



MINUTES OF THE QENOS ENVIRONMENT MONITORING TEAM MEETING HELD

WEDNESDAY 17th Jun 2015

Present:

Resident members	EMT	Qenos
Chris Ryder		Rob Berton: SHE Manager (Chair)
		Les Harman: Senior Environmental Adviser (Secretary)
		Alan Findlay: Environmental Health Coordinator
		Duncan Laslett: Olefins Operations Manager
Apologies		Kathryn Mc Donald: Acting Plastics Operations Manager
Judy Hindle		Andre Olszewski Resins Operations manager
Dominique Dybala		Bruce Gunn Olefins: SHE Coordinator
Kimberley Foss		
Melinda Corry		
Valerie Gemmel		CWW
Troy Ryan		Ding Chan

1. Introductions

Rob opened the meeting @18:10 with a round the room self- introduction by all attendees.

2. Review of 2015 EAP action status

The 2015 EAP status was distributed with the meeting agenda. All active items were discussed with the following points noted.

- Item 6.22 New enclosures fitted and as effective as older ones. Utilising acoustic cameras to identify further enhancements.
- Item 6.23 & 6.24: RX2 new gearbox fitted and is quieter. RX1 gearbox is being manufactured overseas. Depending on delivery date and production schedules installation may carry over into 2016.
- Items 7.9 & 7.11 to improve seals at the ETP were completed during the recent ETP clean.
- Items 10.33 to 10.38: Are all on scheduled to be completed by year end.

3. Incident Review

Olefins site has had one low risk incident relating to sulphides level in trade waste marginally exceeding the trade waste licence limits. A report will be distributed to EMT members

4. PSV graph. (Pressure Safety Valve)

Duncan Laslett presented the PSV graph. There was once PSV lift since the last meeting on the sour water system to the plant sewer. (Copy attached to minutes)

5. Community Complaints

Alan Findlay presented the complaints.

- There was one complaint for effluent treatment plant odour on 11th May accepted based on the waste water plant activity at the time. The odour was not detected during the site investigation.
- Two noise complaints were classified as plausible complex on 24th and 28th May. No specific noise sources identified however it is considered probable that the normal operational noise of the plants contributed to the reported noises.

6. Noise monitoring report

A presentation summarising the community noise monitoring at Charles Road and Galvin Street was presented by Les. (Copy of presentation attached to the minutes). The historical data from 1999 to 2004 from the Charles Road noise meter has been adjusted down 2 dBA to allow direct comparison with the monitoring data from 18 Charles Road data collected since 2012. The North end of Galvin St data has been collected in the bus yard immediately North of Galvin since March 2014.

The noise data presented still has significant variations in particular Galvin St even with the data filtered for wind conditions and time of day. Other ambient conditions such as temperature and in particular temperature inversions are known to have significant impacts on sound propagation. More detailed analysis of the data is required to verify the noise EIP reductions in community noise. The first Noise EIP report is due in December 2015 will include further analysis to clarify this.

7. Odour Audit Results.

The odour audit was held on Saturday 13th June at the Olefins site. Four community representatives attended three of them for the first time.

Alan gave a presentation (copy attached) which gave an overview of the odour audit.

An odour calibration process using Pocket smell test cards and four site samples confirmed that all participants didn't have anosmia but did have varying levels of odour sensitivity which was also evident in the rankings at the plant locations.

The audit visited 18 sites and each participant gave a relative ranking of odour on a 0-10 scale for each site. The average ratings of the participants varied from 3 to 5 with an overall average rating of 4 up slightly from 3 in 2014.

Two of the community participants noted that they were familiar with odour at the effluent treatment plant having smelt it at their residences occasionally.

A decision was made to cancel the visit to Resins as the Olefins site audit had used up all the time available.

8. Community Alarm

Rob Berton outlined the process that he was using to evaluate the upgrade of the community alarm from the current siren to the phone alert system.

9. Injury Performance update

Rob noted that we had had two injuries since the March EMT.

- A tooth was chipped when a battery drill being used in the Resins cooling tower bit and the drill rotated hitting the operating in the face.
- A laceration to the knee with jigsaw being used to cut plywood for formwork. The operator's overalls were intact however the jigsaw still lacerated the skin beneath.

Ding enquired about whether the work was being completed under a JSA which Rob affirmed. Qenos is analysing how we manage tasks with the minor contractors.

