

QAL Community Forum Outcomes – Reference Sheet

Updated 16 March, 2006

QAL Community Forum Principles

- Continuously reduce impact on the community while maintaining the operation of the plant
- To work together and achieve results to the satisfaction of the broader community
- To achieve a mutual understanding of technical environmental matters through education and sharing of information via an agreed and shared database

| F# | Reference Topic |
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| 10 | <p>Air Shed Model EPA presented Air Shed Model to Forum</p> |
| 14 16 17 19 20 21 28 | <p>Alkali Presentation on sources of background alkali emissions. Reiterated that community feedback assists in finding sources EMP being drafted for submission to EPA EMP submitted and approved by EPA Reliable alkali measurement techniques being developed (QAL first refinery in the world to monitor and measure alkali) Tank pipe modifications have been installed and working well at reducing alkali mist Forum shown video of prototype ‘hose-out’ procedure for alkali emission reduction project Alkali measurement device installed on top of Calciner units Trial underway to install membranes on secondary surge tanks and primary feed tanks to eliminate alkali misting</p> |
| 20 23 24 25 26 | <p>Alumina Dust Alumina transfer point dust reduction projects being worked on Project to reduce alumina conveyor dust has been commissioned with positive results Investigation underway for alternative alumina loader (Cascading Chute technology) Investigations continue into upgraded loading facility Funding approved to upgrade alumina loading facility</p> |
| 11 | <p>Barney Point Mud Flats Access gates now locked and section of fence missing will be erected</p> |
| 9 11 12 | <p>Boilerhouse Failure of uninterruptable power supply in the boilerhouse control room causing six boilers to shutdown being investigated. Once investigation is complete, a report will be presented to Forum. Investigation complete and recommendations adopted by QAL, findings presented to Forum. Revised Boiler baghouse program presented. First baghouse will be fitted July 2003. Remaining boilers will be fitted with statutory turnaround schedule.</p> |

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| 15 | QAL submitted voluntary Environmental Management Plan (EMP) to EPA in June outlining actions, outcomes and performance measures. |
| 16 | Boiler 6 baghouse was successfully fitted and commissioned mid August 2003. Boiler 3 baghouse will be fitted in 2004. EPA accepted QAL's EMP for boilerhouse emissions. |
| 20 | Boiler 3 baghouse being fitted July 2004 |
| 21 | Boiler 3 baghouse successfully fitted |
| 24 | Boiler 2 baghouse installed |
| 22 | Boiler 4 baghouse to commence in July |
| 26 | Boiler 4 baghouse installed July 2005, Boiler 5 baghouse to be installed in February 2006 |
| 27 | Package boiler project discussed. If approved, operation by September 2006 |
| 28 | Boiler 5 baghouse to be installed in March. Once complete, stack two will have two baghouses installed |
| Calciners / Calcination Project | |
| 11 | Update presentation made |
| 12 | Target date for commissioning is late April 2003 due to excessive rain in February 2003. |
| 15 | Calcliner commissioning started and going satisfactorily. Forum members invited on tour once commissioning complete. |
| 16 | Commissioning update |
| 17 | Forum undertook tour of facility |
| 18 | Units still being commissioned, operating at 85% of full capacity. |
| 19 | Commissioning continues, operating at 90% of full capacity. |
| 20 | Calciners expected to be in full operation in August. Rotary kilns being progressively decommissioned as Calciners come on line. Contract has been let for kiln demolition. |
| 21 | Design issues have been resolved and all modifications are to be finished by the end of October |
| 23 | Update presentation delivered – Unit 1 bags and half of Unit 3 replaced. Demolition of kilns has commenced with first kiln removal planned for March-May |
| 24 | Production limitations – hydrate stored on site and some transported to CAR for commissioning. Major lifts of the kiln demolition have commenced. Units 1,2 and three bags have been replaced |
| 25 | Final operating kilns to be decommissioned by 30 June. Demolition of kilns 5-9 are 65% complete |
| 26 | Kilns 5-7 fully removed, demolition of stacks to begin October/November |
| 27 | Major refractory failure on unit 1 in October. Kilns over 70% complete |
| 28 | Calcination stacks removed |
| Coal | |
| 11 | QAL has installed coal dust monitors at QAL stockpile and at Barney Point. |
| 19 | Coal train unloading station dust suppression project successfully commissioned and working well. |
| 22 | Remainder of coal dust control project commissioned with concrete laid around coal unloading / storage areas, silt trap installed, coal collection pad and trees planted. |
| 24 | Forum members sought QAL interest in assisting the group to contact Queensland Rail re covers on coal trains |

