

Appendix A14.3 Baseline Ambient Air Quality Report 2016





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Figure 1 – 6 Maps showing Air Quality Monitoring Locations

Laboratory Analysis Reports

Field Observation Records for Odour Assessments







1.0 Scope

This report presents the results of a survey of ambient air quality at various locations in Dublin associated with the Greater Dublin Drainage Orbital Sewer and Wastewater Treatment Plant Project.

2.0 Methodology

The survey was conducted by TMS Environment Ltd personnel during the period January – March 2016. The surveys included the following:

- Diffusion tube surveys for determination of ambient levels of nitrogen dioxide (NO₂) and nitrogen oxides (NO_x), benzene, toluene, ethylbenzene and xylenes (BTEX);
- Subjective assessments of odour at all monitoring locations where diffusion tube monitoring was undertaken.

Diffusion tubes were used for the determination of ambient levels of nitrogen dioxide (NO₂) and nitrogen oxides (NO_x), benzene, toluene, ethylbenzene and xylenes (BTEX) at 12 locations in accordance with standard methodologies including UK DEFRA Technical Guidance LAQM TG(09).

The levels of ambient BTEX, nitrogen dioxide (NO₂) and nitrogen oxides (NO_x) were measured by positioning diffusion tubes at strategic locations for a period of approximately 28 days. The selection of sampling point locations was determined by the location of the proposed site taking in to account the surrounding area, with respect to the location of the samplers relative to buildings and other obstructions, height above ground and sample collection and analysis procedures. After the exposure period was complete, the diffusion tubes were removed from the site; the diffusion tubes were analysed using ultraviolet-visible spectrophotometry to determine the levels of NO₂ and NO_x and gas chromatography (GC) with flame ionisation detection (FID) analysis for BTEX. The locations of the tubes are marked as AQ1 – AQ12 on the attached maps in Figures 1 - 6.

The monitoring personnel also carried out subjective olfactometric assessments at the same locations during the measurement events. The methodology conformed to the general guidance issued by the EPA in the Guidance Note "Air Guidance Note 5 (AG5): Odour Impact Assessment Guidance for EPA Licensed Sites". This Guidance offers a systematic and consistent approach to the assessment of odours on and in the local area of facilities and installations that are licensed by the Agency. While the study is aimed at establishing baseline ambient air quality as opposed to examining the air quality impact of a licenced facility, the use of this best-practice Guidance demonstrates the robust assessment procedures adopted for the study.

3.0 Survey results

The measurement results are presented in Tables 1 - 3. The detailed laboratory analysis results are presented in the attached Laboratory Analysis Reports and the Field Record Sheets for the Odour Assessments.







Table 14.3.1: Monitoring results for NO_2 and NO_x

Monitoring Location	Monitoring dates	NO₂ µg/m⁻³	NO _x µg/m ⁻³
AQ1 St. Francis Hospice, Connolly Hospital. North of proposed pumping station	12/01/2016 to 12/02/2016	18.3	21.6
AQ2 Elm Green Nursing Home, Southeast of proposed pumping station	12/01/2016 to 12/02/2016	26.3	38.6
AQ3 St. Michael's House, south of proposed WwTP	12/01/2016 to 12/02/2016	22.5	23.9
AQ4 In the vicinity of the proposed WwTP site	02/02/2016 to 01/03/2016	25.5	28.1
AG5 In the vicinity of the proposed WwTP site	12/01/2016 to 12/02/2016	14.6	17.4
AQ6 In the vicinity of the proposed WwTP site	12/01/2016 to 12/02/2016	18.3	26.0
AQ7 In the vicinity of the proposed WwTP site	02/02/2016 to 01/03/2016	21.0	20.3
AQ8 In the vicinity of the proposed WwTP site	02/02/2016 to 01/03/2016	25.9	25.6
AQ9 In the vicinity of the proposed WwTP site	02/02/2016 to 01/03/2016	24.5	51.3
AQ10 In the vicinity of the proposed WwTP site	02/02/2016 to 01/03/2016	21.5	23.8
AQ11 Grange	12/01/2016 to 12/02/2016	12.9	16.5
AQ12 Grange	12/01/2016 to 12/02/2016	20.1	21.1







Table 14.3.2: Monitoring results for BTEX

Monitoring Location	Benzene µg/m ⁻³	Toluene μg/m ⁻³	Ethylbenzene µg/m ⁻³	m-, p-xylene µg/m⁻³	o-Xylene µg/m ⁻³
AQ1	< 0.19	13.6	< 0.24	< 0.24	< 0.24
AQ2	0.68	1.66	0.28	0.94	0.32
AQ3	0.59	0.96	< 0.25	0.48	< 0.25
AQ4	< 0.21	0.32	< 0.27	0.30	< 0.27
AG5	0.59	1.38	< 0.25	0.38	< 0.25
AQ6	0.43	0.77	< 0.25	0.44	< 0.25
AQ7	0.59	2.81	0.36	1.08	0.34
AQ8	0.59	2.12	0.28	0.98	0.30
AQ9	0.71	2.99	0.34	1.01	0.31
AQ10	0.48	0.83	< 0.27	0.73	< 0.27
AQ11	0.45	0.78	< 0.25	0.36	< 0.25
AQ12	0.80	1.11	< 0.25	0.79	0.25

