

## Taylor Preston proactive monitoring summary (Jason Pene)

### Background

The number of complaints regarding odour from the Taylor Preston Limited (TPL) abattoir and animal by-products rendering operation in Ngauranga Gorge has traditionally increased in the warmer months of summer. A proactive monitoring program was proposed to run from late October 2002 with continuation of the program assessed periodically.

### Monitoring method

Monitoring was undertaken in 3-week blocks with a period of 1 week between each monitoring block to be used to reassess the effectiveness of the program. Investigations were targeted at times where a traditionally high number of complaints were received. These peak complaint periods are generally between 7am and 10am, as air is warmed by the rising sun and rises through the gorge to the residential areas above, and between 6pm and 10pm, with the arrival of neighbouring residents after working hours.

Investigations were undertaken up to twice daily from Monday to Friday. Each investigation involved visiting specified sites in the area and rating the odour intensity from 1 – 5 at 10-second intervals, as well as noting odour and weather characteristics.

This method was used in place of the standard FIDOL investigation in an effort to gain more subjective and quantifiable results.

### Monitoring results

Three blocks of monitoring have been completed since the program began on 29 October 2002.

Period	Monitoring Days	Number of complaints	Number of complaints received while an officer was at the site	Number of occasions an odour was detected	Number of occasions an offensive odour was detected
One 29/10/02 - 15/11/02	8	1	0	7	Nil
25/11/02 - 13/12/02	7	4	0	7	Nil
20/01/03 - 14/02/03	12	18	4	11	One

- Odour of both a stockyard and rendering nature was detected during monitoring periods. Stockyard odour was detected more often, while rendering odour was more likely to be of a higher intensity.

- Although only 4 of the 23 complaints received during the monitoring periods were received during site investigations, 8 of the other complaints were received within a 2 hour period before or after investigations.

### Monitoring block 1

Results from block 1, undertaken from 29 October 2002 – 15 November 2002, show that there was odour was present during this period but generally not of a problematic nature.

- Odour of level 3 or higher was detected during 1 of the 30 site investigations (3.3%).
- Odour intensity was recorded 1803 times during these investigations, an intensity of 3 or above was measured 3 times (0.17%).
- The weather was not particularly conducive to the dissemination of odour during block 1 (early November 2002).
- TPL stated they were processing at full capacity during this period (and would remain at full capacity until Autumn 2003).

### Monitoring block 2

Results from block 2, undertaken from 25 November 2002 – 13 December 2002, show that there was odour was present during this period but generally not of a problematic nature. However, higher odour level 5 were detected.

- Odour of level 3 or higher was detected during 4 site investigations (7.7%).
- Odour intensity was recorded 1251 times during these investigations, an intensity of 3 or above was measured 5 times (0.40%)
- Weather conditions during block 2 had improved from block 1 to be generally fine and calm throughout and therefore, more.

### Monitoring block 3

Results from block 3, undertaken from 20 January 2003 – 14 February 2003 show that the intensity and frequency of odour had increased from the levels detected during Blocks 1 and 2.

- 38 separate site investigations were undertaken, with odour of level 3 or higher was detected during 5 of these occasions (13.6%).
- Objectionable odour (a breach of consent condition) was detected during 1 of the investigations. Enforcement options are being considered in regard to this breach.
- Odour intensity was recorded 1952 times during these investigations, an intensity of 3 or above was measured 17 times (0.87%).
- The weather during Block 3 was generally fine and calm.

## Monitoring block 4

Monitoring is underway for block 4 (20 February 2003 – 7 March 2003).

## Conclusions

- The odour was generally not problematic during blocks 1 and 2 (up to 15 December 2002). Poor weather may have influenced results from block 1.
- Odour was present and at times objectionable during block 3.
- Anecdotal evidence from both officers and complainants stated that the odour intensity and frequency had increased in the TPL neighbourhood from the last months of 2002 to the early months of 2003.
- Though TPL was identified as the source of the majority of odour, odour was also detected from other sources, such as the Works Infrastructure asphalt plant in Ngauranga Gorge.
- TPL has investigated and installed measures to reduce odour emissions from the rendering plant.
- Odour management practices may have regressed from the standards implemented in previous summers. Blood has been rendered during daytime hours and stock washes reduced to once daily instead of twice on hot days.

## Other information

- Condition 7 of resource consent WGN950150 that governs discharges (including odour) beyond the TPL boundary has been confirmed as breached 3 times during 2003 to date (once during proactive monitoring investigations and twice after hours).
- TPL have been served an infringement notice for the first of these incidents, further enforcement action is likely to be taken over the remaining incidents.