10. Environmental News

The following was briefly described by Les

- A review of the EPA along with terms of reference has been announced by the state government.
- EPA is still planning to trial the Earned Autonomy pilot which may be a model that replaces the Accredited licence system. Trial is behind schedule which will squeeze the timeline and potential effectiveness.
- Qenos has leased the Fire training ground to a third party training provider ERM. They will only be using gas fires and there shouldn't be any visible smoke impact.

11. Other Business

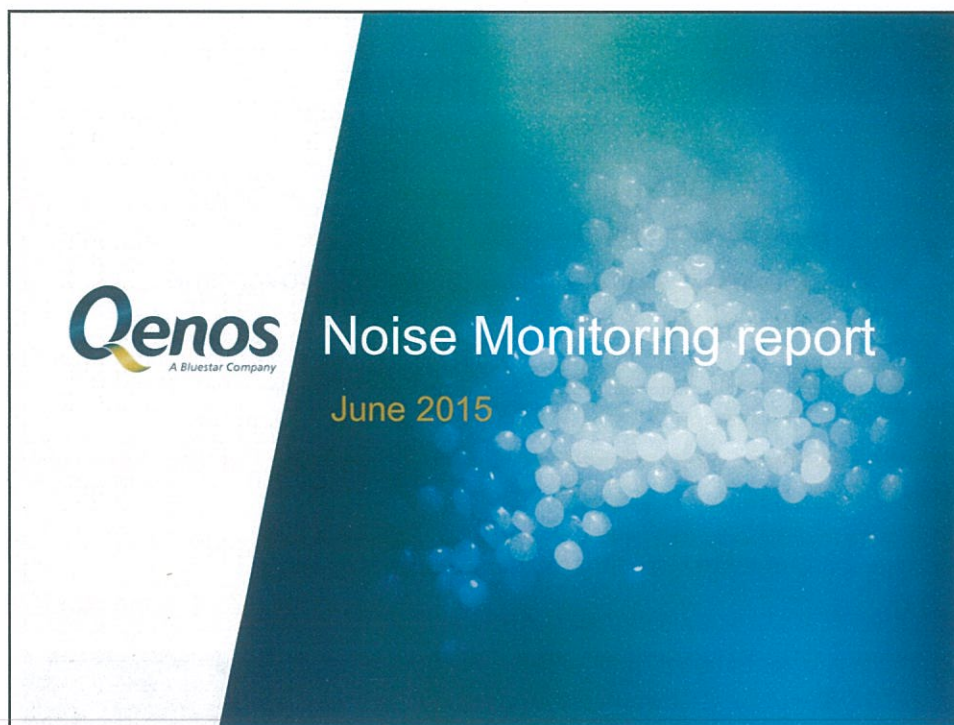
EPA had sent in a summary status for the meeting which was viewed. Review of Qenos licence in March was OK. No issues identified

Next meeting:

6-8 pm on 9th September at the Qenos Olefins training centre

12. Meeting Close.

Meeting closed by Rob



2015 activity

- Community noise monitoring in progress.
- Noise EIP with EPA.
 - EPA clarified completion date – March 2019
- Noise reduction projects
 - New gearbox fitted to Rx2
 - New covers on both gearboxes. To be extended
 - Olefins de-aerator vents reduced.



