

**COMMUNITY ALLIANCE FOR
POSITIVE SOLUTIONS INC. (CAPS)**



*Submission responding to
Environmental Review and
Management Programme (ERMP)
made by
Aluminum Company of America
to the
Environmental Protection
Authority*

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Introduction

The Community Alliance for Positive Solutions Inc. (CAPS) has carefully reviewed the ERMP report produced under the direction of ALCOA by ENVIRON. The size of the document alone made it a tedious task to read for most individuals, therefore careful inspection was an enormous undertaking. A team of CAPS members, several of whom are professionals and experts in their own right, inspected meticulously this document and found numerous and significant inconsistencies, miscalculations, misrepresentations, ambiguities and misinformation. We have attempted to address the shortcomings of the ERMP, as well as provide accurate information from valid sources, including attaching actual documents to support our claims. We have also included commentary and attachments by community members.

In light of the caustic spill on 21-7-05 in Wagerup, and ALCOA's failure to report the spill because they did not deem it necessary, the company's lack of accountability and integrity is clearly evidenced. It is our hope that the EPA will consider seriously this submission, and the gravity of this recent breach of protocol, before approving the Wagerup expansion. It is our even greater hope that the expansion will not be approved until ALCOA appropriately and sufficiently alleviates the problems currently plaguing the community for which they are responsible, and demonstrates the ability to apply adequate technology to avoid further impacts through expansion.

Increases in Production

The table below outlines some of the refinery production changes that are set to occur with the expansion.

5.1.1 Refinery Production Changes: Table 2 (ERMP, 2005, p71)

SCOPING ALL PRODUCTION	UNITS	CURRENT	EXPANDED
Alumina Production	Mtpa	Approximately 2.4	Approximately 4.7
Bauxite Mining Rate	Mtpa	9	16
Bauxite Residue	Mtpa	4.8	9.6
Caustic	tpa	141 000	282 000
Lime	tpa	110 000	200 000
Water	MLpa	4 800	9 600
GHG	tpa	1 342 000	2 544 000

On page 61 of the ERMP the proposal states ALCOA wishes to increase the production of bauxite incrementally ... “from 9 Mtpa to approximately 16 Mtpa”. However, on page 70 it states they wish to “...enable the refinery to process an additional 9 Mt of bauxite per year, taking the total annual bauxite throughput at the Wagerup refinery to approximately 16 Mt per year.” (ERMP, 2005, p70).

Given the current output is 9 Mtpa, a subsequent 9 Mt would result in 18 Mt of bauxite being produced per year (Environmental Scoping Document, 2004, p. 3), not 16 Mt as quoted above. This results in a 100% increase in production compared to the 80% increase described in the ERMP on page 44.

Water Usage and Ground Water Contamination

Water is a precious commodity, required not just for quality of life, but for life itself. Water usage should be a primary focus for the EPA in considering the expansion plans of ALCOA. If water usage of all alumina production facilities were totalled and compared to residential usage in WA, one would find it quite puzzling as to why residents and not industry are placed under tight water restrictions, and why ALCOA can justify increasing their water usage. Water shortage is not a problem that will go away, and ALCOA is greatly contributing to the problem. Equally as profound, ALCOA has been contaminating groundwater with radioactive materials and other effluent, which not only affects the health and safety of the local community, but the entire water table.