NOTE AQ1, AQ2, AQ3, AQ5, AQ6, AQ11, AQ12 monitoring was undertaken from 12 January to 12 February 2016 AQ4, AQ7, AQ8, AQ9, AQ10 monitoring was undertaken from 2 February to 1 March 2016







Table 3 Baseline Odour assessments

Monitoring Location	Monitoring dates	Odour rating	Description
AQ1 St. Francis Hospice, Connolly Hospital. North of proposed pumping station	02/02/2016 01/03/2016	0	None detected
AQ2 Elm Green Nursing Home, Southeast of proposed pumping station	02/02/2016 01/03/2016	0	None detected
AQ3 St. Michael's House, south of proposed WwTP	02/02/2016 01/03/2016	0	None detected
AQ4 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AG5 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AQ6 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AQ7 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AQ8 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AQ9 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AQ10 In the vicinity of the proposed WwTP site	02/02/2016 01/03/2016	0	None detected
AQ11 Grange	02/02/2016 01/03/2016	0	None detected
AQ12 Grange	02/02/2016 01/03/2016	0	None detected

NOTE Odour rating: 0 = No odour, 1 = Faint odour, 2 = Moderate odour, 3 = Strong odour, 4 = Very strong



















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LABORATORY ANALYSIS REPORT DETERMINATION OF AMBIENT AIR VOLATILE ORGANIC COMPOUNDS IN DIFFUSION TUBES BY THERMAL DESORPTION / GAS CHROMATOGRAPHY

Report number	K01732R
Booking in reference no	X5498
Despatch note no	SOR27036
Customer	TMS Environmental
	53 Broomhill Drive, Tallaght
	Dublin 24
	Ireland
Date samples received	07/03/2016
Job Reference	22918

							DTEV		
Location	Tube no	Date exposed	Date finished	Exposure hours	Benzene	Toluene	BTEX Ethyl Benzene	<i>mp</i> - Xylene	<i>o</i> - Xylene
						l	ng on Tube		
AQ1	GRA10944	12/01/2016	12/02/2016	744.25	<5.00	340.53	<5.00	<5.00	<5.00
AQ2	GRA11087	12/01/2016	12/02/2016	743.17	18.06	41.52	5.80	19.09	6.59
AQ3	GRA11154	12/01/2016	12/02/2016	741.83	15.49	24.10	<5.00	9.78	<5.00
AQ5	GRA06546	12/01/2016	12/02/2016	741.00	15.45	34.46	<5.00	7.66	<5.00
AQ6	GRA11193	12/01/2016	12/02/2016	739.50	11.26	19.26	<5.00	9.03	<5.00
AQ11	GRA11099	12/01/2016	12/02/2016	738.67	11.84	19.57	<5.00	7.33	<5.00
AQ12	GRA11049	12/01/2016	12/02/2016	737.67	20.96	27.53	<5.00	15.93	5.10
AQ7	GRA11545	02/02/2016	01/03/2016	672.40	14.01	63.66	6.58	19.98	6.26
AQ8	GRA11105	02/02/2016	01/03/2016	672.42	14.08	48.08	5.23	18.13	5.63
AQ9	GRA11696	02/02/2016	01/03/2016	672.42	16.87	67.79	6.29	18.65	5.75
AQ10	GRA10946	02/02/2016	01/03/2016	672.42	11.54	18.90	<5.00	13.55	<5.00
AQ4	GRA11631	02/02/2016	01/03/2016	672.33	<5.00	7.37	<5.00	5.52	<5.00
Blank	GRA11086	12/01/2016	12/02/2016	744.00	1.89	8.02	0.75	1.39	0.72
Lab blank	GRA08446				2.397	2.297	0.469	1.347	1.966

(RESULTS ARE BLANK CORRECTED)

Tube Type Carbograph 1TD COMMENTS:

Results below 5.0ng on tube are below the reporting limit. Customer blank was high. Laboratory blank used for blank correction. Customer blank was not lab blank substracted.

Overall M.U.	±9.1%		Reporting Limit	5ng on tube
			Analyst name	M. Witek
involving the exposure proce using exposure data shall be	edures and periods provided by e indicated by an asterisk. Any q This report is not to be reproduc	radko International Ltd. Laborato the client are not within the scope queries concerning the data in this r ced, except in full, without the write Report Number	e of our UKAS accreditation. The report should be directed to the tten permission of Gradko Inter	hose results obtained e Laboratory Manager
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LABORATORY ANALYSIS REPORT

Date of analysis

18/03/2016

Date of report

21/03/2016

The analysis has been carried out in accordance with in-house method GLM4

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.

