	25.4	4m depth
Portin 6	1	08:18			78.2	i o	0	. 20.7	24.6	2m depth
17	11	08:19		1. p. a			0	20.7	24.1,	2m depth
			/	i	79.2	. 0	6	20.7	28.4	Im depth
		L	······································	· · · · · · · · · · · · · · · · · · ·		i		·		
		· · · .	·		1			1		:
		· · · · · · · · · · · · · · · · · · ·						· · ·		·
	,	1. 11. j								
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Field Technician:

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Annex A

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ANNEX A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

yr:

Name of site: TKR P(5 N.5)Date of measurement: 11/10/2006.

· · · · ·	· · ·	
	Sampling equipment used:	Dates calibrated
•	GA2000	22/8/2006.

	:	ŀ.	T	·····			·			
	- Colomba			· · ·	Pei	imeter on-site a	nd/or off-site i	nonitoring hol	es	Į:
Sample location	. Date of	Sampling	We	ather		Flammablalaad	Carbon	and marker that be again and	··· · · ·	
	medsurement	time			Balance gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Porton4	· 11/10/06	Bilts	Ardenter Fr	NN-53 ANT	1.9.5		O	20.4	26.2	3m depth
$\overline{\Omega}$	÷ د ب	17:17.0		當時		(j	C	204	263:	
Portins		13219			794		. U	· · · · ·	263:	6.5 m daph
()	, <i>* i</i>	1320			79.4		. 0	205	<u></u>	15m depath
Portion	· · · · · · · · · · · · · · · · · · ·	BYZ:1.	计算一次间 國		1. 17.9.5 . print		· · · ·	20,5	262	the douth
 		3:22		1			0	224	263	3m depth
۲.)		13223		· · · · · · · · · · · ·	- 19.6		O ····	20.3	263	5m depth
د ۲	· ۲ .	1 1	<u>,</u>					20,51	268	4m depth
Portrant		B723		1	. 19.6	······	0	2°3	263	2m depth
L.	1 a	13:24			79.5	1.0		20.4	263:	2m depth
< ر		1325	· · · ·	<u> </u>		. 0	0	203	262	
		· · · · · · · · · · · · · · · · · · ·		, , , , <u>,</u> , , , , , , , , , , , , , ,						In depth.
				I had been				1	•	:
						······································				
		1		······································	<u>I</u>		· · ·			
DV=1.1755-1-1	cian: <u>K</u> .	1 · b:	····	, n .	•	•	2 Contraction of the second			N .
riela techni				······································		· · · · · · · · · · · · · · · · · · ·		d by:	<i>\</i>	7220
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PS/APP 1.18-15

Particular Specification

Annex	A
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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

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Name of site: TKR P/S M5. Date of measurement:

12/10/2006

ANNEXA

Sampling equipment used:	Dates calibrated
G742000	22/8/2006

Sample Date of Sampling Weather Haminable gas Carbon dioxide (%) Oxygen (%) Temp (°C) Remark location measurement time condition Balance gas (%) (methane %) dioxide (%) Oxygen (%) Temp (°C) Remark Proton 4 12/10/06 8920 400 793 0 0 20.6 266 7m doft C
$10 \text{ cation measurement time condition Balance gas (%) (methane %) Carbon dioxide (%) Oxygen (%) Temp (°C) Remark (%) (%) Temp (°C) Remark (%) (%) Temp (°C) Remark (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\frac{107m^{-1}}{12/10/-6} \frac{12/10/-6}{8225} \frac{825}{11} \frac{793}{11} \frac{793}{10} \frac{0}{10} \frac{0}{10} \frac{20.6}{20.6} \frac{26.6}{26.6} \frac{7m}{260} \frac{1}{10} \frac{1}{$
$\frac{1}{100} \frac{1}{100} \frac{1}$
$\frac{10005}{1005} - \frac{1000}{1000} = \frac{1000}{100$
Perton 1 8/22 - 793 0 0 206 26.7 4m dyth
Poton 200 20. 4th doubt
26.5 36 100
$a = \frac{1}{2} $
SI ZA 270 Am dist
794
101.00 11 082.6 79.4 10 0 225 217
793 0 0 2691
man and the set of the
Field Technician: K. K. K.
Field Technician: C. C. K. Checked by
Checkell Dy.

Annex

Dates calibrated

Sampling equipment used:

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

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Name of site: TKR P/S No5. Date of measurement: 12-10-2006

		10 2006			6 ¹	•	· G	A2000		i / /
					1	÷	S J	12000		22/8/2006
	:		· · · · · · · · · · · · · · · · · · ·	· ·	1 				······	
·	1				Pei	imeter on-site a	nd/or off-site	monifoning	· · · · · · · · · · · · · · · · · · ·	£*
Sample	Date of	Sampling	We	ather		Flammable gas	Control Siles	nom wing nor	es	1.
location	ineasurement	time	con	dition .	Balance gas (%)	(methane %)	Carbon		· ·	
tortron 4	1=/10/06	13:25			Daranec gas (70)	(metnane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
1	12/10/50		AT TAK	the state of the	7.9.4	J. C	C '	20.5	28.6	3m depath
1	r x y	13:26	30 se	计常 的 可 化基	793	o o	C	2016		
Porton 5	i e /	13:30	1-11-17		79.3	0	C i	206	28.6	6.5m depth
¢7	, s ,	- 13:31			79.3				28.	1.5m douth
Portion			·	ligetor en		······	. 0	20,6	28.1	4m depth
- (0) (0) / - ()	1.8.1		1 10° . 10 . 100		17.9.4 mar	- 15x 1.0	0 .	20.5	28.7	3m death
	171	13:32	- , :	·		. O	0	20.5	28.	
c/	-1	1326			793	Q. ⁴ €	New Original States	25.61		5m depth
C	- /	17:33	1 21		:79.3:	······································	C ····································		28.	4m depth
Tortimb	1 * /	13235	- 		-79/1	10		20.6	28-	2m douth
			· · · ·		1.1		· Ó	205	28.8	2m depth
<u> </u>		13:36.	: ' -) :		193.	0	6	20.6		**
			. 6			: ب ا :			28.	Im about.
		k	The second s	Jana Art		·		·		<u></u>
		1		1					·	
	······································	······	·:					•		
					· · · · · · · · · · · · · · · · · · ·		-	· .		· · · · · · · · · · · · · · · · · · ·
		,					·····]	· · · · · · · · · · · · · · · · · · ·
Riald The last	cian: <u>K.</u>	r len	in the	3 .			2 · · · · · · · · · · · · · · · · · · ·		<u>_</u>	
rueia techni	cian : <u>$1 \leq 1$</u>	1. A-	1.	······································	• • •	h / [da]		d by::::	<i>D</i>	XXX
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ANNEXA

PS/APP 1.18 - 15

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ANNEX A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TR P/S No.5. Date of measurement:

3-10-2006

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Dates calibrated
Dates canorated
22 (8/2006.