Water Usage

- The ERMP (p148, 7.5) states that climatic change has reduced rainfall by 10% in the last 20 years. ALCOA's "total current water requirement" is 9460 MLpa, of which 4800 is from licensed surface water sources. The proposal will require 14,900 MLpa in a dry year. (ERMP, p. xviii). The refinery surface water will depend on annual winter rain water. *Where will the water come from if we have several dry winters, and how will this impact on Yarloop and surrounding districts?*
- **Water quality and availability have decreased dramatically in Yarloop.** ALCOA has licence and rights "...to divert water from Harvey River Main Drain, Yalup Brook, Black Tom Brook for storage and use by the Wagerup refinery." (ERMP, p. 154). It is stated that this has no impact on the water supply to Yarloop and Districts. *How does ALCOA come to this conclusion? The town water supply ran dry in February 2002 and was trucked in by the Harvey Shire. Reports from properties adjacent to the Yarloop water supply state that the water transport has been ongoing since that time. This community can no longer source its water supply from the underground spring which has been disrupted by ALCOA's previous mining activities in the catchment area.*
- **There is no mention in the ERMP of water required or its usage at ALCOA's Willowdale mine site.** *Water usage at the mine is significant, and will increase with the expansion, so should be reported and taken into consideration.*
- On page 319, the ERMP states that "based on historical stream flow data, CENRM (2005) estimated about 75.2GLpa flow passed (*sic*) the Logue Brook confluence, suggesting there is approximately 28 GLpa available in the winter at the proposed Harvey Main Drain abstraction point after allowing for environmental flows" (CENRM 2005). Here ALCOA is working with historic data. **Currently the Willowdale mine site has disrupted the streams that feed the Logue Brook Dam and Bancell Brook. Also, ALCOA's model of prediction does not take into consideration climate change, which has influenced weather patterns, particularly rainfall, for several years and will continue to do so. ALCOA cannot provide accurate projections on water availability from its current sources using historic data.**

- **ALCOA has licence to disregard, and contribute to, water shortages. *How does/will the Government justify this?***

Ground Water Contamination

- ***ALCOA admits to ground water contamination.*** “Groundwater quality investigations have identified groundwater contamination in certain locations beneath the refinery and the residue area. These investigations are contained in the Wagerup refinery Water Resource Management Plan and areas where most work has been undertaken...” (ERMP, p158).
- **There has been no clear indication in the ERMP of how ALCOA has tried to prevent or clean up the contamination of the water, only that they will continue to monitor how far the plume has travelled.** On page 160, the report eludes to the extension of the plume “beyond the refinery footprint into adjacent land” and that it has not impacted “surface water.” The report further states that monitoring needs to continue so that the “spatial extent of the plume” is understood. ***ALCOA has not reported any concrete figures regarding actual contamination of ground water or the water table, which can seriously impact a vast area of land and population. Considering the seriousness of this matter, their lack of specificity is not acceptable.***
- **Elevated uranium levels have been found in the groundwater of adjacent properties as a result of runoff from ALCOA’s contaminant pond (ERMP, pp. 161-162). *The community was not alerted to this problem. This is not acceptable and should not be trivialised.***

Pollution and Air Quality

As air quality is also of vital importance, not just to quality of life, but to life itself, the continued mantra by ALCOA that there is “no problem” is unacceptable. There is a problem with air quality in the communities surrounding Wagerup. ALCOA continually justifies their emission control using monitoring in areas that are typically unaffected by emission fumigation, while the main sources for polluting emissions are not required to be monitored.

Air Quality Monitoring

- The ERMP (Table 12, page 173) details measured ambient VOC concentration levels at Boundary Road, and conclude from this six week measurement period that the “chemicals in the ambient atmosphere surrounding Wagerup Refinery are dominated by human and natural processes other than refinery operations.” **ALCOA placed their measuring devices within 1 kilometre from the refinery. Because they have installed a 100m stack, the emissions do not fall that close to the operations, but are spread out over a greater area, including zones B and C, and beyond, depending on weather conditions and wind patterns. *This study that ALCOA is using to justify their management of air quality and VOC’s is not valid.***
- **Weather, wind, time of day, and production at that time, along with unusual industry events, need to be taken into consideration when collecting data on air quality. Most modelling, especially when done at inappropriate sites, will not provide this information. Only constant independent monitoring at numerous locations will give the full picture of air quality, as stated in the CSIRO Air Quality Study draft proposal, July 2003.**
- The ERMP report states that “the overall air quality was found to be typical of rural environments in both the nature and the levels of chemical compounds detected, except for acetaldehyde...”, that levels were “below environmental and health standards”, and the main chemical compounds detected were “known to be present in refinery emissions.” ***This statement is only true if ALCOA has compared our air quality to that of other rural environments with industries. If this is indeed what they refer to, then it should be more clearly stated. Also, ALCOA has taken an average of air monitor readings only 1 km from the Wagerup plant, which does not give an accurate picture of the air quality situation in this area.***