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BTEX

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LABORATORY ANALYSIS REPORT DETERMINATION OF AMBIENT AIR VOLATILE ORGANIC COMPOUNDS IN DIFFUSION TUBES BY THERMAL DESORPTION / GAS CHROMATOGRAPHY

Report number	K01732R1
Booking in reference no	X5498
Despatch note no	SOR27036
Customer	TMS Environmental
	53 Broomhill Drive, Tallaght
	Dublin 24
	Ireland
Date samples received	07/03/2016
Job Reference	22918

							DILA		
Location	Tube no	Date exposed	Date finished	Exposure hours	Benzene	Toluene	Ethyl Benzene	<i>mp</i> - Xylene	<i>o</i> - Xylene
					Values F	Reported in	Parts per Bil	llion (p.p.b.) in Air *
AQ1	GRA10944	12/01/2016	12/02/2016	744.25	<0.06	3.68	<0.06	<0.06	<0.06
AQ2	GRA11087	12/01/2016	12/02/2016	743.17	0.22	0.45	0.07	0.22	0.08
AQ3	GRA11154	12/01/2016	12/02/2016	741.83	0.19	0.26	<0.06	0.11	<0.06
AQ5	GRA06546	12/01/2016	12/02/2016	741.00	0.19	0.37	<0.06	0.09	<0.06
AQ6	GRA11193	12/01/2016	12/02/2016	739.50	0.14	0.21	<0.06	0.10	<0.06
AQ11	GRA11099	12/01/2016	12/02/2016	738.67	0.14	0.21	<0.06	0.09	<0.06
AQ12	GRA11049	12/01/2016	12/02/2016	737.67	0.26	0.30	<0.06	0.19	0.06
AQ7	GRA11545	02/02/2016	01/03/2016	672.40	0.19	0.76	0.08	0.26	0.08
AQ8	GRA11105	02/02/2016	01/03/2016	672.42	0.19	0.58	0.07	0.23	0.07
AQ9	GRA11696	02/02/2016	01/03/2016	672.42	0.23	0.81	0.08	0.24	0.07
AQ10	GRA10946	02/02/2016	01/03/2016	672.42	0.15	0.23	<0.06	0.17	<0.06
AQ4	GRA11631	02/02/2016	01/03/2016	672.33	<0.07	0.09	<0.06	0.07	<0.06
Blank	GRA11086	12/01/2016	12/02/2016	744.00	0.02	0.09	0.01	0.02	0.01
Blank	GRA08446			744.00	0.03	0.02	0.01	0.02	0.02

(RESULTS ARE BLANK CORRECTED)

Tube Type Carbograph 1TD

COMMENTS:

Results indicated with < are below the reporting limit calculated for time exposed. Customer blank was high. Laboratory blank used for blank correction. Customer blank was not lab blank substracted.

Weeks exposed	4	Uptake rates (ng.ppm ⁻¹ min ⁻ ¹)	1.85	2.07	1.94	1.94	1.94
Overall M.U.	Ę	±9.1%		Reporting	Limit	5ng or	n tube

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.

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	L. Gates, Laboratory Manager





LABORATORY ANALYSIS REPORT

lyst name	M. Witek
•	

Date of analysis

18/03/2016

Date of report 21/03/2016

Ana

The analysis has been carried out in accordance with in-house method GLM4

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.

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LABORATORY ANALYSIS REPORT DETERMINATION OF AMBIENT AIR VOLATILE ORGANIC COMPOUNDS IN DIFFUSION TUBES **BY THERMAL DESORPTION / GAS CHROMATOGRAPHY**

Report number	K01732R2
Booking in reference no	X5498
Despatch note no	SOR27036
Customer	TMS Environmental
	53 Broomhill Drive, Tallaght
	Dublin 24
	Ireland
Date samples received	07/03/2016
Job Reference	22918

							DILA		
Location	Tube no	Date exposed	Date finished	Exposure hours	Benzene	Toluene	Ethyl Benzene	<i>mp</i> - Xylene	<i>o</i> - Xylene
					•	Values Repo	orted in µgm	⁻³ in Air *	
AQ1	GRA10944	12/01/2016	12/02/2016	744.25	<0.19	13.56	<0.24	<0.24	<0.24
AQ2	GRA11087	12/01/2016	12/02/2016	743.17	0.68	1.66	0.28	0.94	0.32
AQ3	GRA11154	12/01/2016	12/02/2016	741.83	0.59	0.96	<0.25	0.48	<0.25
AQ5	GRA06546	12/01/2016	12/02/2016	741.00	0.59	1.38	<0.25	0.38	<0.25
AQ6	GRA11193	12/01/2016	12/02/2016	739.50	0.43	0.77	<0.25	0.44	<0.25
AQ11	GRA11099	12/01/2016	12/02/2016	738.67	0.45	0.78	<0.25	0.36	<0.25
AQ12	GRA11049	12/01/2016	12/02/2016	737.67	0.80	1.11	<0.25	0.79	0.25
AQ7	GRA11545	02/02/2016	01/03/2016	672.40	0.59	2.81	0.36	1.08	0.34
AQ8	GRA11105	02/02/2016	01/03/2016	672.42	0.59	2.12	0.28	0.98	0.30
AQ9	GRA11696	02/02/2016	01/03/2016	672.42	0.71	2.99	0.34	1.01	0.31
AQ10	GRA10946	02/02/2016	01/03/2016	672.42	0.48	0.83	<0.27	0.73	<0.27
AQ4	GRA11631	02/02/2016	01/03/2016	672.33	<0.21	0.32	<0.27	0.30	<0.27
Blank	GRA11086	12/01/2016	12/02/2016	744.00	0.07	0.32	0.04	0.07	0.04
Lab blank	GRA08446			744.25	0.09	0.09	0.02	0.07	0.10
(RESULTS ARE BLANK Tube Type Carbograph COMMENTS:	1TD			6					

Results indicated with < are below the reporting limit calculated for time exposed. Customer blank was high. Laboratory blank used for blank correction.