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| 28 | Discussion on coal dust in area and QAL's commitment to work with Gladstone industry to approach the issue |
| 6 | Communications during a crisis Hierarchy of crisis established. Significant impact external to QAL – emergency services take control of plant |
| 5 11 14 15 16 | Community alkali pads Community invited to assist QAL in monitoring external boundaries using alkali pads. MSDS provided to Forum. Presentation on alkali monitoring pads When pads are taken to the EPA, same information to be given to QAL to follow up. Information being added to complaints database Monitoring information now collated from EPA, community and QAL |
| 2 9 10 22 24 | Community and Corporate Survey Draft provided to Forum#2. Report due back mid July 2002. Presentation to be made August forum. Presentation made. Brochure summarizing findings to be sent out to participants. QAL intends to build findings into Community Relations plan Survey feedback newsletter sent out to participants Survey results presented to Forum Survey results mailed to Forum members |
| 2 15 16 17 18 23 26 27 28 | Community Forum feedback / communications Feedback procedure established (See Forum #2 minutes) Preferred means of communication for each Forum member established and maintained by QAL Community Relations Forum indicated they would like to see more communications regarding Forum, the environment, and community activities. Proposal put forward to modify advert, implement newsletter and enhance website to improve Forum progress communications. Forum gave feedback on new advert. Annual meeting between QAL Board and Forum positive 2003 summary of Forum outcomes presented to Forum. 2004 Board/Forum meeting well received Forum celebrated four years since its inception Forum site tour and BBQ well received Forum/Board meeting well received |
| 2 10 | Community Hotline Publish 1800 in phone book. When QAL has phone outage, 1800 number will be diverted to a mobile. |
| 12 | Community House Presentation on purpose of Community House |
| 13 | Community Relations Presentation on purpose and function of QAL Community Relations, including an outline of corporate philanthropy and current community activities. |

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| 15 | Update on community activities (ongoing) |
| 17 | First edition of the QAL Community Newsletter to be distributed Feb 04 |
| 19 | First edition of <i>Refining Moments</i> quarterly external newsletter published First ever HSEC report published and distributed |
| 20 | Forum won award Sustainability Award for 'Educating our Community'. QAL won Sustainability Award for 'Waste Management'. QAL putting Forum forward for Queensland Community of the Year award. Feedback from HSEC report positive. |
| 21 | Forum entered for Queensland Community of the Year award. |
| 22 | Forum unsuccessful with aforementioned award. |
| 23 | Update on community activities including 2004 HSEC Report – due for release in approx six weeks. Community Relations role handover |
| 25 | HSEC Report released, thanked J Feddersen in assisting with 2005 Ecofest exhibitions |
| 27 | Upcoming 100 Million Tonnes event, 2005 CQU scholarship and high school bursaries issued. QAL Employees Picnic successful |
| | Complaints |
| 14 | Presentation on statistical data YTD. |
| 17 | Forum presentations to include correlation between number of complaints and wind conditions plus number of successful claims vs unsuccessful. |
| 18 | Complaint feedback correlated with wind direction |
| 19 | Dust and odour complaints reduced year to date |
| 20 | Odour and noise complaints reduced significantly. Reduction in complaints noted across the board. |
| 21 | Complaints have reduced since commissioning of abatement projects |
| 22 | A correlation between odour complaints and downtime of the Thermal Oxidiser has been noted since its commissioning in January 2004. |
| 23 | Reduction in alkali and odour complaints. Zero noise complaints since July 2004. Presentation on complaints procedure delivered. Presentation delivered by Pacific Claims on external alkali complaint procedure |
| 24 | Odour making up 52% of complaints for YTD |
| 28 | 2005 end year results showed a significant decrease in number of complaints |
| | Environmental Projects |
| 9 | Approximately 20 environmental projects will be undertaken at a cost of \$71 million over five years (not including Calcination Project). Environmental projects are dependent on Board approval. Findings from the EPA Evaluation may alter the list of projects |
| 11 | Environmental Projects timetable for fly ash, coal dust, odour outlined |
| 12 | Update on environmental projects to be presented at each Forum |
| 24 | Air emissions monitoring complete with positive results |
| | EPA Evaluation |
| 4 | To be used as a basis for long term environmental strategy |
| 10 | Evaluation is under review by EPA. |
| 12 | QAL submitted two Environmental Evaluations to the EPA, one in 2002 on the electrical integrity of Boilerhouse and one in February 2003 relating to the impact of QAL's emissions. QAL waiting on formal acceptance of the latter. |
| 13 | Presentation on Evaluation findings given by authors of the report. |
| 14 | QAL and EPA in early stages of discussion regarding future path to |