## Recommendations

- Proactive monitoring to continue into March 2002 and beyond, until complaint level drops.
- Investigation into TPL's operation procedures to take place in an effort to minimise odour production on site.

## Seaview Proactive Monitoring Summary (Harley O'Hagan)

### Background

There are four main consent holders located in the Seaview area that have historically been producers of problem odours. These consent holders are HVWS (Seaview Wastewater Treatment Plant), Nuplex Environmental, Chemwaste and NZ Fish Products Ltd. The four sites are monitored together.

### Proactive monitoring methodology

Two three-week phases of monitoring have been carried out in the Seaview Area, one starting on 26 November 2002, and one starting on 10 February 2003. A third phase is scheduled to begin on 10 March 2003 after a week to review the results of the second phase.

In each scheduled week, an officer monitors the area on three occasions for 2 to 3 hours in the morning, which is the time that most complaints have been received. Generally monitoring is not undertaken during wet weather, as odour incidents are not likely when the weather is bad. Predetermined sites located around the four plants being monitored are visited. At these sites, the wind speed and direction and temperature are measured and any odours detected are recorded and assessed using FIDOL factors.

### Monitoring results

Consent Holder	Phase	Monitoring Days	Number of complaints	Number of complaints received while an officer was at the site	Number of occasions an odour was detected	Number of occasions an offensive odour was detected
HVWS	1	7	0	0	4	Nil
	2	4	0	0	3	Nil
Chemwaste	1	7	2	2	3	Nil
	2	4	0	0	3	Nil
Nuplex	1	7	0	0	3	Nil
	2	4	1	0	3	One
NZ Fish	1	7	0	0	6	Nil
	2	4	0	0	2	Nil

Odours were regularly detected from each of the four sites, but no offensive or objectionable odours were detected during the proactive monitoring. As Seaview is an industrial area, a level of background odour is acceptable. There were no confirmed breaches of consent in either phase of monitoring.

No odour complaints have been received regarding HVWS since proactive monitoring began, but one odour complaint was received regarding NZ Fish, and two each have been received regarding Nuplex and Chemwaste.

While we do not generally respond to individual complaints during proactive monitoring, the NZ Fish complaint was received in between monitoring phases, and was investigated because GW had had not received any complaints for some time, and there were no officers monitoring the area at the time. The officer detected no odour during their investigation.

Chemwaste's odour complaints were both received on the same day, and the investigating officer detected some odour but did not consider it to be offensive or objectionable.

Nuplex Environmental's first complaint was received between monitoring periods, and the investigation had a similar result. However, the officer investigating the second complaint (received while they were proactively monitoring in the second phase) did detect an odour that was considered to be offensive and objectionable. An explanation was requested, and after receiving Nuplex's explanation, a written warning was issued.

## **Conclusions**

We have concluded that generally the four consent holders being monitored in Seaview are unlikely to create an acute odour that is offensive and objectionable beyond the boundary during normal operations. Any serious odour is generally due to a problem with the plant or with the operation of the plant.

Of the four complaints that have been investigated, each has resulted in odours being detected by the investigating officer, and in 25% (1 out of 4) of instances, the officer has confirmed a breach of consent.

These results infer that if a complaint is received it should typically be investigated.

## **Next steps**

Greater Wellington will conduct one more three-week round of pro-active monitoring. From then on, provided the monitoring results are similar to those already obtained, proactive monitoring will cease, and complaints will in most cases be responded to when they are received.

## Asphalt Surfaces New Zealand Limited Monitoring Summary (Sarah Wilks)

### Background

Asphalt Surfaces New Zealand Limited (ASNZL) is an asphalt plant located in Kinleith Grove, an industrial zone on the boundary of Porirua. The plant was granted a discharge to air permit on 24 August 1999 and began producing asphalt on the 26 April 2000.

There has been a significant history of complaints, associated investigations and enforcement action at the ASNZL site. Since the plant began operating Greater Wellington (GW) has:

- Received over 1100 complaints alleging an offensive odour;
- Responded to over 600 separate incidents at the site;
- Confirmed 26 offensive odours beyond the boundary of the plant;
- Undertaken an independent odour assessment of the plant; and
- Issued eight infringement notices, two abatement notices and one enforcement order for breaches of conditions 6, 9, 13 and 17.

Of the total number of complaints received by GW between January 2000 and January 2003, ASNZL has had more complaints alleging an offensive odour than any other site in the Wellington Region.