Noise monitoring criteria

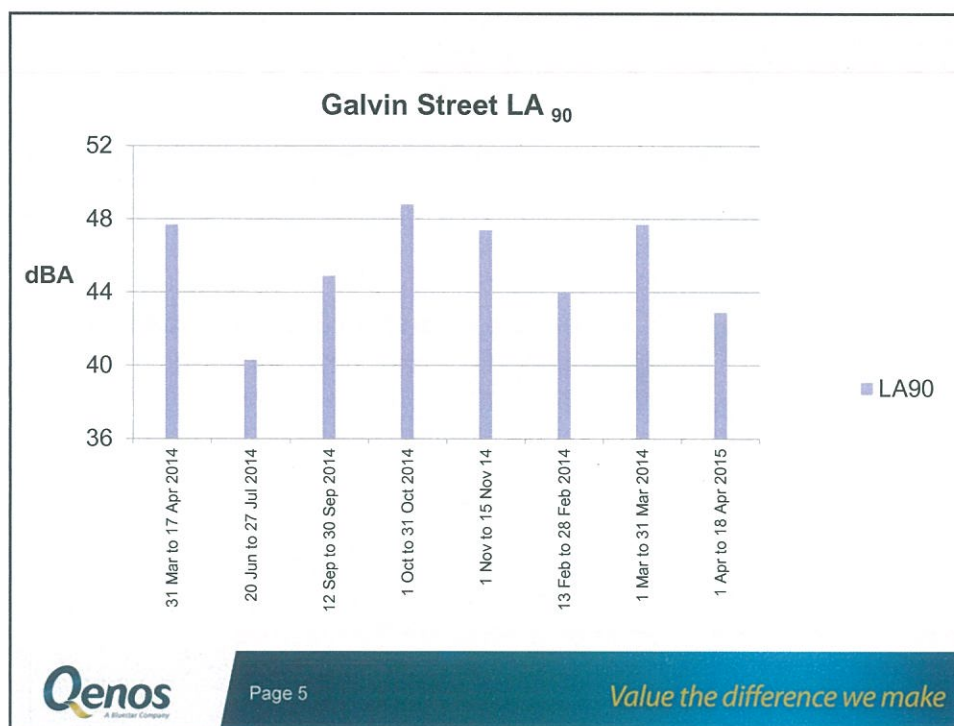
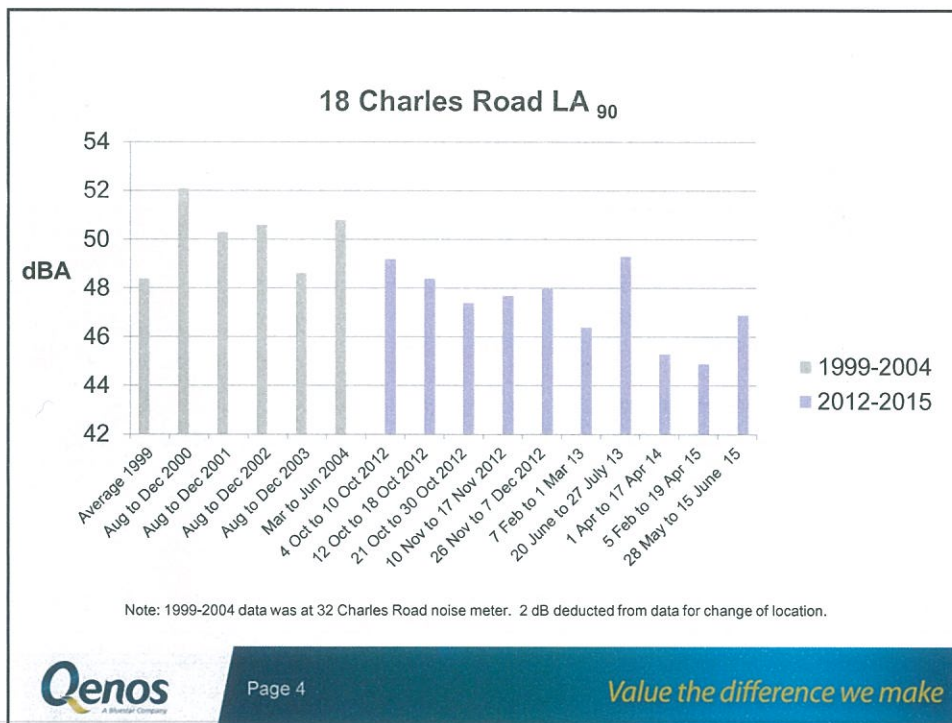
- Using LA₉₀ to track trends.
 - Noise level exceeded for 90% of time.
- Filters used to compare like for like data over time
 - Extract for Noise EIP

The community noise monitoring data will be analysed using the data filters from Section 2 of this EIP to enable like for like comparison of data

These filters are

- Wind direction from West to North
- Wind Speed from calm to 14 km/hr
- Time window from Midnight to 5 am.
- No rainfall





Next steps

- Finalise EIP
 - Potential update to satisfy EPA
- Progress Abatement projects
 - Verify success on abatements.
 - Site and community noise monitoring.
- Continue monitoring program.
 - Refine data filtering to account for seasonal conditions.
 - Wind,
 - Temperature inversions.
- First Noise EIP report due Dec 2015

