Minutes of Meeting

Meeting:	**Altona Properties** **Soil & Groundwater Meeting**	Location:	Mt St. Joseph's Girls College Board Room, Altona
Recorded by:	Emma Ryan-Reid / Graham Smith	Date:	8 March 2006, 5:30pm
Reference:	2125079A 003 MINS(MAR06) REIDE		
Present:	Paul Cassar (resident), Nessie Hardy (resident), Quentin Cook (EPA), Peter Horne (Orica), Jim Lewis (PolyOne), Yves Blanchett (PolyOne), Graham Smith (PB), Emma Ryan-Reid (PB), Noel Ryan		
Apologies	Les Harman (Qenos), Valerie Gemmell (residential), Bryan Goodwin (Dow)		

The Altona Groundwater Management Plan Website is located at **www.altonagroundwater.info** this includes details of the groundwater management plan and the latest groundwater treatment and monitoring results as presented at the community meetings of the Soil and Groundwater Review Group.

Item No.	Item	Action
1.	**Confirmation of Agenda** – Agenda confirmed as stated.	
2.	**Minutes of last meeting** – Minutes of last meeting (August 2005) were circulated previously. Minutes of last meeting accepted as true and correct.	
3.	**Frequency of meetings** – Valerie Gemmell (prior to the meeting) suggested having an annual meeting, with the option for a 6 monthly meeting if required. Noel Ryan commented that this was an option but for the moment it might be best to retain the 6 monthly meeting given developments to be discussed in this meeting.	
4.	**Groundwater Treatment Update** - PB presented a summary of groundwater treatment and monitoring over the past six months since the last community meeting. An updated timeline (attached) was presented detailing system operation and shutdowns. Operational reliability has been inconsistent, mostly due to high quench temperatures and a major shut down owing to failure of the site water main. To avoid future shutdowns due to high wastewater levels, tanks are now switched over before a weekend if these exceed 50% capacity. A new site water supply was installed in March. It is anticipated GWTS reliability will improve as a result of improved (less rusty) water quality. The water main had been an ongoing cause of unscheduled shutdowns relating to the quench and scrubber. The current method of calculating GWTS reliability does not account for planned shutdowns such as during groundwater monitoring or system maintenance. Nessie suggested that this approach is not a true representation of reliability. *(The approach has now been amended for future reporting.)* Paul Cassar queried whether groundwater treatment would continue beyond the budget that had been allocated. Jim Lewis assured that completion of treatment was not determined by budget but by treatment success. Paul queried whether recent heavy rain had increased groundwater contamination. Noel explained that rain might change groundwater levels over time but was unlikely to increase contaminant concentrations. PB presented a number of graphs (attached) showing: system operating performances, cumulative volatile chlorinated hydrocarbons (VCH) (as 1,2 dichloroethane (EDC)) extracted by the treatment system, cumulative resources used and waste produced and cumulative environmental impacts measure.	

5.	**Annual Groundwater Monitoring Event – Nov 05** – PB conducted groundwater sampling of 64 wells across the APPL, SCT, Dow, Qenos Resins and Qenos Olefins sites in November 2005. Samples were analysed for VCHs and benzene, toluene, ethyl benzene and xylenes (BTEX). Selected samples were analysed for total dissolved solids (TDS) and polycyclic aromatic hydrocarbons (PAHs). Contour maps of groundwater flow, EDC and VCM concentrations were presented (attached). Groundwater flow (in a southerly direction) and water levels (ranging from 5.0 m to 11.5 m below ground level) were both consistent with historic results. A new primary laboratory was used as the previous laboratory no longer does the analysis required for APPL groundwater monitoring. No data anomalies or step change in concentrations noted with new laboratory. Quentin asked whether crossover with the labs occurred for QA purposes. Emma commented that the change was purely because of a business decision by the previous primary laboratory to no longer undertake the analysis. The same secondary laboratory was used and all QA samples taken as per previous events. The ongoing decreasing trends in contaminants in wells at the plume boundary and some air sparge (AS) and soil vapour extraction (SVE) wells consistent with natural attenuation and treatment. Dissolved oxygen and redox potentials also support natural attenuation in these areas. The November 2005 results again indicate a separation of the on-site and off-site plumes. Re-sampling of 10 wells reporting anomalous analytical results in the Nov05 Groundwater Monitoring Event is scheduled for 15 & 16 March 2006. *(sampling now completed)*	
6.	**Proposed Air Sparge Enhancements** – PB presented details of a proposed enhancement of the GWTS comprising installation of 8-16 new AS and 8-16 SVE wells. The new wells would target remaining contaminant hot spots based on the success achieved with the AS and SVE wells in the former tar storage area in the south-west corner of the site. Currently the effectiveness of air sparging in other areas is limited by variable fracturing in upper basalt aquifer. Seven of the existing 13 AS wells do not have any flow, with only five currently in operation (3 in former tar storage area, 2 in former EDC plant area). Also, VCH recovery rates decreased significantly since the GWTS was commissioned as the bulk of easily mobilised contaminants have been extracted. The additional AS and SVE wells should assist in VCH recovery treatment is extended into those areas with limited or no air sparging; the area around the former EDC plant and storage tank. The enhanced AS system will operate within existing design capabilities of GWTS. If necessary, treatment operations will be rotated between areas of the site to ensure continued compliance with EPA waste discharge licence. No increase in discharges to air is anticipated. PB presented a plan of proposed locations of new AS and SVE wells (attached). Subject to EPA agreement, PB advised that drilling works could commence at the end of March, with connection to the GWTS by mid to late May. Nessie Hardy suggested an article for The Consultative Chronicle summarising the treatment progress and enhancement works.	PB – write article

7.	**Proposed Soil Treatment Trial** – PB presented details of a proposed soil treatment trial in the former tar storage area in the southwest corner of the site. An area of 10 x 5m in a moderately contaminated area will be targeted during the trial. *(Following the meeting, in consultation with EPA, an additional 10m x 5m in a high contaminant area was added to the trial scope).* The trial area represents approximately 15% of the total area of contaminated soil. Up to 50% of the soil volume is anticipated to be basalt floaters, with depth to basalt ranging from 1.0 to 1.8 m below ground level. Volatile contaminants will be released from the soil via sequential deep soil ripping events. After each ripping the area will be covered with HDPE and volatiles drawn via perforated piping for treatment in the GWTS. Baseline and end of trial sampling, and daily monitoring of volatiles entering the GWTS will be used to assess the success of treating the soil in this method, and the number of deep ripping events required to treat the soil. Ripping events will occur only in a south-westerly breeze and air monitoring will occur downwind of the work area and in the personal breathing space of site personnel. Full OHS protective equipment and clothing will be required by site personnel during these activities.	
8.	Nessie Hardy thanked Noel Ryan for the article he wrote on groundwater contamination for the Chronicle.	
9.	**Groundwater Management Plan Website** - The website was updated following the last community meeting and will be updated after the current meeting. Contact details have also been updated. Soil treatment trial works will be added to the website.	PB – Website to be updated
10.	**Next Meeting** - The next regular meeting will be scheduled in 6 months; late August 2006 on a Monday evening.	
	Meeting closed at 7.55 pm.	