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1 1	1						·		
G ' 1	1	 		Pe	rimèter on-site ai	1d/or off-site i	nonitoring hol	es	j:
Sample location	Date of measurement	Sampling	Weather		Flammable gas	Carbon	and another opposite the logic action of the		
Partion 4		time	The state of the s	Balance gas (%)		dioxide (%)	Oxygen (%)	Temp (°C)	Remark
<u>((()))</u>	13-10-2006	<u>-8721</u>	Artist Financia	1-7-5	0		20.6	26.5	3m depth
Portrans		8452		and a man of get for the second	0	0	205	26.3:	T
ł		8/23		74.5		0	j. 2.6	26.5:	1.5m depth
PatronT		8124		7.7.3.	·····	0	20,6	263	4m dezek
	- 1	8726.		1 1 1 1 7 9 4 4 1 m mar	- m 140	0.	205	2/25	3m depath
< / < 1	<u> </u>	8127		1793	0	0	226	246	r ind
		828		79.4		*** 0°	23:51	26.5	11
. 4	× r	8:28		1 79B	0	0	226	26.5	0.0
Portra 6	· · ·	831	2	79.4	10	· D	205	263:	
	L 4	8:26	and a start of the second	79.2	0	D	20/	z6.4	2m depth
					21 i		. 206	20-	Im dept
			The second		<u>.</u>		· · · · · · · · · · · · · · · · · · ·		<u> </u>
	, ș	1 • •		1	······································			;	
		1. 1							

Field Technician: K.K.K

Annex A

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ANNEX A Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR PLS No5,			·
Date of measurement:	;	Sampling equipment used:	Dates calibrated
13-10-2006	_		
		G1A2000	22/8/2006.

	· · · · · · · · · · · · · · · · · · ·	· ·			····					
	1				Per	imeter on-site ar	nd/or off-site i	nonitoring hol	es	Ē.
Sample location	Date of measurement	Sampling time	Weathe			Flammable gas	Carbon	and marks plants for the second as	··· ·· · ·	
Portion 4	13-10-2006	1 1 1 N	conditio		Balance gas (%)	(methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
<u> </u>	13 10-2030		EPO CENSE	Array 1. 1	7.9.4	0	G	20.5	27,2	3m derth
Portrons	i ()	1327		10 13 H	7950	<i>O</i>	G	20.5	273:	6.5m depth
(/	, c, · .	3>25			113		<u> </u>	20.6	22	1.5m depth
Portron 7	() · · ·		18- 10 1 1018 - 0	· · · · · · · · · · · · · · · · · · ·	15	·	0	20,4	273	4m derth
()		13/20		<u>.</u>	179 Prove		0	205	<u> Z]3</u>	- 2m depth
- ,	τ ,	13:31			11,1		0	205	17.3	-5m digth
, 7	- /				793	11 174 1 - + 6	•	20,61	27.9	4m depoth
Portron 6	- /	13238	F . 8 7		79.5	i 0	0	. 2206	23	2m. dejth
57			(1)		792"	0	- O G	22.5	27.3	2n depth
							~	226	27.3	- In depth
				 		· · · · · · · · · · · · · · · · · · ·		1.		<u></u>
		1			· · · · · · · · · · · · · · · · · · ·		•			
		1. 11.								
	, . <u>.</u>	, <u>1</u>					<i>.</i>			
Field Techni	cian: 14-14	. K	····	si-j						A
		er Visu	0	· · · · ·	· · ·	р р р р р р р р р р р р р р р р р р р	Checke	d by:		t Pr
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Annex A

Annex A

22/8/2006.

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

14-10-2006

Name of site: TKR P/S No5. Date of measurement:

ANNEXA

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Sampling equipment used: Dates calibrated

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S'amminia					Per	imeter on-site	and/or off-site i	nonitoring ho	es	<u>i</u> :
Sample location	. Date of	Sampling	We			Flammable	is Carbon	haden and the appendice for a large series of	1992 - 1992 - 1997 - 19	
Portron4	measurement	1 · · · · · · · · · · · · · · · · · · ·	1		Balance gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	· Remark
	18:14-10-200b		Andrew F	We have	19.3	Jan S.	0	20.6	27.2	<i>A</i>
Portion 4		\$12P		più oprida		6	0	20,7	17.2	J 3mdg
Portion 5	<u> </u>	827	· · · · · · · · · · · · · · · · · · ·	ʻ1 [,]	79.2	G	0		274:	9.5m dyoth
Portion	. و . ه	526	· · · · ·		792	······································	. 0	20.7		-1.5m degoth
	- 1 · · ·	882-1	11 1- 1 E. 1 . E.M.	1.40 1.50 1.50		······································	-	-55P	27.3	- 4m depth
در					793	to the second	. 0	20,6	27.4	3h depth
C1			<u> </u>	TE A TEL		0	0	20.6	272	- 5m dept
RII		807		1	744		10 March 10	205	27.4	4m depth
Toutin b		\$320		5	793	· · · · · · · · · · · · · · · · · · ·	0	. 20.6	23	2m durth
Patrice.	<u>`````````````````````````````````````</u>	8-233		1	793	1:0	· U	20.6	27.Z	· · · · · · · · · · · · · · · · · · ·
tortoons	c (8-28	(C.)	41- j	792	0	Ő	1	21.2	2m depth
			. t		· · · · · · · · · · · · · · · · · · ·	,* 1 ,	1	200		In dopth
				Jan La T	And a second second	· · ·		<u>.</u>		
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Field Techni	cian:	4	!··· .	· · ·	· · · ·	/ . d.	C'heolte	d by:	P	the

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ANNEX A Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Y

Name of site: TKRP/S Not Date

Date of mea	asurement:	> No.5.	, • •	· · ·		·. ;	Sampli	ng equipment	used:	Dates calibrated
		-10-2-	(
		(° ~ 20)	5.			• •	GA	2000		12/8/2006
·					;		L			· · · · · · · · · · · · · · · · · · ·
	:				n	ution into a second	1/ 22: 1		•	
Sample	Date of	Sampling	· · · · · · · · · · · · · · · · · · ·	1.11	Pe	inneter on-site	and/or off-site	monitoring ho	the second se	1.
location	measurement	time				Flammable ga		a low and called the grantes a	and the state	
			cón	1 110 11 11 11	Balance gas (%)		dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Portron4	14-10-2006		1		and the second data and the se	and C	0	206	18.5	Zm dept
Portin 14		1321	36 - tr	· 清朝 何(時上京)	1		C	205		
Porton 5	~1	1323 8	1.		793				28.3.	I'm depth
		13:29	······································	1			0	20.6	28.3	1.5 m depth
Portan 7				<u> </u>	1-713	· · · C	0	20.6	28.6	4m douth
•	· · · · · · · · · · · · · · · · · · ·	13/30	11 pr 17 k . 19		1: 193 -	19 Lag 250	. 0	22.6	28.7	3 m depth
. *1		13:32			79.4	O i	0	225		T I I
11	- 1	13:33	τ. τ. τ.		9,4	D.	A DE CONTRACT	20,5	287	5m depeth
۲.	14	13-34	*		F1	- 10	6		28.3	4n depth
Portron 6	• • •		;: ઉત્કુત્વ		793	10		. 20.6	28.5	2m durth
	<u> </u>	B>37	I	Ruje	713	·	. 6	20,6	28.6	2m derth
۲.	< .	13:30	1 × 1		79,44	0	6	20,5		
-				the second			i		285	I'm depth.
	1. · ·		· · · · ·		the second se	· ·	· ·			
	······	1				<u></u> 	*			
			1	 			•			
	<u> </u>					<u>.</u>	1			
		ı			1		······	·····		

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Field Technician: 15

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Annex A

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ANNEXA Landfill Gas Monitoring – Field Measurement Recording Sheet (Sample)

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Vame of site Date of mea	e: TKR surement:				3	Samplit	ng equipment i	ısed:	Dates calibrated
	· [6-10-2:	000	· · · · · · · · · · · · · · · · · · ·		<u> </u>	2000		22/18/2066
Sample location	Date of measurement	Sampling time	Weather		imetei on-site a Flammable gas (methane %)	Carbon	nonitoring hol Oxygen (%)		3:
stron4	16-10-206	8:21	AND THUR	1-1-1-1-	0	0	20.5	<u>Тетр (°C)</u>	Remark 3n douth
it.	e) 	8224		-79.3	0	0	20.6	253	9 m. dopth
Front	, c1 · .	8:25		793	······································	0	20.6	253	1.5m depth 4m depth
<u>ч</u> Ч		826.		1	- 155 0	0	205	253	3m depth
<u>c1</u> 2 ↓ (< 1	\$ 128				0	20.5	25,4	5m depth 4m depth
iertrenb	· · · · · · · · · · · · · · · · · · ·	5730 5721		1 7924	0	0	. 23.5	253	2m depth
extra 5	<u>ر ر</u>	8125		7972	0	0	20,5	25,2	2m dept
		· · · · · · · · · · · · · · · · · · ·						~	I'm degath
		!						· · · · · · · · · · · · · · · · · · ·	
	i				1				

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Innex A

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ANNEXA Landfill Gas Monitoring – Field Measurement Recording Sheet (Sample)

Name of site: TKR P/S N.S. Date of measurement:

e of measurement;	
	16-10-2-06.