Customer	blank	was	not	lab	blank	subst	racted.
----------	-------	-----	-----	-----	-------	-------	---------

Weeks exposed	4	Uptake rates (ng.ppm ⁻¹ min ⁻¹)	1.85	2.07	1.94	1.94	1.94
Overall M.U.		±9.1%		Reporting	Limit	5ng on	n tube

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd. Page 5 of 6

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Signed.	Gates

L. Gates, Laboratory Manager





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St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

LABORATORY ANALYSIS REPORT

		Analyst name	M. Witek
Date of analysis	18/03/2016	Date of report	21/03/2016
	The analysis has been carried out in accore	dance with in-house method GLM4	

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd. Dogo 6 of 6

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	L. Gates, Laboratory Manager





LABORATORY ANALYSIS REPORT NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY

REPORT NUMBER X5502R

BOOKING REFERENCE No X5502

DESPATCH NOTE No SOR27036

CUSTOMER TMS Environmental

53 Broomhill Drive, Tallaght

Dublin 24, Ireland

DATE SAMPLES RECEIVED 07-Mar JOB REFERENCE 22918

			Exposu	re Data		NO ₂	NOx	NO	NO ₂	NOx	NO	TOTAL	TOTAL
NO ₂	Tube Numbe	r NO _x	Date On	Date Off	Time (hr.)	ppb *	ppb *	ppb * ⁺	μg/m ³ *	μg/m ³ *	μg/m ³ * *	μG NO₂	μG NOx
661509	AQ1	661519	12/01/2016	12/02/2016	744.25	9.56	11.29	1.73	18.32	21.63	3.31	0.99	1.17
661508	B AQ2	661520	12/01/2016	12/02/2016	743.17	13.75	20.16	6.41	26.35	38.62	12.27	1.42	2.09
661507	7 AQ3	661521	12/01/2016	12/02/2016	741.83	11.74	12.48	0.74	22.50	23.91	1.41	1.21	1.29
661506	6 AQ5	661522	12/01/2016	12/02/2016	741.00	7.62	9.07	1.45	14.59	17.38	2.79	0.79	0.94
661505	5 AQ6	661526	12/01/2016	12/02/2016	739.50	9.57	13.59	4.02	18.33	26.03	7.70	0.99	1.40
661504	AQ11	661523	12/01/2016	12/02/2016	738.58	6.73	8.61	1.89	12.89	16.51	3.61	0.69	0.89
661503	AQ12	661525	12/01/2016	12/02/2016	737.50	10.49	11.03	0.55	20.09	21.14	1.04	1.08	1.13
661502	Travel blanks	s 661524			744.25	0.15	2.48	2.33	0.30	4.75	4.46	0.02	0.26
661510	Q7	661518	02/02/2016	01/03/2016	672.40	10.98	10.58		21.04	20.28		1.03	0.99
661511	Q8	661517	02/02/2016	01/03/2016	672.42	13.52	13.36		25.90	25.60		1.27	1.25
661516	Q9	661531	02/02/2016	01/03/2016	672.42	12.76	26.79	14.03	24.45	51.34	26.89	1.20	2.51

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.

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LABORATORY ANALYSIS REPORT

661515 661514	Q10 Q4	661530 661529	02/02/2016 02/02/2016	01/03/2016 01/03/2016	672.42 672.33	11.25 13.33	12.41 14.68	1.16 1.35	21.55 25.54	23.78 28.12	2.23 2.58	1.05 1.25	1.16 1.37
L	ab Blanks	6			744.25	0.12	0.17	0.06	0.22	0.33	0.11	0.012	0.018
⁺ NO results	are deriv	IO) results I red by subtr	a subtracted nave not been racting NO2 fro a temperature	om NOx.		X was lo	wer than	n result f	or NO2.				
Overall M.O	.U.		5.2%	% +/-	Limit of De	etection	0.029u	g NOx, 0	.01ug NO2	2 on tube			
Tube Prepara	ation: 20%	%TEA/Water	Analysed on U	VS05 Camspec N	1550								
					Analyst Na	ame	C. Fras	er					
Date of Ana	lysis		17/03	8/2016	Date of Re	port	17/03/2	2016					

Analysis carried out in accordance with documented in-house Laboratory Method GLM7

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.

