

QAL Community Forum Outcomes – Reference Sheet

Updated 28 December, 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

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F#	Reference Topic
10	Air Shed Model EPA presented Air Shed Model to Forum
14	Alkali Presentation on sources of background alkali emissions. Reiterated that community feedback assists in finding sources
16	EMP being drafted for submission to EPA
17	EMP submitted and approved by EPA
19	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
20	Forum shown video of prototype 'hose-out' procedure for alkali emission reduction project
21	Alkali measurement device installed on top of Calciner units
28	Trial underway to install membranes on secondary surge tanks and primary feed tanks to eliminate alkali misting

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<p>20 23 24 25 26</p>	<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>
<p>11</p>	<p>Barney Point Mud Flats Access gates now locked and section of fence missing will be erected</p>
<p>9 11 12 15 16 20 21 24 22 26 27 28 29 30 31</p>	<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. QAL submitted voluntary Environmental Management Plan (EMP) to EPA in June outlining actions, outcomes and performance measures. 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. Boiler 3 baghouse being fitted July 2004 Boiler 3 baghouse successfully fitted Boiler 2 baghouse installed Boiler 4 baghouse to commence in July Boiler 4 baghouse installed July 2005, Boiler 5 baghouse to be installed in February 2006 Package boiler project discussed. If approved, operation by September 2006 Boiler 5 baghouse to be installed in March. Once complete, stack two will have two baghouses installed Boiler 5 baghouse installed Boiler 7 is offline for turnaround and baghouse installation. Package Boiler has arrived on site and will be commissioned in January 2007.</p>
<p>11 12 15 16 17 18 19</p>	<p>Calciners / Calcination Project Update presentation made Target date for commissioning is late April 2003 due to excessive rain in February 2003. Calciner commissioning started and going satisfactorily. Forum members invited on tour once commissioning complete. Commissioning update Forum undertook tour of facility Units still being commissioned, operating at 85% of full capacity. Commissioning continues, operating at 90% of full capacity.</p>

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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
28	Discussion on coal dust in area and QAL's commitment to work with Gladstone industry to approach the issue
29	Final coal dust suppression project complete
32	92% of QAL's coal is fed directly into the boilerhouse and not held in stockpiles.
Communications during a crisis	
6	Hierarchy of crisis established. Significant impact external to QAL – emergency services take control of plant
Community alkali pads	
5	Community invited to assist QAL in monitoring external boundaries using alkali pads. MSDS provided to Forum.
11	Presentation on alkali monitoring pads
14	When pads are taken to the EPA, same information to be given to QAL to follow up.
15	Information being added to complaints database
16	Monitoring information now collated from EPA, community and QAL
Community and Corporate Survey	
2	Draft provided to Forum#2. Report due back mid July 2002. Presentation to be made August forum.
9	Presentation made. Brochure summarizing findings to be sent out to participants. QAL intends to build findings into Community Relations plan
10	Survey feedback newsletter sent out to participants
22	Survey results presented to Forum

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24	Survey results mailed to Forum members
	Community Forum feedback / communications
2	Feedback procedure established (See Forum #2 minutes) Preferred means of communication for each Forum member established and maintained by QAL Community Relations
15	Forum indicated they would like to see more communications regarding Forum, the environment, and community activities.
16	Proposal put forward to modify advert, implement newsletter and enhance website to improve Forum progress communications.
17	Forum gave feedback on new advert.
18	Annual meeting between QAL Board and Forum positive 2003 summary of Forum outcomes presented to Forum.
23	2004 Board/Forum meeting well received
26	Forum celebrated four years since its inception
27	Forum site tour and BBQ well received
28	Forum/Board meeting well received
29	Positive feedback from Forum members regarding 2005 HSEC Report
	Community Hotline
2	Publish 1800 in phone book.
10	When QAL has phone outage, 1800 number will be diverted to a mobile.
	Community House
12	Presentation on purpose of Community House
	Community Relations
13	Presentation on purpose and function of QAL Community Relations, including an outline of corporate philanthropy and current community activities.
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
29	New website in development
	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.