Odours vs. Emissions

- **A 1995 in-house report by ALCOA, written prior to the introduction of the liquor burner at Wagerup (attached) stated, “There is a very significant risk of adverse public and workforce reaction, should the Wagerup liquor burner produce unacceptable levels of odour. Currently, there are no post-treatment technologies readily available that could be implemented in the event that odour emission rates**

from the Wagerup liquor burner are higher than those used in the modelling exercises...At this time, the relationship between VOC concentrations (odours) and the many operating variables that control the liquor burner at Kwinana are poorly understood. This means that we have no sure mechanism for controlling the odour emission rates and would not be able to reduce them if they exceeded the limit. Thus, we recommend at this stage no maximum allowable odour emission rate be prescribed for the future Wagerup liquor burner.” *Even before the liquor burner was built, ALCOA was aware that they would not be able to control odours or emissions.*

- ALCOA use the term “odours” interchangeably with “VOC concentrations”. *It is important to remember when analysing this report that odours are not dangerous, emissions are.* Odours are a minor issue compared with emissions. Odours are an unpleasant nuisance that lower quality of life. Emissions cause health problems. For example, Benzene, a VOC and a class A carcinogen emitted by ALCOA, causes leukaemia and other disorders, even at very low levels of exposure.
- ALCOA continues to use the word “odours” when referring to community complaints or impacts and the word “emissions” when referring to on-site projects in public relations materials such as the Wagerup News and the ERMP.
- In 1997, one year after the liquor burner was started up at Wagerup, a report was issued in-house assessing the impact of liquor burning on the community (Galton-Fenzi/ALCOA, 1997). The report (attached) suggested that in dealing with the community and employees, “using science and logic, in similar situations, is never entirely successful,” and to be able to get these people on-side, despite complaints and health impacts, was to get the affected community to become “unconcerned, so reducing the risk of costly programs for the company, which may be required to ensure that the liquor burning project continues and is cost effective.” *In other words, placate the community to the point that they don’t interfere with ALCOA’s plans.*
- Page 174 of the ERMP illustrates sources of odours in the rural community. ALCOA suggests that a potential source of “background odour” includes wood burning heaters and bushfires. **Wood burns cleanly, with a pleasant odour, as opposed to natural gas, which ALCOA uses in their power station and calciners. Natural gas is odourless, yet contributes to greenhouse gases (Motas, 2005).**
- *A full report of chemical compounds present in emissions and their concentrations, monitored at the source and in areas most impacted, should have been provided in the ERMP.* We have attached a partial list of chemical emissions from the Wagerup plant.
- Alcoa has stated in the past that approximately 600 chemical compounds are being emitted (*Wagerup Refinery Air Emissions Inventory Final Report, 2002, p. 1*). The ERMP report only refers to 274 volatile chemical compounds being analysed (p. 171). A

complete study to investigate the impact of the combinations of all 600 compounds on air quality, environment and health should be undertaken immediately, before ALCOA increases their emissions through expansion.

- Benzene, toluene, and xylene, all relevant to ALCOA's oxalate kiln, are carcinogenic, while carbon disulphide, styrene, mercury, and carbon monoxide, also present in the oxalate kiln emissions, are neurotoxic, some accumulating and causing permanent damage, as well as damaging other organs. (Sherman, 1994).

Cooling Tower Emissions

- According to an environmental audit report by AWN (Air Water Noise Consultants 2003, p10.20), prepared for the Dept. of Environmental Water and Catchment Protection, ALCOA has not reported or tested for cooling tower mass emissions. The ERMP Air Quality Management Plan (p. 20) states that "the existing cooling towers are not licenced sources and therefore do not require compliance monitoring" and that "there is no on-going monitoring proposed at this stage." AWN suggests that "cooling tower mass emission rates must be reported". *Though ALCOA is proposing a 50% reduction in odorous emissions by modifying the operation of the cooling towers (ERMP, p. 20), how will this reduction be measured and fulfilled if cooling tower emissions are not monitored?*
- The cooling towers have also been the source of Legionnaire's Disease bacterial outbreaks on several occasions.