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Signed	L. Gates, Laboratory Manager

Odour Investigation Field Record Sheet

General	Your Reference	Your ReferenceSite License No.Assessment by					
22918N/AYour Name: Martin Kearns (Other Investigator(s) present)					:		02 Feb 2016
Pre-Assessment Preparation	Observer is free from medical conditions (cold sore throat, sinus trouble?)	Observer abstinence (30 min) from smoking, flavoured drinks, scented toiletries and deodorizers?		dour assessment- erification; routine; y)	Map- Has a map showing assessment locations been attached?	Weather Condi (record wind in	
Pre. Pr	Yes	Yes	Baseline		Yes	Dry, cool	
in these notes pleting the field e overleaf)	Note 1: Observation point Sensitivity (assuming detectable, if not then 0) Note 3: weather Conditions 1 Remote (no housing, commercial/industrial premises or public area within 500m of observation point) Precipitation – dry, rained recently, drizzle, raining, foggy 2 Low sensitivity (no housing, commercial/industrial premises or public area within 100m of observation point) Moderate sensitivity (no housing, commercial/industrial premises or public area within 100m of observation point) Note 4: Odour Persistence 0 No Odour No Odour Intermittent (detected intermittently during period of assessment) 5 Extra sensitive (complaints arising from residents, business and users of public areas within area of observation No Odour 1 Intermittent (detected throughout the period of assessment) Precipitation – dry, rained recently, drizzle, raining, foggy						
Notes (the ranking systems in these notes must be used when completing the field observations table overleaf)	point) Note 2: Wind Streng 0 Calm 1 Light air 2 Light breeze 3 Gentle breeze 4 Moderate breeze 5 Fresh breeze 6 Strong breeze 7 Near gale 8 Gale 9 Strong gale	stand	l by wind d sulty against the wind ing against the wind	2 Moderate Odo 3 Strong Odour	still and inhale facing into wind) king and breathing normally) t make clothes/ hair smell in area affected by odour)		
	Start time: 09:46	Do any of the odours experienced in character those recorded during survey? Yes	on-site match	List areas Inspected Designted location	on-site during t assessment? Minimal agric	activities were occurring he off-site odour ultural activity – rvesting cabbages	
Odour Source Investigation (Post Odour Survey)	Finish time: 18:55	Potential on-site sources identified	1:	1			testing cabbages

	Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ1	1	w	UW	3	14:15	5	0	0	No odour detected
	AQ1	1	w	UW	2	16:25	5	0	0	No odour detected
tions	AQ1	1	w	UW	2	18:15	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ2	2	w	DW	2	14:25	5	0	0	No odour detected
	AQ2	2	w	DW	2	16:40	5	0	0	No odour detected
tions	AQ2	2	w	DW	2	18:30	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ3	1	w	DW	2	13:55	5	0	0	No odour detected
	AQ3	1	w	DW	2	16:00	5	0	0	No odour detected
tions	AQ3	1	w	DW	2	17:50	5	0	0	No odour detected
Field observations										

Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
AQ4	1	w	DW	2	10:45	5	0	0	No odour detected
AQ4	1	w	DW	2	12:00	5	0	0	No odour detected
AQ4	1	w	DW	2	13:10	5	0	0	No odour detected
meeting with local reside	ents / comp	laints recei	ved during asses	ssment (inclue	de names/addi	esses/teleph	one numbers et	c.): Not applicab	le
	Name of household/ commercial site (describe so that location can be easily identified again by a third party) NA AQ4 AQ4 AQ4 AQ4	commercial site (describe so that location can be easily identified again by a third party) Image: Commercial site (describe so that location can be easily identified again by a third party) NA ≥3 AQ4 1 AQ4 1 AQ4 1 AQ4 1 Image: Commercial site (describe so that location can be easily identified again by a third party) ≥3	Name of household/ commercial site (describe so that location can be easily identified again by a third party) Image: Comparison of the second secon	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I I I S NA NA ≥3 NA I	Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site (commercial site (commercia	Name of household/ commercial site (describe so that location can be easily identified again by a third party)I I<	Name of household/ commercial site (describes of hat location can be easily identified again by a third party)I I S S S S S S S S S NAS S S S S NAS S S S S NAI S S S S NAI S S S S NAI S S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S S NAI S S NAI	Name of household/ commercial site (describe so that location can be easily identified again by a third parity)NANAS S S S SNAS 	Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: Signal strate NAImage: Signal strate signal strate NAImage: Signal strate signal strate (1 - 2)Image: Signal strate signal strate signal strateImage: Signal strate signal strate signal strateImage: Signal strate signal strate signal strate signal strateImage: Signal strate signal strate signal strate signal strateImage: Signal strate signal strate signal strateImage: Signal strate signal strate signal strate signal strateImage: Signal strate signal strate signal strateImage: Signal strate signal strate signal strateImage: Signal strate signal strate signal strateImage: Signal strate signal strateImage: Signal strate

Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
AQ5	1	w	DW	2	14:55	5	0	0	No odour detected
AQ5	1	w	DW	2	16:55	5	0	0	No odour detected
AQ5	1	w	DW	2	18:55	5	0	0	No odour detected
meeting with local reside	ents / comp	plaints recei	ived during asses	ssment (inclue	de names/addi	resses/teleph	one numbers etc	c.): Not applicab	le
	Name of household/ commercial site (describe so that location can be easily identified again by a third party) NA AQ5 AQ5 AQ5	commercial site (describe so that location can be easily identified again by a third party)	Name of household/ commercial site (describe so that location can be easily identified again by a third party) Image: Comparison of the second second point of the second point of the second second point of the second point of the second second point of the second point of the second point of the second second point of the second point of the second point of the second second point of the second p	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I I S NA 23 NA NA S NA ≥3 NA S NA 2 NA NA AQ5 1 W DW AQ5 1 W DW AQ5 1 W DW AQ5 1 W DW Image: Commercial site (opset-ration K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Comparison K Image: Co	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I	Name of household/ commercial site (describes of that location can be easily identified again by a third party) I high in high	Name of household/ commercial site (describe so that location can be easily identified again by a third party)NAS NAS NA $v_{intercinin transformsolution transformsolution transformNANASSsolution transformsolution transformsolutio$	Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site source of the source of t

