

Altona Properties Soil & Groundwater Meeting

Minutes and Record of Questions and Answers

Date: 18 August 2003

Location: Altona Conference Room

Time: 17:00

1 Present

Valerie Gemmell (Resident)
Rod McLeod (Welvic)
Tim Kitchen (EPA)
Judy Hindle (Resident)
Murray Grayburn (Orica)

Noel Ryan (APPL)
Melanie Rowe (PB)
Dave Adams (PB)
Ken Lambert (Resident)

2 Apologies for absence

None

3 Confirmation of Agenda

Agenda confirmed as stated.

4 Greetings and Introductions

Opening of meeting and welcome by Noel Ryan. Introduction of Melanie Rowe, PB Project Manager replacing David Wenig.

Introduction of Murray Grayburn (Orica) who will be replacing Noel Ryan and Rod McLeod as Altona Properties' representative. Murray confirmed Altona Properties shareholders' ongoing commitment to the treatment of contamination at the Altona Properties site.

5 Minutes of Last Meeting

Minutes of last meeting (February 2003) were circulated. Minutes of last meeting were accepted as true and correct.

PB presented historical development of EDC plume on A3 plan showing EDC plume in 1997, 1999, 2000, 2001, 2002 and 2003 as requested in previous meeting. Copies of the plan were circulated in the meeting and a copy is attached to these minutes.

Historical EDC maps indicate an overall decrease in the extent of contamination with a separation of the plume into two smaller plumes, one beneath the APPL site and one further south beneath the Qenos plastics site. Fluctuations in the magnitude of EDC concentrations within the hotspots can also be observed. PB advised that variations in

EDC concentrations are reported from one monitoring event to the next but overall EDC concentrations have been shown to be within historic ranges or show a declining trend.

At the previous meeting concerns were raised regarding the change of ownership of land to the south from Qenos to SCT and ensuring ongoing access to monitoring wells. Tim Kitchen (EPA) advised that there is no obligation for the new owner to continue to monitor wells on the land. Noel Ryan advised that APPL is committed to monitoring accessible wells on land to the south. Construction works on SCT land are due to commence in early 2004. EPA is to further clarify requirements for new owners to continue monitoring groundwater and any possibilities for EPA enforcement.

The Soil and Groundwater Review Group also requested that details be prepared on contamination on SCT land in particular with regards to historic trends for monitoring wells in this area so that the importance of ongoing monitoring of this area can be assessed.

PB provided additional information regarding dioxin and furan sampling conducted in September 2002 as follows:

- Ambient Sample collected over 24 hrs, 12.30pm 11/9/02 – 12.30pm 12/9/02
- Emission Sample collected on 11/9/02 from exhaust stack sample point
- Wind Conditions
 - 11/9/02 BOM data 3pm Tullamarine - SSE 13 km/hr with maximum wind gust of 30 km/hr from the west
 - 12/9/02 BOM data – NW 11 km/hr with maximum wind gust of 41 km/hr from the north

It was noted that in addition to dioxin and furan results being below the State Environment Protection Policy requirements, results were below the laboratory detection limits.

David Adams (PB) advised the treatment system was designed to operate at a temperature below that at which dioxins and furans are produced. In addition, the system operates with interlocks and alarms to ensure that if temperature varied beyond the design limits the system would shutdown.

PB also advised that a maintenance schedule confirms the operation of interlocks etc.

6 Groundwater Treatment Update

Melanie Rowe presented an update on groundwater treatment. This included an updated operational timeline (attached), which indicated that the system was shutdown due to ongoing demolition works at the site through to 2 June 2003 when the GWTS was restarted. The system was in operation from 2 June – 16 July prior to a shutdown to address ongoing high pH issues with the wastewater that prevented disposal to sewer as trade waste.

Caustic wastewater has now been disposed of offsite and the cause of the problem identified and repaired. The GWTS will be monitored on a daily basis to ensure that this problem does not arise again.

