



HEALTH, SAFETY & ENVIRONMENT REPORT 2009

Welshpool, Western Australia

The Welshpool plant produces a range of solid and liquid agricultural formulations of herbicides and fungicides, and specialised water dispersible granules.

The site

incorporates five manufacturing plants, using unique processes, which formulate herbicides and fungicides in liquid formulations and water dispersible granules (WDG) with a variety of active ingredients.

The WDG plant on the Kwinana site was closed and most of the production volume has been transferred to Welshpool. The plant operates 24 hours/day, six days per week.

Health and safety performance

We are pleased to report that we had no serious injury in 2008. At the end of 2008, we had worked for 516,883 hours (10 years) since the last lost time injury, and 197,600 hours since the last injury requiring medical treatment (a cut requiring stitches). The site continues to maintain an excellent safety record. 98% of all people on site have completed the company's 5 day and 4 day OH&S courses. The Take 5 program continues to be used and promoted. The introduction of "Action Cards" has not gone as well as expected.

The Granulation plant conducted a manual handling assessment of palletising 15kg bags 10 high on a pallet. This required the operator to lift a number of these bags above shoulder height, an accident waiting to happen. It was decided to purchase a specifically designed bag lifter manufactured in Italy at a cost of almost \$40,000 (see over the page for more information).

Wastes

We are reporting a sudden increase in waste sent to an industrial treatment plant. We manufacture a number of slow release formulations where the active pesticides are absorbed into inert solids. In use by the farmer, the active material is slowly leached from the inert solid to do its intended task, giving a much longer period of plant protection. Over the years, some of the off-specification solid raw materials such as talc, perlite etc have been stored for eventual disposal. In addition, during product changes, small amounts of the inert solids are sent through the production train to remove remaining traces of the previous product, these were also stored. During 2008 we found an opportunity to work with a waste treatment company to dispose of these materials.

Waste, tonne	2004	2005	2006	2007	2008
Recycling	62.68	0	14	0	5
Aquifer	.00011	.00019	.00014	.00005	.00012
Landfill	292	233	245	207	253
Industrial	-	-	-	2.5	115.9

Government audit

An audit conducted by the local Department of Consumer and Employment Protection requested that we attend to 3 items, which we have since completed. A placard on site had faded in the sun, the emergency procedure plan needed to be updated and the site plan required further information regarding bulk tank storage sizes. The above were part of an improvement procedure and not a prosecution.

Testing

Our environmental and safety testing program this year involved 144 measurements. We are pleased that all were within expected limits. The tests involved measuring scrubber parameters, stack dust emissions, water quality in our aquifer, stormwater quality and occupational dust exposure monitoring.

Complaints

There were no complaints from neighbours during the year.



Energy performance

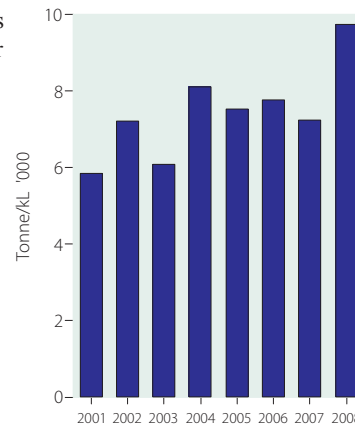
We do not use a large amount of energy, as shown in the table below. It should be noted that the figures in the table vary from those shown in previous reports, as we discovered that the units provided by our gas supplier were misunderstood by us. We have corrected past energy figures.

The manufacture of Water Dispersible Granules (WDG) is the most energy demanding process

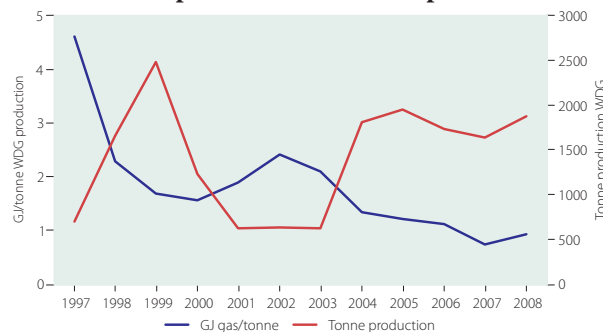
on site. The WDG process uses water to bind powder product to form granules that will disperse readily when the farmer adds it to water. The end product is dry, the water added to the process is evaporated off using natural gas as the heat source. Over the past few years we have been working on energy efficiency. The graph below shows that energy efficiency has improved

with increased volumes of production up until 2005. From this time on even though production volumes dropped, energy efficiency was still improved. The volume produced increased during 2008, however this resulted in a decrease in gas usage efficiency mainly due to the type of product manufactured and the decreased rate of production. It is believed this is due to a more complex product range being manufactured resulting in slower instantaneous throughput making gas usage less efficient.