				1
	·	;		Sampling equipment used:
			•	the second se
				P 3
1			-	CA
		÷		hA20.00

	:	T	·····							
Sample					Per	imèter on-site a	nd/or off-site i	nonitoring ho	eq	
location	Date of measurement	Sampli time	ng	ather			Carbon		.08	
Portan 4	16-10-2006			dition	Balance gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
-1001 (0X) / 51 .			All the second second		-19,4 		0	205	267	3h derth
Portion 5	; ; ; ; ; ; ; ; ;	1320	1 . 1.5 (0.5.)	[[許麗 台] 河 L 法国		D	0	20.4	267	9 m depth
Portion	. * 1				79.3	. o	<u> </u>	20.6	26.6	1.5m depth
10vicon J		13212			795	····,-····	0	20.4	21.4	4m dorth
		17:12	>		1 1 mg 9 2 10 1 10 10	- 455 5.50	0	20,1	265	3m depth
61		1 7/10	2 ***		-192		0	206	265	5m derth
Portronto	· · ·	13:15	intration and		-19-5-	10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 ·*· ·	2014	26.4	- 4m deroth
10V [10] 0.					79.4		0	20.5	26.4	2n denth
Portron5	* 1	-732/19			7924	I. 0	. 0	20.5	267:	
107 11011		13:1		1	195	0	O	20.4	26.4	- in depth
				in the second		÷				- In Appin
				A had faiting						· · · · · · · · · · · · · · · · · · ·
					5 ** _ 45 45.	· · · · · · · · · · · · · · · · · · ·		:		

Field Technician: K.K.K.K.

Checked by:

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Annex A

Annex A

Dates calibrated

22/8/2006

ANNEX A Landfill Gas Monitoring – Field Measurement Recording Sheet (Sample)

Name of site: TKR P/S No.5. Date of measurement: Sampling equipment used: Dates calibrated 17-10-2006 GiA2000 22/8/2006 Perimeter on-site and/or off-site monitoring holes i. Sample Date of Sampling Weather Flammable gas Carbon ··· · · · location measurement Balance gas (%) (methane %) time dioxide (%) Oxygen (%) Pertion 4 79.6 Temp (°C) 17-10-2006 Remark 8:17 Ø 203 266 3m dijoth Fin A SHARE MALE τι . \$91 Tam 0 20.4 Porton 5 0 26.6 9 midersth 5 **8**5 - 1 ٩. 820 0 225 0 5n depth Portion , 51 8518 701-· 0 0 56 202 4m dept t se e 1 This ? 1. 79:4 . Provali 15 1:0 200 3m depth 0 26,4 1<r с, 882 Ø 225 10. 263 < , ' 5m depth 5:21 ۲. a film 793 0 ° n 2016 Portion 6 26.2 4m dopth ίς, 8/29 715 - 10 σ 204 26.4 ές, 2m dest 8-12-5 Пo 792. Q 226 265: Portion 5 1 < 4 2th length <u> 8: 19</u> J. 5) Õ 203 265 I'm derth. . 1 ·.. . . . : · -=/.-... ÷ L ÷ • • 1 1 1 1 1 • ; i 1.1.1 an a Asian ang

Field Technician: K.K.K.

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Annex A

ANNEXA Landfill Gas Monitoring – Field Measurement Recording Sheet (Sample)

SUPEV. Visur

Name of site: TKR P/S N.J. Date of measurement: Sampling equipment used: Dates calibrated 17-10-2006. hA=2000 22/8/206. Perimeter on-site and/or off-site monitoring holes Sampling Weather time Flammable gas time fondition Balance gas (%) (methane %) Sample 3: . Date of Flammable gas Carbon ι. location measurement dioxide (%) Oxygen (%) Portan4 AND FALL Temp (°C) 740-2006 0 Remark 792 G <u>20.6</u> 27.1 11. 1 ., 3m depth 13222 0 0 Portions 206 151 273 11. 9 m dowth 13:23 ···· 0 794 0 27.5 Portron 205 1.5m depth 15 793 13:23 ، رے ا <u>΄</u> σ. 226 G 272 4m douth 1 (1 The part of ... 13>24 1 179 4 March 18 10 Ο 205 17) er 27 3m devith 13=25 6. 27 0 235 derth. (1 5h 13:26 198 < 1 S. 0 27.6 226 يور الل Portion 6 irr derff 13:27 ~ < { 793 1 0 0 20.(7 =75 C1 · • 1 13:27 derth 7956 $l \sigma$ 20.5 Porton 5 6 57 1 4 derth (3:24 100 9.2" \mathbf{O} 0 20.6 57 <u>h</u>.----1.4.2 · 5 1 - 17 1.1111.04 i 4. ÷ A. A. V . AN L - MAY Checked by:

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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)-

Name of site: Tk Date of measurement:

18-10-2006,

TKR PLS N.5.

Sampling equipment used:	Dates calibrated
612000	22/18/2006.
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Como 1		ļ		·· · · ·	Per	imeteiron-site ar	1d/or off-site i	noniforing hol	Qd	j:
Sample location	Date of	Sampling	Weath	ier	Balańce ĝas (%)	Flammable gas	Carbon		×- · · · ·	
	measurement	time	conditi	lon	Balance gas (%)	· (methane %)	dioxide (%)	$O_{\rm Wiggen}$	The (90)	
Pertron 4	18-10-2016	8:14	And THINK	ent a la sul	793			1 · · · · · · · · · · · · · · · · · · ·	Temp (°C)	Remark
< ¥ .	1				1. 1. V 10 1		Ċ,	20.6	27.0	3m depth
Portron 5	1 2	8725	- f		a market for the second s	1972 O	0	20.3	26.8:	7 m dept
Pertion]						. 0	0	20.6	26.9	
		- 827-				··· , ··· O'	0	20.7	3.7.6	- Sh depith
*1		Sm.8	11 p-1-54 with the		1 1 - 7.9.4 marine	·	· 0	20,5	15	the depath
. <1	1 * 1	8=31			79.3	Caller & O	Ū.	20.6	26.8	Sn depth
د ،	× , · ·	55/30		·····	1/3		***** O E***		<u> 261</u>	5m depth
Portronb		•					<u> </u>	20.4	26.8	4m death
		8523	·		13	·····	0	20.6	26.9	2m depth
<u> </u>		5-3:4			- 29.4	I: 0	` O	20.5	268	
Portrons	- 1	8-226.			793	0	Ö	20.6	1 .	2nd Lepth
			- h		· · · ·			2-00	26.9	In depth.
	1.	1.	······································	1	lana ana ana ana ana ana ana ana ana ana	÷				1
		j,			· · · · · · · · · · · · · · · · · · ·	·				:
	· · ·	·	4-1-		· · · · · · · · · · · · · · · · · · ·		3	•		
	<u>i</u> . ·			121 1	1 ···					
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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR P/S Date of measurement:

18-10-2006	18-	ĺ	0-200	6
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Dates calibrated
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Annex A

Sample Date of Sampling Weather	
Sample Date of Sampling to Watter	
location measurement time. Weather	
Balance gas (%) (methane %) dioxide (%) Orwann (%)	
10 1001 18-10-2006 12 of the transmission 79-2	ħ
1 1 The share share and the share sh	th
Retarts	7th
IN AMILIAN ALL AND ALL	with
1 1202 120 10 10 10 20.6 21.7 Am	erth
	'1D)
	l
	11
16/1800 - 3-29	
	' n
Station 5 11 million de 212 de 212 de	pth_
2007 Zlat In der	2

Field Technician:

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Landfill Gas Monitoring - Field Measurement Recording Sheef (Sample)

Haer/

Name of site: TKR Pls N.5. Date of measurement:

[9-	1.0-20	d'r
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Sampling equipment used:	Dates calibrated
	Dates canorated
A	
- UTA-2000	22/2/2
	2-18/2001-

[,		•	ŀ .	1		· · · · ·	······································	l	
Clarate 1					Pe	imeter on-site at	nd/or off-site i	nonitoring ho	es	
Sample location	Date of measurement	Sampling time	g We			Flammable bas	Carbon	he be another all all the forget and the s	×	
Portron 4	(9+10-20-6	80			Balance gas (%)			Oxygen (%)	Temp (°C)	Remark
51.		82		and the second s		10 ·····	0 0	20.4	26.4	- 3m dapth
Portron 5	-1.	8-23	· · · · · · · · · · · · · · · · · · ·	<u>, , , , , , , , , , , , , , , , , , , </u>	79.4		Ū ·	20,5	2hg	- 9 hr depth
Porton		- <u>X26</u>	57		79.P		U U	20.5	26.5	- 1. Sh detty
	· · · · · · · · · · · · · · · · · · ·	82	. <u></u>)	Nation		is is O	Ø	. 225	2.5	3m deroth
· · · · · · · · · · · · · · · · · · ·		801	· · · ·		79.4	0	0	1235	26.	5m durth
Portant.		- <u>8-829</u>			795			20.4	215	4m devith
tox for v.		8-33			74.7			205	265	In depth
Portrons		8-26		· · · · · · · · · · · · · · · · · · ·		0	0	·····	215	-2m depth
			. h		LIX.			205	267	In depath.
		k ;		Line alter		·····		<u>.</u>		<u></u>
		1.				······································			· · ·	·
	<u>i</u>	1. 104 - 104 Lange - 1				1				•

Field Technician:

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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR · P/S ~ 5. Date of measurement:

19-10-2006.

1h	
Sampling equipment used:	Dates calibrated
CA	
- MA2000	22 8/2006

	:							• •		
Sutatalo					Per	imeter on-site ar	1d/or off-site i	nonitoring hol	es	<u>i</u> :
Sample location	Date of measurement	Sampling	We	ather	Balańce gas (%)	Flammable gas	Carbon	and the second	··· · · · ·	
	measurement	time	con	aition	Balance gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Portron-4	1-12-2006	1.5 Not	August TT		19.2		0	2000	26.7	1
<u> </u>		13526	SE	in the second	12	6	Ċ	20.8	2 -1	3 h depth
Porton 5	, ,	R:29	12 Mar 1		-79,3	0	0	,	26.	malepoth
Portion	· · · · ·	1729	J		19.2	4	0	23,6	271:	- En depth
r1			::::::::::::::::::::::::::::::::::::::			<u> 0</u>	· · · · · · · · · · · · · · · · · · ·	226	2]3	4n depth
(C)	/	13:34	1			7 155 ¹ . 0	0	226	2,0	In death
r I	- 1			11 P	1 C	0	0	207.	27.2	5 An deroth
Pertronb		13734		Č	795	10 mg	6	23,4	269	4 m depth
		D>36	-	ę	29B	10	<u> </u>	207	- (-7	2m. depath
	· · ·	BUSS		. · ·	743	I o	0	20.6	26.6	
16trans		13225	1997 - 2	18. 1. J	792	, O	Ó	2=.7	()	<u>Dir depth</u>
				·		; t , t			26.7	In depoth.
	1		1,	A har peters		· · · · · · · · · · · · · · · · · · ·				
		 * 				· · · · · · · · · · · · · · · · · · ·				
		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				· · · · ·		÷.,		
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Field Technician:

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Annex A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKL P/S No5. Date of measurement:

20-10-2006.

Dates calibrated	-
· · · · · · · · · · · · · · · · · · ·	
22/8/2006	~
	Dates calibrated

Annex A

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	1	l	•••			Per	imèter on-site ar	nd/or off-site i	nonitoring hol	eg	i:
Sample location	Date of	Sampl	ing	We	ather		Flammabledrad	Carbon	The second secon	×	· · · · · · · · · · · · · · · · · · ·
PLIC	measurement	time			lition	Balarice gas (%)	· (methane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
- lostont	20102006	217		War To	,此 1925年1月1日日 月	793	6		20-6	254	- 3m desth
<u> </u>	1 0.7	50	1. 5-	pr - S	[]]. []] [] [] [] [] [] [] [] [] [] [] [] []		C C	<u>с</u>	2006	- 70 J.	
Loston 5		52	<u> </u>			793		0		25.3. 5 t L.	- Tim depth_
Portron	. <1	Ra	9	(, , , ,		7920	1	0	20,5	255	15h death
<1 1		88	3.	:::)-::(s)		1 1 1 1 1 2 print	7 HZ 1 G	····		27.4	4m depth
. </td <td>1 < 1</td> <td>523</td> <td></td> <td>· · · ·</td> <td></td> <td>792</td> <td></td> <td>0</td> <td>2007</td> <td>25.4</td> <td></td>	1 < 1	523		· · · ·		792		0	2007	25.4	
<۱		812	7.	(·	<u></u>	79 23	G G	G AND	<u>ja-6</u>	-27.7	5m depth
Portant		Cal	10	<u></u>		79.7	· · · · · · · · · · · · · · · · · · ·	6	20:71	254	4m depth
tor top		1	2	· · · · · · · · · · ·			1 0	6	20.6	25.4	2m depth
	1 .	<u>\$42</u>			 Magazine in tagi	-19.59	i. G	0	225	25.4	2m det
SPorton5	<i>L</i> J	828	3	· · · · ·	<u>ر آن جا</u>	79.3	3	0	20.6	25,4	In lerth
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ANNEXA

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Sub-Agen

Name of site: TKR P/S No5 Date of measurement.