A number of graphs were presented (attached) showing cumulative VCH (as EDC) extracted by treatment system, cumulative resources used and waste produced,

cumulative VCH (as EDC) in waste streams and cumulative environmental impacts measure.

Ongoing environmental impacts of the GWTS, in terms of resources used and carbon dioxide emissions, were discussed. These impacts have to be considered together with the environmental benefits in terms of treatment of groundwater contamination hotspots. This is to be discussed further with input from EPA at future meetings in determining an appropriate endpoint for treatment.

7 Groundwater Monitoring

Melanie Rowe presented the results of the March 2003 annual groundwater monitoring event. Sixty-six wells were sampled from across the Altona Properties, Qenos and Dow sites. Groundwater samples were analysed for VCHs, BTEX, PAHs, pH and TDS.

Groundwater levels were generally lower than March 2002 consistent with ongoing drought conditions. Groundwater flow was generally southerly consistent with previous monitoring.

Overall March 2003 monitoring data was consistent with historic data. Melanie explained some isolated aberrations in contaminant concentration (e.g. one-off rises, falls, etc.) could be due to seasonal variation, the high margin error associated with VCH analysis, sample heterogeneity and natural variations within the aquifer.

An overall decreasing trend for EDC was noted around the fringe of the plume and at air sparge wells consistent with natural attenuation and effectiveness of the treatment system in addressing the source of contamination at hotspots. Some slight increases in EDC concentration were noted for several wells however these increases were generally within historic ranges.

No significant trends were observed for vinyl chloride.

PAHS were noted to generally show a decreasing trend with samples from 34 of the 41 wells analysed returning values below laboratory detection limits.

BTEX concentrations were generally stable or decreasing.

Measurements of dissolved oxygen and redox potential were indicative of natural attenuation in some areas of contamination.

The Soil and Groundwater Review Group requested that data for specific wells be presented at the next meeting to show trends in contaminant concentrations.

8 EPA Annual Report

The annual report required under the Altona Properties EPA waste discharge license was submitted on 30 June 2003. Tim Kitchen (EPA) advised that the report was compliant with all EPA licence reporting requirements and that the GWTS had operated in compliance with the conditions of the licence for the financial year 2002/2003. It was also noted that trends

for groundwater monitoring results were positive in indicating effectiveness of the treatment system and this would be confirmed by future monitoring.

Tim also advised that there were no further requirements for dioxin and furan testing.

9 General Discussion and Questions

The Soil and Groundwater Review Group was advised that the AP Groundwater Management Plan website www.altonagroundwater.info had been updated following the February community meeting. Proposed changes to questions listed on the website were reviewed and edits suggested (attached). The website will be further updated with information from the August 2003 community meeting and the changes discussed.

Community members were invited to visit the website.

It was announced that following the changes of ownership to Welvic, Noel Ryan would no longer be involved with Altona Properties and would be finishing at the end of the month. Noel's replacement is yet to be announced but Murray Grayburn (Orica) will be the contact for Altona Properties. Murray reiterated Altona Properties shareholders' commitment to the ongoing operation and monitoring of the GWTS.

Some concern was expressed with regards to the loss of knowledge and continuity in management of the site. However ongoing involvement by PB would provide continuity in the knowledge base.

The Soil and Groundwater Review Group thanked Noel for his involvement in the group and willingness to be open and communicative about treatment and site issues.

Sale of the front title of the Altona Properties site has previously been discussed. A statutory environmental audit will be conducted for the site. Following sale of the north title an amendment to the EPA waste discharge licence (WDL) will be required.

Ken Lambert will be resigning from the Soil and Groundwater Review Group due to an interstate move. The Soil and Groundwater Review Group thanked Ken for his involvement and contributions over many years and wished him well for the future.

10 Next meeting

A consensus was reached that meetings of the soil and groundwater review group can be reduced to six monthly. If any issues come up between meetings an earlier meeting can be called to address this. In addition the review group is to be provided with an update by mail in place of the quarterly meeting.

The next regular meeting was scheduled to be in six months – February 2004.

Meeting closed at 7 pm.