Production volume



Gas consumption GJ/tonne WDG production



Tonne CO ₂	2002	2003	2004	2005	2006	2007	2008
Fuel	383	145	190	180	155	102	108
Electricity	871	779	1167	1172	1042	871	1210
Total	1254	924	1357	1352	1197	973	1318

Air emissions

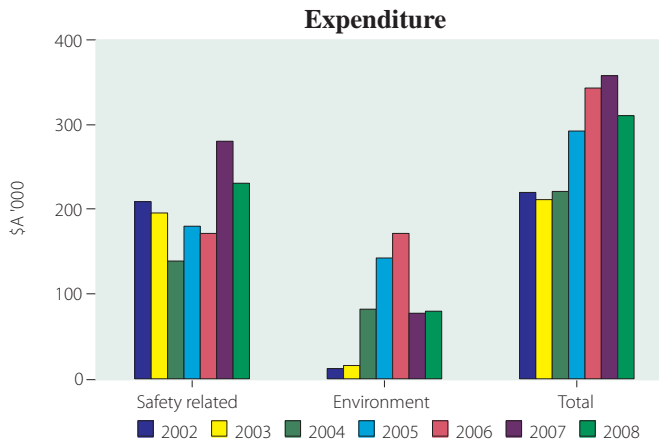
Last year we reported:

There is nothing new to report on air emissions. Some testing done during the year was carried out by a laboratory that did not have the analytical sensitivity we require, though it does meet regulatory demands. All results were below the laboratory's detection limits, which means that our emissions are very low, however we cannot quantify them. A new round of testing will be carried out this year and we will report results in next year's report.

This year's results are no different. Measurements carried out on dust emissions from our stacks in the WDG plant, slurry and granule infusion plants all recorded emissions lower than the capability of the measuring laboratory to detect (emissions < 0.0541 g/min).

Expenditure

Safety expenditure included the upgrading of our dust explosion suppression equipment and the upgrading of a filling line to minimise ergonomic risks in our water dispersible (WDG) plant. The remainder of the expenditure was on managing safety and environmental matters on the site.



Community

We continue to support the "WA Special Needs Children", these children all have life threatening illnesses, and we sponsor a number of children so that they can attend a Christmas party.

Youth and community news, sponsorship of a newsletter highlighting the problems of drug and alcohol use.

Fire fighting

One hopes that it is never necessary for anyone on our site to have to fight a fire. Just in case, we give our people some experience in what to do should this ever happen. The photo shows two of our people at the training ground used by the fire brigade. They are practising to fight a solvent fire using water fog. It can be a fun day, but the skills gained are serious.



Water use

We have further reduced our water requirements in 2008. Despite a 34% increase in production volume, our water consumption increased by only 9%, resulting in the increased efficiency figure in the table.

Water Usage	tonne/tonne production
2003	0.301
2004	0.266
2005	0.244
2006	0.235
2007	0.205
2008	0.167

Groundwater

Before discharge, our collected and treated stormwater is analysed against our licence limit of max 0.2 ppm for any material used on site. Our analysis showed that for all the actives combined, our discharge was 0.121 kg, well within the licence limits set. The soak through which the water is released, shows good vegetation, no sign of herbicides damage.

The site under its current operating license is required to monitor groundwater for possible contamination caused by spillages etc. The photo attached shows water samples being taken from one of our six site monitoring bores.



Manual handling

Manipulating 25 kg bags presents a risk for damage to employees' backs. To avoid this, we have been fitting manual handling aids when this is considered an advantage. Shown in the photo is one of our people using a handling aid to make the lifting of the bags child's play.



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