Slurry Tank Vent Emissions

- The Air Quality Management Plan as outlined in the ERMP (appendices, p. 21) states that slurry tank vents are "considered to be the most significant source of VOCs" (volatile organic compounds)(emphasis ours). **The tank vents are not licenced and do not require compliance monitoring.** *Being the most significant source of the dangerous chemical compound emissions, why is this source not licenced and therefore monitored?*
- Though vapour flows from tank vents are expected to be reduced by modifications, emissions from the source are not expected to decrease. Yet on page 22 in the appendix, the Air Quality Management Plan states that the reduction in vapour flow will have a direct reduction in mass emission rates. *The resulting impact of the modifications on emissions is nebulous in this report. It should be made clear, being such an important point. We strongly recommend licensing and monitoring of VOC's from the slurry tank vents.*

Red Mud Lakes and Dust Emissions

- According to Table E1 (ERMP, p. xiii) current caustic usage is 141,000 Tpa. The expansion will increase caustic usage to 282,000 Tpa. The RDA mudlakes will expand by 80 hectares immediately and will continue to expand (ERMP, pp 75-76) to accommodate the escalating waste, with a subsequent increase in contamination by caustic dust. **Other than a proposed sprinkler system, ALCOA has not presented a feasible and specific plan to alleviate the current contamination and prevent future problems, nor have they been clear on exactly how much the mud lakes will expand over time. *The potential here for increased air pollution, including radioactive particulate matter, and the possibility for groundwater contamination, is very real.***

Calciner 3

- **Recent modifications to Calciner 3 cost approximately \$2 million (Sinclair Knight Merz, 2004) and were expected to reduce formaldehyde emissions and to burn more efficiently and smoothly, making the Calciner less prone to events. *However, these modifications have not improved performance of Calciner 3, as evidenced in the attached graphs showing Calciner 3 surging issues. Events have continued to occur and the modifications did nothing to address any other toxic chemicals. Money was wasted in taking shortcuts instead of installing additional emission control equipment or processes.***
- A second 100m stack with two additional calciners is being planned for the expansion. (ERMP, 2005, p.73, 7). ***Until long-term air-quality investigations are done in all impacted areas beyond Boundary Road, where emissions are affecting residents' health, and until calciner technology is far less problematic, the Government should not allow the additional calciners and tall stack to be built.***

Community Perception and Findings by Outside Agencies vs ALCOA's Self Monitoring

- **“The modelling results suggest that Yarloop is the township most affected by refinery emissions from air, which is consistent with the history of community complaints.” (AWN, 2003, p11.5). This finding is echoed by the CSIRO Air Quality study of July 2003. Yet ALCOA's own findings do not own up to the impact of their emissions on air quality in Yarloop.**
- **Interviews of 39 Yarloop area residents conducted 16th & 17th April, 2005 by Dr. John Croft from the Dept. of Local Government and Regional Development, showed that residents feel pollutants still remain and are impacting their health and well being. They stated that ALCOA is the only industry in this area causing these concerns of pollution. Before ALCOA there were no recorded complaints of pollution-related health problems, or air or noise pollution from the surrounding**

agriculture or the timber industry in Yarloop or surrounding areas. (full report attached)

- *Until ALCOA can demonstrate integrity and accountability in their monitoring and manufacturing practices, they should NOT be allowed to self-monitor and the expansion put on hold.*

Greenhouse Gases and Cogeneration

With climate change becoming a steadily growing and profoundly problematic concern, any intention to increase greenhouse gas emissions should be considered criminal on a global scale.