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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
31	Reported year to date is better than previous years with dust complaints significantly reduced following environmental improvements including the recent demolition of rotary and lime kilns.
32	A presentation on community complaints including alkali, dust, noise and odour year to date was given with 102 complaints being received this year, with approximately 50% relating to odour.
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
Environmental monitoring	
31	Environmental monitoring system is now on line, providing current readings from various environmental monitoring stations.
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 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
32	Forum members toured site with a focus on the cascading chute and

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	wharf
2	<p>Health Study Research</p> <p>Forum investigations carried out for research material. Forum waiting until EPA Evaluation published before further action taken.</p>
4 10 18 28	<p>ISO 14001</p> <p>Presentation made to Forum explaining ISO 14001 audit. Audit summary presented. Lloyds Register and EPA on site for compliance audits QAL recertified to ISO 14001:2004</p>
19 20 22 23 24 25 26 27 28 30	<p>Lime</p> <p>Plans for QAL lime supply to be outsourced continuing Transport plans for lime supply are being developed Lime outsourcing presentation given. Lime outsourcing trial undertaken. Noise monitoring on proposed route to be undertaken by Cement Australia (CA) Trucking from CA continues. Noise monitoring to commence once entire lime supply is being sourced from CA Noise monitoring to commence Cement Australia feedback number provided Draft noise monitoring results presented Lime kiln demolition has begun with contract awarded Lime Kiln demolition will be complete by end of July.</p>
8 13	<p>Mosquitoes</p> <p>Monitoring carried out by QAL on all QAL land in conjunction with GCC. Tested for mosquito larvae near QAL roundabout of which there were none. QAL will continue to treat for larvae.</p>
12 16 18 25 26 27 29	<p>Noise</p> <p>Presentation made outlining changes to boiler relief valve silencer program – 90% reduction program to be complete by end 2003. Silencer relief valves will be in place by the end of the year. Boiler vent silencers fitted and working well Presentation delivered detailing production and noise levels. Decommissioning of lime kilns has seen a change in noise tone as opposed to pressure Presentation delivered on environmental noise Members were again encouraged to log noise events with QAL. Hydroblasting protocols represented to Forum members.</p>
4 8 10	<p>Community Notification Register</p> <p>Email / letter protocol established (guidelines). Database letter sent out (to be actioned) and database to be maintained by QAL Community Relations. Notification register invitation sent to South Gladstone and Barney Point. Register maintained by QAL Community Relations Notification register activated for the first time Oct 2003. Leak in Digestion contained, however register activated as a precaution. QAL has a Community Notifications Register, which is activated following</p>

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	assessment guidelines in the Crisis Management Manual. Local businesses, schools and neighbours are included on the list.
	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.
20	Reduction in odour and noise noted on the heater deck in Digestion.
22	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
30	Map of site was displayed to show the reduction of odour, particularly in digestion where oxidiser now operates.
31	A plan of the engineering study to look at the feasibility of removing odour from sources was presented
32	A number of options are currently being explored and a pre-feasibility study will be completed by Q1 2007. Following this, detailed engineering on the selected options will be done. Progress will be presented in future forums.
	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
28	Positive comments received regarding 2006 Forum Board Meeting
	QAL Clean up
14	QAL Clean up days have become such a success, they will be initiated

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	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 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
31	Tree Planting committee's goal of 2100 trees for 2006 was achieved with the final 720 trees planted on 20 September.
	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
29	Destratification units installed
31	Work has started on the Red Mud Dam with earthworks for Processing Facility and Access Road.
	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%.

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7 9 11 12	Water QAL will use effluent water from GCC Sewage Treatment plant Ground water model to be presented to Forum in February 2003 QAL meeting 25% restrictions QAL presented water management system to Forum
27	Cogeneration Proposed project introduced to forum members
29 30	GAIN Forum members expressed interest to participate in GAIN. Johann van Zyl to present to GAIN. Melissa Russell advised that forum members could raise issues at QAL community forum meetings, which will then be relayed at GAIN meeting