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| | address alkali, dust and odour. |
| | Forum plant tours |
| 16 | Forum members toured plant and watched demonstration of hydroblasting, visited the Central Control Room and viewed a Granomatic. |
| 17 | Forum members toured Calciners and viewed the thermal oxidiser. |
| 21 | Forum members toured Waste Transfer facility |
| 24 | Next plant tour discussed |
| 26 | Tour planned for next forum |
| 27 | Forum members toured Calciners and lime unloading facility |
| | Health Study Research |
| 2 | Forum investigations carried out for research material. Forum waiting until EPA Evaluation published before further action taken. |
| | ISO 14001 |
| 4 | Presentation made to Forum explaining ISO 14001 audit. |
| 10 | Audit summary presented. |
| 18 | Lloyds Register and EPA on site for compliance audits |
| 28 | QAL recertified to ISO 14001:2004 |
| | Lime |
| 19 | Plans for QAL lime supply to be outsourced continuing |
| 20 | Transport plans for lime supply are being developed |
| 22 | Lime outsourcing presentation given. Lime outsourcing trial undertaken. |
| 23 | Noise monitoring on proposed route to be undertaken by Cement Australia (CA) |
| 24 | Trucking from CA continues. Noise monitoring to commence once entire lime supply is being sourced from CA |
| 25 | Noise monitoring to commence |
| 26 | Cement Australia feedback number provided |
| 27 | Draft noise monitoring results presented |
| 28 | Lime kiln demolition has begun with contract awarded |
| | Mosquitoes |
| 8 | Monitoring carried out by QAL on all QAL land in conjunction with GCC. |
| 13 | Tested for mosquito larvae near QAL roundabout of which there were none. QAL will continue to treat for larvae. |
| | Noise |
| 12 | Presentation made outlining changes to boiler relief valve silencer program – 90% reduction program to be complete by end 2003. |
| 16 | Silencer relief valves will be in place by the end of the year. |
| 18 | Boiler vent silencers fitted and working well |
| 25 | Presentation delivered detailing production and noise levels. Decommissioning of lime kilns has seen a change in noise tone as opposed to pressure |
| 26 | |
| 27 | Presentation delivered on environmental noise |
| | Community Notification Register |
| 4 | Email / letter protocol established (guidelines). Database letter sent out (to be actioned) and database to be maintained by QAL Community Relations. |