- As described on page 80 of the ERMP, a new cogeneration facility may be built for the expansion and additional turbine alternators added, or modifications will be made in the existing powerhouse. Greenhouse gases will increase with the expansion and the proposed powerhouse from 1,342,000 to either 2,544,000 or 2,255,000 tonnes GgCo2 equivalents, depending on the energy supply option selected (ERMP, p. 337). **Both options result in greenhouse emissions significantly higher than the existing refinery's output. Greenhouse gases may not be viewed by the nearby communities as a major concern as opposed to odorous or visible emissions, but they affect dramatically the health of the planet. How can ALCOA justify this increase when they are a founding member of WASIG, a signatory of the UNEP?**
- **If a new cogeneration plant is built, the powerhouse will require a 3km buffer zone (Western Australian Planning Commission – *State Industrial Buffer Policy 1997*). No mention is made of this buffer zone in the ERMP.**

Noise

Refinery Noise

- According to the ERMP report (p.106), ALCOA does not believe Wagerup Refinery can achieve full night noise compliance. “Analysis indicated that even with significant noise attenuation, the new equipment would be unable to meet the regulatory criteria in its own right...SVT concluded that it was not practical for new equipment to be installed to meet sound power allocations that would satisfy the 35dB(A) night time criterion at all affected locations” (ERMP, p313). **ALCOA has stated it has reduced noise yet they have applied for Regulation 17. Regulation 17 involves increasing the night noise level from 35dB to 47 dB. The only way ALCOA can comply with noise limits is to increase the limits, which is not a legitimate method of dealing with noise to the community’s satisfaction. *Until ALCOA can reduce noise, or relocate affected residents, an increase in allowable noise is not acceptable.***

Rail and Transport Noise

- **Increased rail freight and truck transport will further increase noise pollution, as well as traffic tie-ups, and the potential for caustic spills.**

Community Complaints

Filing complaints against ALCOA concerning odours, noise, and health problems has become an exercise in futility for most residents. Many have stopped complaining after experiencing rudeness, harassment, or at the very least, no action by the company (testimonials attached). One third of the homes in Yarloop are now owned by ALCOA, and those leasing the properties are forbidden to make complaints.

- On page 193 of the ERMP indicates that there are fewer odour and noise complaints and significantly fewer health complaints than in 2001. ALCOA attempts to explain the reduction in complaints on page 194, and page 202 of the ERMP report states that “complaints have declined significantly...” and that the reduction in complaints is most likely due to emission reduction and ALCOA’s purchasing of properties. **ALCOA has bought out 125 properties in Yarloop, 25 properties in Hamel and 52 in Wagerup. (W.A Ownership – Advanced Report, June 2005). What they fail to mention is that they are now leasing out these homes with stipulations in the lease agreement (attached) which state that leasees cannot complain about ALCOA.** Under the Quiet Enjoyment clause, section 2.2b of the Lease Agreement it states “ The Tenant will not make any claim or lodge any formal complaint against ALCOA for loss of quiet enjoyment of the premises as a result of any damage or nuisance arising or in connection with noise, odour, dust or pollution or disturbances generated as a consequence of the business activities by ALCOA...*If the Tenant becomes disturbed...they (the tenant) agree to give ALCOA 21 days written notice of their termination of the lease.*” (emphasis ours)
- ***Many residents have stopped complaining because they feel it is useless or they fear intimidation.*** [The writer of this submission was subject to inhaling a plume of pollution which dropped due to atmospheric inversion fumigation approximately 1 k from the refinery, an area that is not often affected, on 23/7/04. The resident called ALCOA to report the incident immediately. The pollution hung in the air for 15 minutes. The ALCOA investigator did not show up for 45 minutes, and by then the plume had vanished. *The residents suffered stinging throats and dry mouth, and subsequently heard similar stories from neighbours after the event.*]
- ALCOA states on page 197 that there is not a correlation between alumina production and community complaints, basing their conclusion on complaints versus calciner production. ***However, it has been made clear earlier in this submission that the calciner is not the only source of pollution.*** The AWN study and the CSIRO study of July 2003 have found a correlation between complaints and refinery pollution. The Emphron study 2005 concludes that it is possible that complaints are increased by refinery and airborne dust from the Residual Drying Area (RDA), known as the mud lakes.