Date of mea	Billament	D Nog	. · · ·		· · ·	4. 11	Samplii	ng equipment i	Ised'	Datar antiturt 1
		-10-2006				•		<u>G-, j - principi, j</u>	<u></u>	Dates calibrated
		10-2004) 	•	· · ·		6,A2	500	· · · · · · · · · · · · · · · · · · ·	22/8/2006
	:	· · ·	<u> </u>	 		·····	·		· ·	
Saturala		L		1 	Pei	imeter on-site ar	1d/or off-site i	nonitoring hol	es	1:
Sample location	Date of	Sampling				Flammable gas	Carbon	and day and a second se	×	
	measurement	for an international second	a strange and the second s		Balance gas (%)	(methane %)	dioxide (%)	Oxvgen (%)	Temp (°C)	Demot
Portion4	20-10-2006	135.16	Avenue T	M	193		Ú Ú	· · · · · ·		Remark
<u> </u>	5 7	1724 1 OF	81 - L S	E MARY	and Part Liference	6	·	20.6	<u> 17.7</u>	3m depth
Portions		13217	- 82				Û	20.5	27.6	Im depth
Porton					13	·	<u> </u>	20.6	275:	1.5m depth
Jertion 1	7	3217			7.93		с с	20.6	27.6	4n depth
<u> </u>	1	(3)2)			19 19 79 3 march	The A.F. O	0	ja.b	275	- In algun
<u> </u>	. * /	3-22		,	- 79 L		•			-3m depth
e l	· · · ·	B-23	1		-1944		U New March	20.5	-27-7	5m depth
Portionb			<u>:::-</u>			KOS ALIZA	0	20.51	27.6	4m depth
	1	B325		1	793	- 10	· O ·	20,6	21.7	2m depth
11	× 1	13:18			79.4	1.0	· · · · ·	20.5	275:	- 0 J
Partinos	× .	13:27	· · · · · ·		793	Ö	0	20.6	27.6	
		· · · · ·		·					200	Im depath
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Field Technician:

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ANNEXA

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)-

Name of site: TKR P/S N.5

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Sample locationDate of measurementSampling intermeterWeather Balance gas (%)Perimeter on-site and/or off-site inonitoring holes>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Dates calibrated
$\begin{array}{c cc} 10 cation measurement time condition Balance gas (%) (methane %) dioxide (%) Oxygen (%) Temp (°C) \\ \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	2/8/2006,
location measurement time condition Balance gas (%) (methane %) dioxide (%) Oxygen (%) Temp (°C) $at_{rm} + 2(-10-2=6)$ 8:11 Final	
location measurement time condition Balance gas (%) (methane %) dioxide (%) Oxygen (%) Temp (°C) $a_{rm} + 2(-10-2a_{6}) = 1.1 + 1.2 + 1$	j:
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$\frac{1}{1} = \frac{1}{1} = \frac{1}$	Remark
$\frac{1}{1} + \frac{1}{1} + \frac{1}{2} + \frac{1}$	3m dejoth
$\frac{1}{1} + \frac{1}{1} + \frac{1}$	In derth
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$\frac{1}{1} + \frac{1}{820} + \frac{1}{100} + \frac{1}{1$	4m depth
······································	
	2m alpon
	m depth
stronb 1 (8824	th depth
1 8217 Fren 714 10 225 56	2m depth
atans taken and the second sec	2m Jerth
	in depth
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Checked by:

Field Technician:

Annex A

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Landfill Gas Monitoring - Field Measurement Recording Sheet Samp

Name of site: TER P/S No. 5 Date of measurement: 21 Oct 2006

Sampling equipment used: Dates calibrated

	:	·	· · · ·		1. · · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
Sample	Date of	Server willing		Per	imetei on-site at	id/or off-site i	nonitoring hol	es	1:
location		Sampling	Weather		\mathbf{T}	Carbon	in the summer stand to be an arrive of the	No. La .	
0	measurement	time	- condition	Balance gas (%)	(methane %)	diaxide (%)	Oxygen (%)		
fortion 5	21/10/00	13:41	Free	- 26 (0		· · ·	Temp (°C)	Remark
tortion 5	14	13 12	117. 10 1. 101. 101. 101. 101. 101. 101.			P :	20.4	28.4	fromd
Portion 4	· · · ·	- Land	- ····································	79-5	0	Ø	20.4	28.4	114
0 1-	4	13:16	1	74.K		0	· · · · · · · · · · · · · · · · · · ·	the second secon	6mdgoth
fortion5	<u>' Y</u> ' ·	13:20	4	79.2		0	20.5	28.4	Im depth
Portion 7	t y i	13:21		708		·····	20.6	28.3	Um dooth
Portion 7	1 .		11 p- 12 (en ly post	1 M	a war hije O	0	20.4	28.4	
	Ч	13:22	<u> </u>	79-2	0	Ø	20.7		¬ / 11
Portion 7	<u> </u>	13:25		73	O 1	OF T	1	28.4	3h depth
Portion 7	ų	13:27					20.4	28-4	2.5m depth
DI		1 5		79.4	0	0	205	28-5	4m depth
Tortion 7	• •	13:29	4	79-4	0	0	20-5	28-5	/
Portion 1	4	13:33	4	76.51	0	0			4in depth
Portion 6	4			1.4		0	20.5	28.4	2m death
tertion N	· · · · · · · · · · · · · · · · · · ·	13:40		19-4	' O '	0	20.5	28.4	$\hat{\mathbf{O}}$ \mathbf{U}
	· · · · · · · · · · · · · · · · · · ·					· ·			2m depth
			2-1-		······································	:			
		1	·····				 		
	, l	·····		5 " AN	/		: .		
		,		· · · · · ·		· · · ·	······································		l

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Annex A

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Landfill Gas Monitoring - Field Measurement Recording Sheet (San

Name of site: TKR 9/5 No.5 Date of measurement: 23 Dot 2006

Sampling equipment used:	Dates calibrated
	.//
642000	22/8/26

						men and the second s				
Sample	Date of	Some Line			Per	imeter on-site a	ud/or off-site	nonitoring hol	es	j:
location	ineasurement	Sampling time	Weat	her		Flammable gas	Carbon	and a second stand to a stress of a second s	No. 1	· · · · · · · · · · · · · · · · · · ·
Portion 5	23/10/06	8=15	1		β at ance gas: (%)		dioxide (%)	Oxygen (%)	Temp (⁰C)	Remark
Portion 5	i y ,		the second se	e	51.3	0	0	20.7	26-1	ground
Portion 4		8=22	A Real Providence	al alfa asti i	79.3	0	0	20.6	26.2	6m depth
Portion 5		8-26			17-2	0	Ø	20.7	26-2	9m depth
Portion 7	· · ·	8-28		· · · · · · · · · · · · · · · · · · ·	7.5	····O	0	20.4	26-2	En depth
Portion 7		8:29			74:2-	2 AST 1.50	0	20.7	26.1	En death
fortion 7	4	8-31	4	· · · · · · · · · · · · · · · · · · ·	17.2	0	0	20.7	26-1	3 on depth
Portion 7	: y	8-34	2		70 3	о Ф С Алатра	Ö Ö	20.5	26.1	2-Sun depth
Portion 7		0	4		(7.)	*** * `O	· 10 .	20.6	26.1	4 in depth
Portion 7	· · · · · · · · · · · · · · · · · · ·	8:36	4		17-5	0	0	20.4	26.1	4 m depth
Portion 6	7	8:44			79.3	. 10	0	20.b	26.2	2m depth
- jun D		0.44			19.3	0	0	20.6	26-1	Zin dep-th
	· · · · · · · · · · · · · · · · · · ·	1				· · · · · · · · · · · · · · · · · · ·		1.	·	:
				<u> </u>				· · · · · · · · · · · · · · · · · · ·		-
L					1 m state - server			· .		