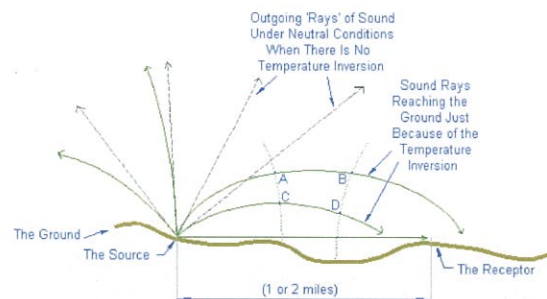


Temperature inversions

- Temperature inversions are very common. They occur on almost all calm clear nights and, less frequently, under certain daytime conditions. A principal mechanism whereby they form at night is the transport of heat away from the earth's surface by infrared radiation.
- The effect is most dramatic when the direct path along the ground is blocked by intervening structures or terrain

Temperature Inversions & Sound Propagation

by Mike O'Connor (a legacy web page, circa 1997)



Qenos Odour Audit 2015

Audit Team

Community: Dominique Dybala, Judy Hindle, Chris Rydder, Troy Ryan

Qenos: Les Harman, Bruce Gunn, Alan Findlay



Qenos Odour Audit 2015

Sites: Qenos Olefins

Note Resins deferred

Date: 13th June 2015

Posponed from Q1 for WWTP desludge

Time: 09:00 - 11:15

Weather Conditions:

Wind Speed: 4-6 knots

Wind Direction: NNE

Temperature: 7-11 C

Cloud Cover: Sunny, Clear, Still

10/10/1974



BOUNDARY OF PREMISES SHOWN AS THUS
PLANT BOUNDARIES SHOWN AS THUS

PROVINCE	4-UNIT H.	4-UNIT S	HEIGHT ABOVE SEA-LEVEL, IN.
1	1	1	20
2	2	2	20-25
3	3	3	25
4	4	4	25-30
5	5	5	30-35
6	6	6	35-40
7	7	7	40-45
8	8	8	45-50
9	9	9	50-55
10	10	10	55-60
11	11	11	60-65
12	12	12	65-70
13	13	13	70-75
14	14	14	75-80
15	15	15	80-85
16	16	16	85-90
17	17	17	90-95
18	18	18	95-100
19	19	19	100-105
20	20	20	105-110
21	21	21	110-115
22	22	22	115-120
23	23	23	120-125
24	24	24	125-130
25	25	25	130-135
26	26	26	135-140
27	27	27	140-145
28	28	28	145-150
29	29	29	150-155
30	30	30	155-160
31	31	31	160-165
32	32	32	165-170
33	33	33	170-175
34	34	34	175-180
35	35	35	180-185
36	36	36	185-190
37	37	37	190-195
38	38	38	195-200
39	39	39	200-205
40	40	40	205-210
41	41	41	210-215
42	42	42	215-220
43	43	43	220-225
44	44	44	225-230
45	45	45	230-235
46	46	46	235-240
47	47	47	240-245
48	48	48	245-250
49	49	49	250-255
50	50	50	255-260
51	51	51	260-265
52	52	52	265-270
53	53	53	270-275
54	54	54	275-280
55	55	55	280-285
56	56	56	285-290
57	57	57	290-295
58	58	58	295-300
59	59	59	300-305
60	60	60	305-310
61	61	61	310-315
62	62	62	315-320
63	63	63	320-325
64	64	64	325-330
65	65	65	330-335
66	66	66	335-340
67	67	67	340-345
68	68	68	345-350
69	69	69	350-355
70	70	70	355-360
71	71	71	360-365
72	72	72	365-370
73	73	73	370-375
74	74	74	375-380
75	75	75	380-385
76	76	76	385-390
77	77	77	390-395
78	78	78	395-400
79	79	79	400-405
80	80	80	405-410
81	81	81	410-415
82	82	82	415-420
83	83	83	420-425
84	84	84	425-430
85	85	85	430-435
86	86	86	435-440
87	87	87	440-445
88	88	88	445-450
89	89	89	450-455
90	90	90	455-460
91	91	91	460-465
92	92	92	465-470
93	93	93	470-475
94	94	94	475-480
95	95	95	480-485
96	96	96	485-490
97	97	97	490-495
98	98	98	495-500
99	99	99	500-505
100	100	100	505-510

[illegible][illegible]

Odour Calibration: Olefins Lab Fumehood

All participants successfully completed pocket smell test demonstrating no anosmia.

Odours from 4 site samples were assessed and discussed by team members to assist with the odour rating and description procedure.