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| 8 | Notification register invitation sent to South Gladstone and Barney Point. Register maintained by QAL Community Relations |
| 10 | Notification register activated for the first time Oct 2003. Leak in Digestion contained, however register activated as a precaution. |
| | Odour |
| 12 | Impromptu presentation given on thermal oxidiser, due for commissioning in September 2003. Over next five years there will be an 80% reduction in odour from QAL. |
| 16 | Odour reduction project parts will be delivered end Sept for installation. EMP being drafted for submission to EPA. |
| 17 | Forum undertook tour of thermal oxidiser (odour destruction unit). Unit three online, units one and two due for commissioning December. |
| 18 | Thermal Oxidiser successfully commissioned and working well. Reduction in odour and noise noted on the heater deck in Digestion. |
| 20 | Modifications undertaken on Thermal Oxidiser to improve reliability. |
| 22 | Correlation noted between time Thermal Oxidiser off line and increase in odour complaints. |
| 23 | Investigations underway to further decrease Thermal Oxidiser downtime |
| 24 | Presentation on how and why the TO trips |
| 25 | Presentation on upcoming odour survey |
| 26 | Half the total number of odour complaints can be attributed to the two incidents at the Red Mud Dam in 2005 |
| 28 | Investigations underway to target next round of odour sources |
| | QAL Board |
| 4 | QAL Board strongly supports environmental performance improvements Long term environmental program based on EPA requirements |
| 10 | Forum requested a meeting with new Chairman |
| 11 | Representatives from the Forum identified for meeting with the Board in Feb 2003 |
| 12 | Meeting held that reaffirmed the Board's commitment to reducing negative impacts that QAL has on the community. Agreed that QAL's Board and representatives of the Forum continue to meet once a year. |
| 18 | Annual meeting positive and constructive – reaffirmed QAL's commitment to environmental improvement and lessening community impact. |
| 23 | 2004 Forum/Board meeting well received |
| 24 | Expectations of new owners RUSAL regarding Forum are the same as existing owners |
| 27 | Board to attend next Forum in February 2006 |
| | QAL Clean up |
| 14 | QAL Clean up days have become such a success, they will be initiated quarterly. |
| | Re/Vegetation |
| 5 | Using straw mulch, topsoil cover, direct seed Revegetation to control dust/erosion and water run off quality and improve aesthetics |
| 4 | Forum invited to participate in tree planting |
| 6 | Revegetation Committee established |
| 11 | Tree mulching session held on 7/11/02. 1200 trees had mulched placed |

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| | around base. Next session to be held Jan 2003. |
| 12 | QAL slashed grass near QAL roundabout and will continue to do so. |
| 13 | Tree Planting Committee had a meeting with direct seeding expert to develop long term revegetation strategy by the end of the year. Tree planting committee undertook tree planting at Yaralla Scout Den, Barney Point. Committee invited to assist planting Community House. |
| 14 | Tree planting/mulching afternoon organised for June |
| 15 | Another tree mulching afternoon organised for August and tree planting afternoon planned for Sept/Oct |
| 16 | Date set for tree planting in Oct |
| 17 | 500 trees planted by Committee on Thursday 23 October |
| 18 | Survival rate of trees greater than 80% (normally ~50% in saline environ) |
| 20 | Tree planting date set for Thursday 22 July |
| 21 | Tree planting day undertaken 29 July – 500 trees planted. Another date planned for Oct for 1000 trees to be planted |
| 22 | Tree planting undertaken 25 Nov – 650 trees planted. |
| 23 | Presentation delivered outlining buffer zone revegetation. Species listed for sand ponds. Four tree planting sessions for 2005 planned with goal to plant 3000 trees by year end. First session planned for April 7 |
| 24 | First tree planting session for the year held in April. Over 700 trees planted |
| 25 | Next tree planting session planned for 4 August |
| 26 | Next tree planting session planned for 19 October |
| 28 | 2005 target reached. 2006 target of 2100 trees set |
| | Red Mud Dam |
| 9 | Access being reviewed. Security proposal expected end of 2002. |
| 24 | Rare event in March – combination of fresh water levels, wind direction and temperature resulted in an algal bloom which produced odours |
| 28 | Odour mitigation devices to be installed at RMD in April 2006 |
| | Waste Transfer Facility |
| 14 | QAL Waste Transfer Facility commissioned June 2003 |
| 16 | Commissioned in June. Has been hugely successful with an estimated 80% reduction in recyclable material going to landfill. |
| 21 | Forum members toured WTF and presentation made at meeting by representative from Transpacific Industries (TPI). Reduction in recoverable/recyclable material currently at 94%. |
| | Water |
| 7 | QAL will use effluent water from GCC Sewage Treatment plant |
| 9 | Ground water model to be presented to Forum in February 2003 |
| 11 | QAL meeting 25% restrictions |
| 12 | QAL presented water management system to Forum |
| | Cogeneration |
| 27 | Proposed project introduced to forum members |