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Annex A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sur

Name of site: TKR PLS No. 5 Date of measurement:

Date of measurement			Sampli	ng equipmeht i	ised:	Dates calibrated
23	, Oct 2006	•		A2000		
		н Талана Талана		12000		22/8/06
		Deuter v 1	· · · · · · · · · · · · · · · · · · ·		· .	
Sample Date of	Sampling Weather	Perimeter on-s	te and/or off-site	monitoring hol	es	<u>i</u> :
location measurement	time condition	Balance gas: (%) - (methane,	gas Carbon	Oxygen (%)		
Portion 5 22/10/06	Bill Fine	79-3	<u>0</u>	0xygen (%) 20.6	Temp (°C)	Remark
ortion 5 4	3-10	A MA AND O	Q	20.8	25.8	Ground
C i i i i i i i i i i i i i i i i i i i	13-17 4	79.3 0	0	20.6	25.9 21.9	6m depth
ortion 7 4	(3-19	79.5 0	0	20.4	26-0	9 in depth 4m depth
D L· -	13:24	1 1. 5779 r. 3 mar al 1 155 14.0	. 0	20.0	26.0	tin depth
ortion 7 4	13-26	79.2 0		20.7	26-0	Sm dooth
Portion 7 9	13-20		Martin Correction	20-7	25-9	Sm dapth 205m dapth
ortion 7 4		79-4 0	0	205	25.9	You dopth
Portion 7 4	(3)-33 [3:35]	79.2 0	. 0	20.7	26.0	4 in depth
Portion 6 4	13-42	79.20	0	20.7	25.9	2in depth
	US YEU	0	. O	20.7	26-1	2m depth
					· · · ·	:
<u><u>i</u></u>						
1				<u> </u>		·
ield Technician;	Sab An H			· • • • • • • •	1	
A A	- and offent		Chiecke	d by:		20
			· · · · · · · · · · · · · · · · · · ·			RSO

Landfill Gas Monitoring - Field Measurement Recording Sheet (San

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Name of site: TKR P/S NO.5 Date of measurement: 74 Oct 2006

Satat like in the line	
Sampling equipment used:	Dates calibrated
GADON	Datat
1	

		1 1						
Sample	Date of	Samplina	TTT : 14.	Perimetei on-site	and/or off-site	monitoring ho		i:
location	incasurement	time	Weather Condition	ll i latata a la	s Carbon	and the second state of th		
Lotion J	24/10/06	17.117	The	Balańce gas: (%) (melliane, %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Portion 5	ing ,	13 14			0	20-8	27.1	Ground
Portion 4		13=15			0	20.7	27.1	
Portion 5	' V	13217		79-50	p.	20.4	76.9	9 m deoth
Portion 7	Y	13:18		19.2.	0	20.7	27-0	I'm depth Ym depth
Portion 7	. 4	13=10			P	20.8	27.0	You depth
Portion 7		13:21	H.		0	20.6	27-0	3m deoth
Portion 7		12.24	Internet and a second s	79.5	O The second sec	20.4	27-1	2: (mdepth
Portion 7	· 7	121-1	······································	17.6	0	20.3	27.0	4 m depth
Portion 7	, , ,	13:25	7	79.4	· D	20.5	27.0	4m depth
Portion 6	4			79.3 0	P	20-6	27.1	ndepth
-bulari U		13:31		79.4 0	0	20.5	27.1	2m depth
								a ni wiph
					r	· .		
L					-	· · ·		

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Landfill Gas Monitoring - Field Measurement Recording Sheet (Samp

Name of site: TKP P/S NO.5 Date of measurement:

Date of measurement: 74 Oct 2006	Sampling equipment used:	Dates calibrated
location measurement time condition Balance gas (%) (methane %) (Portion 5 $M/1006$ $M13$ $M20$ $M20$ 79.3 O Portion 4 4 $M20$ $M2$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Remark Ground Ground Gun depth Gun depth Gun depth Gun depth Sm depth Gun depth Gun depth Gun depth Qun depth Qun depth
Field Technician: A Sub Agent	Ċhecked by	RSO

Annex A

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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sar

Oct 2006

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Name of site: THE PS No.5. Date of measurement:

Satr	apling equipment used:	Dates calibrated
	GA2000	28/1
	· · · · · · · · · · · · · · · · · · ·	

	·	[·							
Sample	Date of			E	erimeter on-site a	nd/or off-site	moniforingho	log	
location		Sampling	Weather		. Hannahla daa			168	
D	incasurement	<u>tinie</u>	condition	Balance gas (9	6) <u>* (methane %)</u>		. 1		
1.5	210/06	× 1	m Thie	79 7			Oxygen (%)	Temp (°C)	Remark
P.S.						p.	20.7	26.4	67.
P.4		0	and the second	79.3	E. O	D	20.6		1.1
01	7.	878		79.2			1	26.4	6-0d
12		8:17	4	TAE		D.	20.7	26.4	9.0d
P.7	-1	8:18	with instant with		· · · · · · · ·	0	20.4	26.4	4 od
P.7	· · ·	0-10	1 And Albert	19.4	ala 1 iss that O	0	20.5	26.5	4.0d
	4	8:19	<u> </u>	79.3	<i>O</i> .	0		200	
P.f.	<u> </u>	8-22		79-3	and the second s		20-6	10-2	3.0d
P.7	· 4	8:24			- China		20.6	26.4	2.5d
P.7	· · · ·	2	<u>بر این از ان از ا</u>	17-5		· • • ·	20.4	26.7	4.00
07		8:26	M	19.4		. 0	20-5	711	
P.	4	8:29	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	79.5	0	Ø		-20-6	4.2d
P.6	6	8-36	··		10 1		NO.4	26-6	2.00
•		0-10		17-5		0	20.6	26-5	.210d
		· · · ·	·					10-13	:
						: .		······································	
	<u>i.</u> .					-	· .		
	,	· · · · · · ·		1	1				
		,	•	1		**	· · · · · · · · · · · · · · · · · · ·	······································	

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Landfill Gas Monitoring - Field Measurement Recording Sheet (Sampl Name of site: TKR P/S No.5

Name of site: TKR Date of measurement:

ate of measurement;	25 Oct 2006		Sampling equipment used:	Dates calibrate
			GA 2000	22/8/06
Sample Date of Date of $\frac{1}{10}$ ineasurement $\frac{1}{25}$ $\frac{1}{2$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Balance gas: (%) Flaminable gas $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-5$ 0 $79-4$ 0 $79-4$ 0 $79-4$ 0 $79-4$ 0 $79-4$ 0 $79-4$ 0 $79-3$ 0	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Remark G 0.0d 9.0d 9.0d 9.0d 4.0d 2.5d 4.0d 4.0d 4.0d 4.0d 2.5d 4.0d 2.5d 4.0d 2.0d 2.0d

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ANNEXA Landfill Gas Monitoring: - Tield Measurement Recording Sheet

Name of	site: TKR	PS No.	5			Sampling equipment t	used:	Dates calibrated	· ·
Date of n	site: TKR neasurement:	1-0.J	2000	· , .	· ·	GA 2000			_
		·		:	÷		•••	2015100	
-	;			Pe		d/or off-site monitoring hol		F	•
Sampl locatio		Sampling	Weather	Balance das (%)	Flammable gas	Carbon dioxide (%): Oxygen (%)	Temp (°C)	[:] Remark	
25	QUIL	1 11 11 11		79 2	0	0 2.6	25-9	6.	