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ6	1	w	DW	3	13:20	5	0	0	No odour detected
	AQ6	1	w	DW	2	15:15	5	0	0	No odour detected
tions	AQ6	1	w	DW	2	17:10	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ7	3	w	DW	3	09:46	5	0	0	No odour detected
	AQ7	3	w	DW	2	10:55	5	0	0	No odour detected
tions	AQ7	3	W	DW	2	12:10	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ8	2	w	UW	2	10:00	5	0	0	No odour detected
	AQ8	2	w	UW	2	11:10	5	0	0	No odour detected
tions	AQ8	2	w	UW	2	12:25	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ9	2	w	UW	2	10:15	5	0	0	No odour detected
	AQ9	2	w	UW	2	11:25	5	0	0	No odour detected
itions	AQ9	2	w	UW	2	12:40	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ10	1	w	DW	2	10:30	5	0	0	No odour detected
	AQ10	1	w	DW	2	11:45	5	0	0	No odour detected
ations	AQ10	1	w	DW	2	12:55	5	0	0	No odour detected
Field observations										
Brief details of any	y meeting with local reside	ents / com	plaints rece	ived during asses	ssment (inclu	de names/add	resses/teleph	one numbers et	c.): N	Not applicab

Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
AQ11	2	w	DW	3	13:35	5	0	0	No odour detected
AQ11	2	w	DW	2	15:30	5	0	0	No odour detected
AQ11	2	w	DW	2	17:25	5	0	0	No odour detected
meeting with local reside	ents / comp	plaints recei	ived during asses	ssment (inclue	de names/addi	esses/teleph	one numbers etc): Not applicab	le
	Name of household/ commercial site (describe so that location can be easily identified again by a third party) NA AQ11 AQ11 AQ11	commercial site (describe so that location can be easily identified again by a third party) Image: Commercial site (describe so that location can be easily identified again by a third party) NA ≥3 AQ11 2 AQ11 2 AQ11 2 AQ11 2 Image: Commercial structure Image: Commercial structure AQ11 2 Image: Commercial structure Image: Commercial structure Image: Commercial structure Image: Commercial structure <td>Name of household/ commercial site (describe so that location can be easily identified again by a third party) Image: Comparison of the second second point of the second second party NA ≥3 NA AQ11 2 W AQ11 2 W AQ11 2 W Image: Comparison of the second se</td> <td>Name of household/ commercial site (describe so that location can be easily identified again by a third party) I I I Some source I</td> <td>Name of household/ commercial site (describe so that location can be easily identified again by a third party) Image: Solution of the initial site (describes of the party) Image: Solution of the initial site (describes of the party) Image: Solution of the initial site (description of the party) Image: S</td> <td>Name of household/ commercial site (describe so that location can be easily identified again by a third party) I</td> <td>Name of household/ commercial site (describe so that location can be easily identified party) I So that so that location is third party) I</td> <td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: constraint of the second second</td> <td>Name of household/ commercial site (describe so that bocation can be easily identified again by a third party)III</td>	Name of household/ commercial site (describe so that location can be easily identified again by a third party) Image: Comparison of the second second point of the second second party NA ≥3 NA AQ11 2 W AQ11 2 W AQ11 2 W Image: Comparison of the second se	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I I I Some source I	Name of household/ commercial site (describe so that location can be easily identified again by a third party) Image: Solution of the initial site (describes of the party) Image: Solution of the initial site (describes of the party) Image: Solution of the initial site (description of the party) Image: S	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I	Name of household/ commercial site (describe so that location can be easily identified party) I So that so that location is third party) I	Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: constraint of the second	Name of household/ commercial site (describe so that bocation can be easily identified again by a third party)III

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ12	2	w	UW	3	13:45	5	0	0	No odour detected
	AQ12	2	w	UW	2	15:45	5	0	0	No odour detected
ations	AQ12	2	w	UW	2	17:40	5	0	0	No odour detected
Field observations										
Brief details of any r	meeting with local reside	ents / comp	l plaints recei	l ived during asses	sment (inclue	le names/addı	esses/teleph	one numbers et	c.): Not applicab	le