INSTRUCTIONS:	THIS ODOR SMELLS MOST LIKE:	THIS ODOR SMELLS MOST LIKE:	THIS ODOR SMELLS MOST LIKE:	THIS ODOR SMELLS MOST LIKE:
Release first odor with tip of pencil or pen. Read response alternatives to patient & circle patient's answer. If desired, test each nostril separately. Repeat with other two odors. One or more incorrect responses suggest olfactory dysfunction. To fully determine patient's ability to discriminate odors, administer the 40-item Small Identification Test™.	Lemon Chocolate Root Beer Black Pepper	Lilac Chili Coconut Whiskey	Dill Pickle Grass Smoke Peach	Barana Peanut Rose Paint Thinner
INSTRUCTIONS: Release first odor with tip of pencil or pen. Read response alternatives to patient & circle patient's answer. If desired, test each nostril separately. Repeat with other two odors. One or more incorrect responses suggest olfactory dysfunction. To fully determine patient's ability to discriminate odors, administer the 40-item Small Identification Test™.	Peanut Lemon Apple Cola	Natural Gas Mint Strawberry Rose		

Olefins 2015 Odour Audit Results

#	Observation Location	Odour Description	Source ID	ppbRAE	Judy (0-10)	Troy (0-10)	Dom (0-10)	Chris (0-10)	Overall (0-10)	Strength (0-10)	2014	2013	2012	2011	2010	2009
2015 Audit Results																
OL1	Gatehouse, H-Block Turnstile	NA	NA	0	0	0	0	0	0.0	3	0	0	0	0	0	2
OL2	SCAL, Tar Filters	Fuel, oil, bitumen	Fugitive emissions	300	2	7	4	2-3	4.0	7.5	1.5	2	4.5	1	9.0	
OL3	NPAL, P-407s	Gasoline	Fugitive emissions	1400	5-8	8-9	10	5	8.0	4.0	3	4.5	1.5	1.5	2	
OL4	NPAL, P-111s	Waiting	Fugitive emissions	80-100	8	8	10	3	7.3	1.5	3	3				
OL5	NPAL, General Area		Fugitive emissions	700	2	2	2	2	2.0	0.5	2	2				
OL6	LEAL Lean Oil Circuit	Oil	Fugitive emissions	2000-3000	1	7	3	2-3	3.5	5.0						
OL7	LEAL Caustic Treatment Area		Fugitive emissions	700	0	0	0	0	0.0	1.5						
OL8	Manhead 9 @ corner of B & 1st st		Fugitive emissions	500	7	8	8	8	7.8	3						
OL9	A Street south of Black Oil tank farm	Faint wafting	Fugitive emissions	400	1	1-2	1	1	1.3	1						
OL10	Manhead 6 @ corner of B & 7th st		Manhead vent	600	0	0	0	0	0.0	0	1	3	2	1	6.0	
OL11	Manhead 5 @ corner of B & 9th st	Waiting	Manhead vent	600	5	9	7-9	1-3	6.5	0						
OL12	Manhead 4		Manhead vent		2	0	0	0	0.5	5.5	2	0	5.0	2	7.0	
OL13	Manhead 2		Manhead vent	0-80	2	6	4	2	3.5	3						
OL14	Manhead 1		Manhead vent	100	1	4	5	3	3.3	3.5	4.5					
OL15	Stormpond		Storm pond		4	4	4	2	3.5	0	0	0.5	0.5	1.5	0	
OL16	ETP, API Forebay		Localised at forebay	250	3	8-9	3	3	4.5	6.0	1.5	1	7.5	3.5	6.0	
OL17	ETP, API Afterbay		Localised at afterbay	200-900	4	7	5	4	5.0	2.5	1.5	1.5	7.5	4.0	6.0	
OL18	ETP, FE Sump		Very close to FE Sample pt	800	6	7	9	4	6.5	3.5	1	1	9.0	3.5	2.5	
EX1	PS11A & B		Pump seal passing pentene		8	8	8	8	8.0							
				Average	3.4	5.1	4.5	2.8	4.0	3.1	1.9	1.8	4.4	2.2	4.6	

Note: highest value in range used to calculate the overall odour rating and average.

2015 Comments:

EX1: Sweet odour along B St identified and sourced to local pump seal passing, reported to STL.

OL6: two distinct odours identified.

OL16: Recognition of WWTP odour offsite. Is an EAP item.