ontine	19410 01	lounding	is vyeamer		โนเซเซ็ก์กรกับค.ศีสร	Garoon .			
location	measurement			Balance gas (%)	- (methane %)	dioxide (%):	Oxygen (%)	Temp (°C)	Remark
RS	26/10/06	8:08	A Laboration	Stran D		0	20-6	25.9	<u> </u>
PS	il.	Pog.	BE	·····79.2	57 O	0	20-7	26-2	bod
PU		8:12		79.3	. P	0 .	20-6	26.:1	9.od
P.C		8.13	7	79.3		0	20.6	36-1	4.0d
P7:	14	8-14		79.20		0	2017	26-0	4.0d
P7 .	: 1	8-17	1	79.4		i o	20.5	26.0	3.00
P7.	, y	8-19		79.3		0	22.61	36.1	2.5d
P7	. 4	8:21		79.4	- 10	0	20-5	26.0	4:0d
P7	· ' y ·	8:23	· · · · · · · · · · · · · · · · · · ·	79.3	j: o	· 0	20.6	36.0:	4.0d
D7.		8-24		79-3	0	0	20.6	26-0	2.00
P6	· ·	8:29	1	79.2	0	0	20.7	26.0	2.00
	F				-	•			
			4			-			
	i.	Fi (10)			· · · · · · · · · · · · · · · · · · ·	<i>i</i>	<u> </u>	<u>]</u>	<u> </u>
L		······································		· · · · · · · · · · · · · · · · · · ·					

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ANNEXA

Landfill Gas Monitoring - Eleld Measurement Recording Sheet (Sample)

ame of site	TKR P/S	N.5.					Samplin	g equipmeht u	sed:	Dates calibrated
ale of meas	urement;	oct 2	ə∡(ŋ.		• .		G.4	12200	,2	12/8/06.
I	,	· · ·				ا بر بر ب	4/ OP - 14 - 1-	· · · · · · · · · · · · · · · · · · ·	· ·	ž _
· ·		1				imeter on site at	With Party by the 1	ionitoring hol		
Sainplo location	Date of measurement	Sampling time	we we we we	attier dition	Balance gas (%)	Flammable gas - (mettane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Portmon 5	2/10/26	Bolt	No Fro		- 1 L	14 C	0	235	25.6.	. Ground
Portonis	1	334	\$\$F		magazper	J. U	0	735	264	6 m depth
Portront	· · · · · · · · · · · · · · · · · · ·	1321			19.3		<u> </u>	20%	263	7 m depth
Porton 5	· 1 · ·	17:26			743	······································	U	20,6	263	4 m digoth
Tertion		13:122	11		·	. us ::C .	6	226	262	24 m depath
Pertion	. y	13:30	· ' •.		-145		U U	204	265	3m dyth
Portrail	51	12-24			- alt		<u>َ</u> َ َ َ َ َ َ َ َ َ َ َ َ َ َ َ َ َ َ	2051	26.6	2.5m depth
Portion	141	13:26		1	795	10	C	20.4	265	4. m depost
Portin	\$1	13/25		- - -	295	i.o	· C	2=.4	264:	4 m depth
Partin	×1	12:32		1 ² k. K	14.3	. 6	6	Dab	26.4	2 n depoth
Portroy b.	103.	14:2	1	a, ,	1	ő "	<u>.</u> 0	1.205	265	2 m dyth
	*.			la se		;	· ·		;	
· ·				1-1		····	,		· .	
	<u>l</u>	i. 1999			A A A A A A A A A A A A A A A A A A A	1	1			· · · ·
Field Tech		et.	- - !=	• • •		i i i i i i i i i i i i i i i i i i i	Cliec	keđ by: <u> </u>	C	frot kso

<u>MAEDA</u> CO (DC200501) 2673 8999. 15:16 8. NOV. 2006

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Annex A

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	Name	of site:	as Monitori TKR R rucement; 27-	;	Shit	N 1963	· · · ·	at:Reco	rding S	lieet	(Sarit)	ile).	• •	g equipinent u	ised;		es callbrated	Gitte L	
	Sam		Date of	Şamp	ling .								Carbon	nonitoritig pol	1, 1, , 3		•		
).	Ioca M M	. [1ncessilement - 2 - 1 / 1 0 / 2006 - 1	5.2	8.	Anton Fr	NIS TAKE	1. 279	·	, o	. [·		0xide (%): 0.5 0.3	Oxygen (%) 19.8 29.9	Teinp (°C) 26-5. 27.1			· · · · ·	· · ·
66343735.				\	br ·				H - 276 V()		· · · · · ·					• *	Hyder V Hyder Consu Date received	ling Limited	
N -	-	- -		· · · · · ·								· · · ·	······································				Reg no. Div/Dep Manager Date received in Div/Dep	GNU GA	
				· · · ·	· · · · · · · · · · · · · · · · · · ·	. 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	· · · · · · · · · · · · · · · · · · ·		3 		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			For For Action Info	S gri Rate	- 1 - 7
Ċ.					· · · · · · · · · · · · · · · · · · ·			<u> </u>			······································); / / : :					Copy to Regly Jata File ref	App	
FROM :	Fjeld	d Tech	nician:	A	Yun	t dig			• • •	•		41 	Cheol	ked by: <u>·</u>	C		RSO	cz A	
						14 14								-					

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MAEDA CO (DC200501) 2673 8444

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ANNEX A Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Dates calibrated Sampling equipment used: Name of site: TKR P/S N.J. Date of measurement: 27-0it-2016 22/8/2006. 642200 Γ. Perimeter ou-site and/or off-site monitoring holes Flammable gas Sampling Weather Carbon Date of Sample Balatice gas (%) (metitane %) dioxide (%): Oxygen (%) Remark Temp (°C) time--location ineasurement 841-1-3 27.2 Grand 0 Portion 5 206 5 6. -Set-of \$ \$13 TE - 2 3 (17) 3 - 11- 74 3 - 12- 5-2723 Lob 0 G lora desth -Fortron 5 273: 10 9 # derth 0 Retron4 8214 221 ٩١ 226 えて 0 lever 51 811 3 1ston 5 ٢٠. D 2903 - 10 1 10 10 10 zab 21,4 Porton dest 18 Watter 848 4m 215 O pach Zin derot Ì. . 94 4-7.0. Iston 0 2551 19.40 **Q** 375 25n depath [-1. `` * \$ 21. ÷., --Patan desth Jag 274 D 793 10 14m 82 Portion 51 6 · 6 35 . . . ۲. ۲ 79.4 Porton Jah 8822 7913-1-0 23.5 275 1. 1. 6 8-22 ۲ ۲ lation :0 ß 2.ab -j94 275 ist 823 4 1 = 1 loston 1 and the second second 1 have the 1 · · · ۰. i. . N≓ _ Phil = 1289 S. 15 Cliecked by Field Technician:

2006 15:15 MAEDA CO (DC200501) 2673 899

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ANNEXA Landfill Gas Monitoring - Field Measurement Recording Sheefs (Sample)

Name of site: TKR P/S NJ. Dates calibrated Sampling equipment used: Date of measurement: 22/8/2000 27-act-2016 GA2000 3 Perimeter on-site and/or off-site monitoring holes Sampling Weather time Balance gas (%) (methane %) dioxide (%): Oxygen (%) +... L . . Date of Sample Remark Temp (°C) location medsurement 27-00+200 17:24 - 10 my Fair 19.3 Pertinits 25-6 (3) march **^** G 22(The second some the second 2:05 28.6 ber dert 141 σ Tre mis 9f - - - - -20.5 dath 0 28.6 Portion4 12.23 ٩١ Portan 5)26 13:24 28 ···D O 0 205 78.0 The rate where the second 3739 4 Provent derall Ì., Poteon 5: :0 3m dep 0 18-6 225.) · ~ (atm 13:26 前行之前 標. C. And . Marrie ·----Zaif !! 25m olegoth 28. 13:3] Portion 205 4m Portron 10 C 251 -1914 Sert : * 1 13:2 ō O 垛 225 28. Portan ន ខេត្ cles 13:27 ~ (2m dest 793" 226 28. 0 Portion 0 17.29 Nr ö. 0 205 2m dersth 28/ Portion 6. 1.2 13:30 1.7.2. ~ t.e has it--1.9 Ct · . L. . ъ - ₁₁₋ i. Cliecked by: Field Technician;