Odour Investigation Field Record Sheet

General	Your Reference	Site License No.	Assessme	nt by			Date of Assessment
	22918	N/A		e: Martin Kearns estigator(s) present)	:		01 Mar 2016
Pre-Assessment Preparation	Observer is free from medical conditions (cold sore throat, sinus trouble?)	Observer abstinence (30 min) from smoking, flavoured drinks, scented toiletries and deodorizers?		dour assessment- erification; routine; y)	Map- Has a map showing assessment locations been attached?	Weather Condi (record wind in	
Pre	Yes	Yes	Baseline		Yes	Damp, cool	
in these notes pleting the field e overleaf)	then 0) 1 Remote (no housing, commercial/ind 2 Low sensitivity (no housing, commer 3 Moderate sensitivity (housing, commercial 4 High sensitivity (housing, commercial 5 Extra sensitive (complaints arising fr	oint Sensitivity (assuming detect ustrial premises or public area within 500m of observation rcial/industrial premises or public area within 100m of of lercial/industrial premises or public area within 100m of al/industrial premises or public area within area of observ om residents, business and users of public areas within a	on point) bservation point) observation point) vation point)		ently, drizzle, raining, foggy rm, hot		
Notes (the ranking systems in these notes must be used when completing the field observations table overleaf)	point) Note 2: Wind Streng 0 Calm 1 Light air 2 Light breeze 3 Gentle breeze 4 Moderate breeze 5 Fresh breeze 6 Strong breeze 7 Near gale 8 Gale 9 Strong gale	stand	d by wind ed culty against the wind cing against the wind	2 Moderate Odo 3 Strong Odour	·	ting and breathing normally) make clothes/ hair smell	
	Start time: 08:00	Do any of the odours experienced in character those recorded during survey? Yes	on-site match	List areas Inspected Designted location		on-site during t assessment?	activities were occurring he off-site odour ultural activity –
Odour Source Investigation (Post Odour Survey)	Finish time: 18:05	Potential on-site sources identified	1:	1		prougning.	

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ7	3	w	DW	2	08:00	5	0	0	No odour detected
	AQ7	3	w	DW	2	09:05	5	0	0	No odour detected
tions	AQ7	3	W	DW	3	10:10	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ8	2	w	UW	2	08:15	5	0	0	No odour detected
	AQ8	2	w	UW	2	09:20	5	0	0	No odour detected
tions	AQ8	2	w	UW	1	10:25	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ9	2	w	UW	2	08:30	5	0	0	No odour detected
	AQ9	2	w	UW	2	09:35	5	0	0	No odour detected
tions	AQ9	2	w	UW	1	10:40	5	0	0	No odour detected
Field observations										

usehold/ site o that hird hird IA A Sensitivities S S S S S S S S S S S S S S S S S S S	Direction from which wind blows	Down-wind ApproxOrientationDW or not detectable(observation Vsetcfacility)	Strength Note 2	VA Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc) Guide- A location where the score meets or exceeds all the threshold values may be deemed
IA ≥3	NA	-wind Approx r not detectable	NA	NA	NA	l or 2	~ 2	score meets or exceeds all the
		Down- DW or etc					≥2	subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
1	w	DW	2	08:45	5	0	0	No odour detected
1	w	DW	2	09:50	5	0	0	No odour detected
1	w	DW	3	10:55	5	0	0	No odour detected
local residents / com	plaints recei	ved during asses	sment (includ	le names/addi	esses/teleph	one numbers etc): Not applicab	le
						Image: state stat	Image:	1 W DW 3 10:55 5 0 0 I<

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ4	1	w	DW	2	08:55	5	0	0	No odour detected
	AQ4	1	w	DW	2	10:00	5	0	0	No odour detected
tions	AQ4	1	w	DW	3	11:05	5	0	0	No odour detected
Field observations										

Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
AQ6	1	w	DW	1	11:30	5	0	0	No odour detected
AQ6	1	w	DW	2	13:35	5	0	0	No odour detected
AQ6	1	w	DW	3	15:50	5	0	0	No odour detected
	Name of household/ commercial site (describe so that location can be easily identified again by a third party) NA AQ6 AQ6	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I approximate I approximate I approximate	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I sith tit (describe so that location can be easily identified again by a third party) I sith tit (describe so that location can be easily identified again by a third party) I sith tit (describe so that location can be easily identified again by a third party) I sith tit (describe so that location can be easily identified again by a third party) I sith tit (describe so that location can be easily identified again by a third party) I sith tit (describe so that location sith tit (describe so that location sith tit (describe so that location sith tit (describe so that location sith tit (describe so that location sith tit (describe so that location sith tit (describe sith tit	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I <td< td=""><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)IIINANASensitivity NAIIIINASensitivity intervation party)NANote 1IINASensitivity intervation partyNANANANANASensitivity intervation partyNANANANANASensitivity intervation partyNANANANASensitivity intervation partyNANANANASensitivity intervation partyNANANANASensitivity intervation partyNANANANAStart time (observation partyIIIAQ61WDW2IAQ61WDW2IAQ61WDW2IAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61IIIIIIIIII</td><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party) I <thi<< td=""><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)NASensitivity setsJunction setsSensitivity setsJunction sets<</td><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)III</td></thi<<></td></td<>	Name of household/ commercial site (describe so that location can be easily identified again by a third party)IIINANASensitivity NAIIIINASensitivity intervation party)NANote 1IINASensitivity intervation partyNANANANANASensitivity intervation partyNANANANANASensitivity intervation partyNANANANASensitivity intervation partyNANANANASensitivity intervation partyNANANANASensitivity intervation partyNANANANAStart time (observation partyIIIAQ61WDW2IAQ61WDW2IAQ61WDW2IAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61WIIIAQ61IIIIIIIIII	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I <thi<< td=""><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)NASensitivity setsJunction setsSensitivity setsJunction sets<</td><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)III</td></thi<<>	Name of household/ commercial site (describe so that location can be easily identified again by a third party)NASensitivity setsJunction setsSensitivity setsJunction sets<	Name of household/ commercial site (describe so that location can be easily identified again by a third party)III