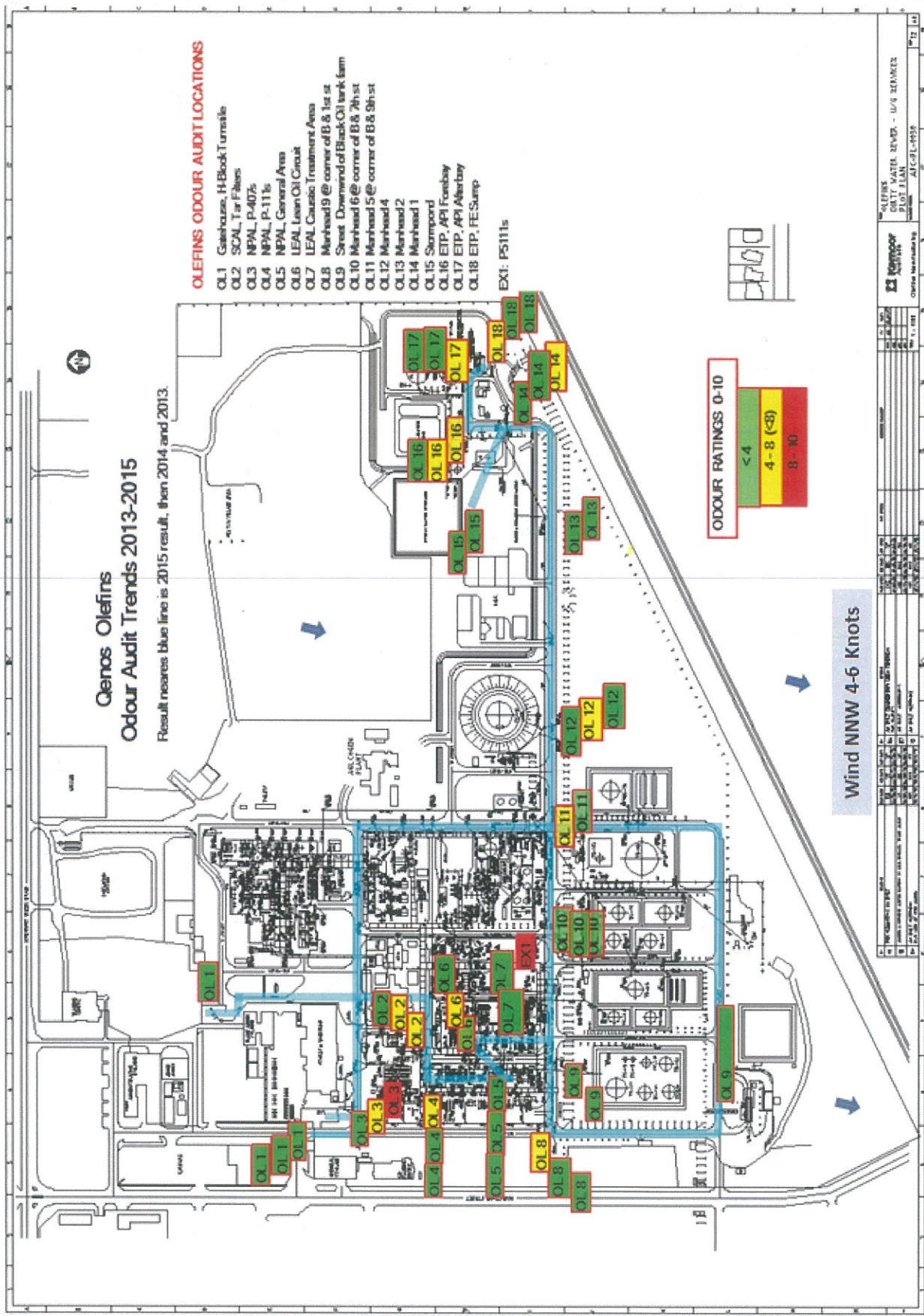
Earthy odour from geobags in waste DG pad detected in B St.

Odour Rating

<4

4-8 (<8)

8 - 10



2014 Total - 4
 2013 Total - 16
 2012 Total - 2
 2011 Total - 23
 2010 Total - 18
 2009 Total - 22
 2008 Total - 14
 2007 Total - 20
 2006 Total - 49

High Pressure Events > PSV Set Points 90 Day Trend

2015 YTD - 5