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Dates calibrated

Sampling equipment used:

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ANNEX A

Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

Name of site: TKR P/S N.5. Date of measurement:

ate of meas	nirement:		ľ	••	•		•			
		port 2	.226.	. ,			- GA2	200 :		22 18 2006.
	, ,	r ,		; ; :			,		<u>.</u>	
	:			-	Per	metel on-site au	d/or.off-site i	nonitoring hol	es	Ĵ.
Sample	Date of	Sampling	. I. We	ather		Flammable gas		-21	**	
location	incasurement	time	- Hacon	aition .	Balance gas (%)	(methane %)	dioxido (%)	Oxygen (%)	Temp (°C)	Remark
Portion 5	28-04-22	1.511	ALLANNE A		193	5 ¹ 0	6	726	275.	Growing
Parton 5			\$E	1977 - 21 177 - 22 E		o	G	237	27,6	6m derth
Fortant	· · · · · · · · · · · · · · · · · · ·	811	18.		793		6.	201	57.6:	9m depth
Portan5	· -1 · -	- 852			-93		U	20.6	275	4m depth
Portmil	1 × j :	8723	11 B - 16 18		in it is Tol Brance	······································	U	336	275	the depty
Portron	4	8224			74.3	0	Ċ	20.6.	173	3m depth
Portan	2 (8-25	1	D		0	· · · · · · · · · · · · · · · · · · ·	2351	275	2.3m depth
Portron 1	v i e j	8826		F	74.2		0	20,6	25	I I'm douth
Portani		821		· · · ·	792	1:0	· 0	20.6	276	4m dapth
Portion		8721		<u>.</u>	193		O	20.	125	2n depth
Perton		8430		K.a :	198-		i D	20.7	27.6	. In deposit
- jai men				1.1.22 24-				: . `		
		· · ·		1			F			·
	<u> </u>	· · · ·				-,	<i>i</i>			
	<u> </u>	<u> </u>	l•_ •	·	1 	· · · · · · · · · · · · · · · · · · ·	and and a second s			ſ .

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ANNEXA Landfill Gas Monitoring - Tield Measurement Recording Sheef (Sample)

۵. Name of site: TKR PIS No5 Date of measurement: 28-200 -2006 Sampling equipment used: NO.638 GA-2000

	•		-	· · ·				· .	•	
	:	· !		-		imeter on site an			68	3:
Sample	.Date of	Sampling	. i We	ather		Flammablegas	Carbon	in a state to be a sure of a	~_ · · ·	·
location	measurement	Sampling time	i-scon	intion	Balańce gas (%)	~ (metitane %)	dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Portons	28-00-06	326	Highly F	Arte and	792	5 G	0	23,6	28.	Grain
Portonis		-13207			-mar Berry	0	O	2-6	28.5	(m dlog
Portont	· i ·	13:21	· · · · · · · · · · · · · · · · · · ·		793	·	0	206	285:	7th darth
Parton 5	1 81 - 1	1-13/28			7.93		U	20,6	280	4 depth
Portonil	INC :	13:29	. The state			· us ·:• 0	Ċ	20.5	28	- Efm douth
Porton	1.1	1729		{	-9.4	0.	<u>`</u> 0	205	28.7	- 3m deph
Porton	1.1	1 vind	5	17	74/2		Č.	201	28.7	2.5m dept
Portron	: < 1	13-31	<u>, rakitara</u>		-744		C	205	28.6	if derth
Porton		1300		1. 1. 1.	744	i: Ó	Ö	205	28.7	Im devel
Parten		9550	1	9:8-1:1 	192	. 0	U	3.00	28.6	2m dpoth
Portant	1	1335			1944	. 0	ī 0	20.5	28.5	-2n dept
-lexture		1.1.6		P. I. S. L. Ker						
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	<u> </u>	I. 2	~ \$1 a				1	:		
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ANNEX A Landfill Gas Monitoring - Field Measurement Recording Sheet (Sample)

۲	Jama of aito	TKR PI	•		2.2				Samplin	g equipment u	seá .	Dates calibrated
			·> •	• <u>7</u>		-			Бацфин	E equipitionit u		Datos outroratou
J	Date of meas	arement: 31-	oct	-27	bbbcf .	-	•		6A2	_0 o U		22 18/2006.
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r					-			<u>_</u>		i	•	· ·
	-	•	-					imeter on-site at		nonitoring hol	CS .	· ·
• •	Sample location	Date of measurement	Samp tim	ling 8	i We	ather dition	Balance gas: (%)	Flammable gas		Oxygen (%)	Temp (°C)	Remark
	Portanis	31-10-2006	1	Le.	· · · · · · · · · · · · · · · · · · ·		119.3.		G	20.6	28.6	6 minel
	Portan 5		\$X:				- 11- T- T- 3	0	C ·	20.6	266	6m derth
	Portion4	· ; ·	83	1-1-1	- 10- C	Y	793		0	206	26.7:	7m depth
	Portan 5	· <1 * .	8.3	11	e e		-79.3	σ	C	20.6	26.7	4m derth
	Portran	i (1	83		:: <u>-</u> :	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	1. 7.98	, · · .: · · · · · · · · · · · · · ·	. 0	20.6	267	4m depth
	Portan	1 4	811	ſ.		r	-79.54	· · · · · · · · ·	0	225	26.8	3m depth
	Portani	11	8-12		1 · · · · · · · · · · · · · · · · · · ·			к О т _ л.,	. 0	20:61.	267	2.5m derth
	Portant	1.2	8			1	793	- 10	C C	2=.6	21.8	4m depth
	Portan		8%	40		17	74.3	i:o,·	· O	2006	26.7:	4in depth
	Perton	•1	83	41	-	The second	79.54	. 0	Ø	225	267	Im depth
	Portsont	· · · ·		42		- L	1 793	0	i O	20.6	36.8	2m derth.
	160 10011	÷.	· ·	:		1.1.2. 1.1.			-			- ·
				, ,		41.	3			• •	-	
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Annex A

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	ANNEX A Landfill G	as Monitorp	C		14-2006 6711	It:Reco	rding S	lieet (Sample		on Bout	- My ages	Annex A	
	Name of site Date of meas	TKR PIS urement: 31-oct	•	Hydrar Com	Dete 8 NI received 8 NI Perg no.	Manager (Date received in Chylbep	en E	Copy to Repy dator	•	g equipment u	sed:	Dates calibrated	
		Date of ineasurement	Sampling time	. We	ther	Balance			Carbon	nouitoring hol	es Temp (°C)	Remark	Ì
	Portants Partients Partients	-1	179372 17327333'			-79	4		0 6 6	225 205 205	26.6. 26.7: 26.7:	Ground Grow dardf The depth	
	Portant Portant Portant Portant		13:31						0 0	224 225 225	26.7 26.7 26.8	Am depth Am depth 3h depth	-
	Postron T	< {	13737 13739 13738			7	45 a LC		0 0 0	20.5	267 267 268	25m douth Am death His death	
1 11 11 11 11	Pertin T Pertan T Portan b	</td <td>17729</td> <td></td> <td>1</td> <td></td> <td>194</td> <td>0</td> <td>0 0</td> <td>205 205 204</td> <td>26.9</td> <td>Zin dath zin dath</td> <td></td>	17729		1		194	0	0 0	205 205 204	26.9	Zin dath zin dath	
) + -) -)											· · · ·		
a.104.10	Field Tech	niciau:	A Sub	Age	4		•••••••	1	Cheol	Ked b <u>y</u> :: <u>:</u> ::		po kso	Anner A

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