	Observer location	n	Wind (1	nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ11	2	w	DW	1	11:50	5	0	0	No odour detected
	AQ11	2	w	DW	2	13:55	5	0	0	No odour detected
ions	AQ11	2	w	DW	2	16:10	5	0	0	No odour detected
Field observations										

	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
AQ12	2	w	UW	3	12:00	5	0	0	No odour detected
AQ12	2	w	UW	2	14:10	5	0	0	No odour detected
AQ12	2	w	uw	3	16:25	5	0	0	No odour detected
	commercial site (describe so that location can be easily identified again by a third party) NA AQ12 AQ12	commercial site (describe so that location can be easily identified again by a third party)I apol NANA≥3AQ122AQ122	commercial site (describe so that location can be easily identified again by a third party)I 	commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site (Image: Commercial site service (Image: Commercial site (Image: Commercial sit	commercial site (describe so that location can be easily identified again by a third party)Image: Second to the second to th	commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site (Image: Commercial site (Image	commercial site (describe so that port of tage again by a third party)Image: second se	commercial site (describe so that parity) identified again by a third party)NASensitivity sensitivityNASensitivity sensitivityNA ≥ 3 NANANANANANANA ≥ 3 NA $\sum contraction from void Approxto contractationto contractationto contractationNANANANA\geq 3NA\sum contractation Void Approxto contractationto contractationto contractationNANANANA\geq 3NA\sum contractation Void Approxto contractationto contractationto contractationNANANANA\geq 3NANA\sum contractation Void Approxto contractationto contractationto contractationNANANANA\sum contractation Void Approxto contractationto contractationto contractationto contractationto contractationNANANANA\sum contractation Void Approxto contractationto contractationto contractationto contractationto contractationNANANA\sum contractation Void Approxto contractationto contra$	commercial site (description gain by a third gain by a third party)NN<

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ3	1	w	DW	3	12:10	5	0	0	No odour detected
	AQ3	1	w	DW	2	14:20	5	0	0	No odour detected
tions	AQ3	1	w	DW	3	16:40	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (1	nd= not dete	ctable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ1	1	w	UW	3	12:30	5	0	0	No odour detected
	AQ1	1	w	UW	2	14:40	5	0	0	No odour detected
tions	AQ1	1	w	UW	3	17:00	5	0	0	No odour detected
Field observations										

	Observer location	n	Wind (nd= not dete	ectable)	Time		Odour Ra	ting	Odour Description Comments
parameter	Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
Thresholds that could indicate nuisance	NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
	AQ2	2	w	DW	3	12:50	5	0	0	No odour detected
	AQ2	2	w	DW	2	15:00	5	0	0	No odour detected
tions	AQ2	2	w	DW	3	17:30	5	0	0	No odour detected
Field observations										

Observer location		Wind (nd= not detectable)			Time		Odour Rating		Odour Description Comments
Name of household/ commercial site (describe so that location can be easily identified again by a third party)	Sensitivity (1-5) Note 1	Direction from which wind blows	Orientation (observation Vs facility)	Strength Note 2	Start time (24hr clock)	Period of observation	Odour persistence (0-2) Note 4	Odour intensity (0-4) Note 5	Description of any odours, other source(s) of odours etc, (Also note variable weather conditions etc)
NA	≥3	NA	Down-wind Approx DW or not detectable etc	NA	NA	NA	1 or 2	≥2	Guide- A location where the score meets or exceeds all the threshold values may be deemed subject to nuisance/significant impairment particularly if the observations are supported by public complaints on impact, frequency and duration of odours.
AQ5	1	w	DW	3	13:15	5	0	0	No odour detected
AQ5	1	w	DW	2	15:30	5	0	0	No odour detected
AQ5	1	w	DW	3	18:00	5	0	0	No odour detected
	Name of household/ commercial site (describe so that location can be easily identified again by a third party) NA AQ5 AQ5	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I isource isourc	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I so third is so third party) I so third is so third party I so third is so third party I so third is so third party I so third party I so third party	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I	Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site ititic itititic ititic ititic ititic itit	Name of household/ commercial site (describe so that location can be easily identified again by a third party)IIINANASensitivity NAIINot NONot price to think wind holowIINASIINANANANANASIIIIIINASIIIIIINASIIIIIINASIIIIIINASIIIIIIAQ51IIIIIIAQ51IIIIIIAQ51III	Name of household/ commercial site (describe so that location can be easily identified again by a third party) I I I I NA S I NA S I <th< td=""><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)NASensitivity stitivityImage: sensitivity sensitivityNASensitivity sensitivityImage: sensitivity sensitivityImage: sensitivity sensitiv</td><td>Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site solution in the solution of the solution is solution in the solution is solution in the solution is solution in the solution is box in the solution is solution in the solution is again by a third provided the solution is the solution</td></th<>	Name of household/ commercial site (describe so that location can be easily identified again by a third party)NASensitivity stitivityImage: sensitivity sensitivityNASensitivity sensitivityImage: sensitivity sensitivityImage: sensitivity sensitiv	Name of household/ commercial site (describe so that location can be easily identified again by a third party)Image: Commercial site solution in the solution of the solution is solution in the solution is solution in the solution is solution in the solution is box in the solution is solution in the solution is again by a third provided the solution is the solution