GW began proactive monitoring at the ASNZL site on 14 October 2002. Since that time GW has undertaken four phases of proactive monitoring, each for a three week period with a one week review period in-between each phase.

### Results of pro-active monitoring

Since pro-active monitoring began on 14 October 2002, GW officers have visited the ASNZL site on 26 occasions. Although an asphalt and/or solvent odour was detected on 19 occasions, no instances of an offensive odour were confirmed beyond the boundary of the plant. Six days of pro-active monitoring were cancelled due to adverse weather conditions and were unable to be rescheduled. A further four proactive monitoring days were cancelled after the plant ceased operations on 31 January 2003.

In phases one and two, the pro-active monitoring was predominantly undertaken in north to north westerly wind conditions which historically have resulted in the largest number of complaints. In phases three and four monitoring was undertaken in both northerly and southerly conditions to identify the source of the solvent odour.

The results of the monitoring are summarised in *Table one* below:

**Table one: summary of proactive monitoring results**

<b>Phase</b>	<b>Monitoring Days</b>	<b>Number of complaints</b>	<b>Number of complaints received while an officer was at the site</b>	<b>Number of occasions an asphalt/solvent odour was detected</b>	<b>Number of occasions an offensive odour was detected</b>
One (14/10/02 – 10/11/02)	9	22	11	8	Nil
Two (11/11/02 – 08/12/02)	4	6	0	4	Nil
Three 09/12/02 – 24/12/02)	8	1	0	7	Nil
Four (20/01/03 – 16/02/03)	5	16	7	3	Nil

## **Conclusions**

As a result of the proactive monitoring GW officers established that:

- The carbon filter installed on the plant in January 2002 has reduced the intensity of the odour.
- The discharge from the carbon filter is not an asphalt type odour;
- The asphalt odour that is occasionally detected beyond the boundary is coming from the conveyor belt, load out bin and bitumen tank.
- The ASNZL plant is unlikely to create an acute odour that is offensive and objectionable beyond the boundary during normal production;
- The solvent odour detected by residents is not coming from the ASNZL plant and is likely to be coming from Steam and Sand Limited and/or other surrounding industries.

## **Next steps**

The ASNZL plant has not been producing asphalt since 31 January 2003. The General Manager of the ASNZL plant has advised GW, that the directors of ASNZL have not been able to secure a New Zealand buyer for the plant and that it is likely that the plant will be dismantled in the next few weeks and sent to Australia. The General Manager has further advised that once a final decision has been made, ASNZL will advise GW in writing and will surrender the resource consent.

Consents Management Department has advised the Pollution Control of the solvent odour that is coming from Stream and Sand Limited and/or surrounding industries. PC are now following up on the information gathered by consents management.

## **Carey's Gully Complex Monitoring Summary (Luci Ryan)**

### **Background**

In general, the total number of odour complaints received by GW throughout the Wellington region increases as air temperature increases during the summer months. However, complaints relating to activities at the Carey's Gully Complex do not follow this pattern. Instead, the number of complaints made about the Carey's Gully Complex peaks consistently in the autumn months of March and April. Therefore, in order to maximise the likelihood of detecting odour from the site, it is proposed to proactively monitor the site during the autumn months.

Since the last report to the Environment Committee in October 2002, GW has received 46 complaints over a period of 22 days, relating to the Carey's Gully Complex. Out of the 22 days on which complaints were received an officer visited the site on 11 occasions. A total of 27 complaints were received on the days that an officer visited the site. Odour was detected on 6 of the 11 occasions that the site was visited, but it was not confirmed as offensive or objectionable.

### **Proactive monitoring**

Proactive monitoring of the Carey's Gully Complex is due to begin on the evening of the 3 March 2003. Monitoring will take place between the hours of 5.00 pm and 9.00 pm, Monday to Friday for 3 weeks. The hours that the monitoring will take place have been determined by analysing the pattern of previous complaints, which shows that 60% of complaints were received between 5.00pm and 9.00pm.

The results of the monitoring will then be reviewed in week four, and a decision on any additional monitoring requirements will be taken. Four members of the Consents Management Department will undertake the monitoring.

It should be noted that the Carey's Gully Complex is a difficult site to monitor. The site is closed at night, so it cannot be accessed without contacting Wellington City Council. Additionally, there is no cell 'phone signal along Landfill Road or at the site itself, which means that it is unsafe for an officer to visit the site on his or her own at night.

### **Next steps**

Next steps will be determined after the initial three week monitoring period has ceased.