Health Issues

Making connections between chemical compounds, particulate matter, radioactivity and other by-products of alumina production, and certain health problems, can, understandably, be a nebulous and enormous task at the best of times. Some sensitive individuals may experience immediate health effects from exposure, while others' disease processes will not manifest for years. However, to forego any attempt to identify and investigate the potential connections between emissions and health before increasing those emissions, and to sweep the health problems under the carpet while people continue to be affected, is an irresponsible, blatant and inexcusable disregard of Duty of Care to the community, both by ALCOA and the Government.

- The ERMP discusses the Healthwise 2004 study (p. 190-191) which compared the health of ALCOA refinery workers with the general public, citing their findings of higher incidence rates of thyroid/endocrine cancer as unexpected, and explaining that higher rates of mesothelioma were caused by asbestos exposure elsewhere. **CAPS challenged these findings in their 2004 response to the report, by citing Joe Damiano of Alcoa Pittsburgh. Damiano stated in the book Managing Health in the Aluminum Industry that there is significant exposure in bauxite refining to asbestos and mineral fibres in thermal insulation. Damiano also states that the Bayer process, a method of liquor burning to extract aluminium from bauxite used at Wagerup, does pose a radiation risk. *Thyroid cancer is caused by radiation exposure, so why is the finding of increased rates of thyroid cancer unexpected?* The full CAPS Response to Healthwise Study 2004 is attached.**
- **Employees of the Willowdale mine site were included in the Refinery's Healthwise study, but this inclusion into the studied population was not reported. This is a means to skew the results in ALCOA's favour, as miners are not impacted by the chemical exposure to the extent of workers at the refinery.**
- Partial findings of the Community Health Nurse Report 2002-2003 are summarised on pages 189-90 of the ERMP. **The full report was never released to the public. *The EPA should have access to the full report (as should the community) before accepting ALCOA's conclusions that the findings were not related to refinery emissions.***
- **ALCOA continually states there is no connection between illness and refinery emission. D'Arcy Holman, Professor of Public Health and Chair of the former Wagerup Medical Practitioners' Forum, stated in a letter to the Minister for Health 12/5/03 that he "could not say it would be safe or reasonable from a public health perspective to allow an increase in production; in fact, (his) judgement is that it would be likely to lead to more complaints of health problems in the local community".** (WMPF summary report attached)
- ALCOA states "few of the emission components will have a directly additive affect on health risks." (ERMP, p285), yet they admit there "are as yet unresolved questions

regarding “health effects” and health complaints in the community” (ERMP, p295). **ALCOA’s confidence does not guarantee people’s health and that the environment will not be affected, nor are they willing to be accountable for the problems that exist. *These issues should be resolved before additional emissions are allowed to impact the health of the population.***

- *Obviously, independent emission collection and analyses needs to be done to establish, once and for all, the constitution and amount of emissions and their health effects.*

Land Management Issues

What was once a strong, congenial community with growth potential and historic value is now a dilute shell of its former self: the Yarloop area has had its social fabric ripped to shreds and the only area of growth in town now is the crime rate. ALCOA's land management methods and inequitable dealings with house purchasing have left this a town divided, both socially and geographically. Former residents and those soon to leave are mourning what once was and what the area has become post-1996, when ALCOA commissioned the liquor burner. Since that time, residents have watched with great sadness the demise of their paradise. ALCOA, their supposed "good neighbour," forgot that the town was here first.

Behind the social demise of the area lies the saga of how ALCOA devised and instituted a method of land management that can only be described as a scheme to "divide and conquer." The town of Yarloop was divided into two areas, treating Area A as the most impacted and providing significant benefits, even though the other zone and areas beyond were impacted greatly by the emissions. ALCOA continue to promote building up the infrastructure and amenities of a dying town, while buying up houses in specific zones created by boundaries that do not reflect levels of impact, instead of moving all impacted residents out of harm's way and maintaining the integrity of the community in a new location. The affected region could then become an industrial area and historic village, bringing both manufacturing and tourism dollars to the area.

- **As stated in a report by URS Australia (2003, p.4), "If any portion of Yarloop or Hamel, or the surrounding area, is to remain affected by emissions such that health impacts are possible...then a significant problem also remains. Either compensating some people or relocating others does not remove the problem. *The problem is not solved if any residents or land occupiers remain living in the impact zone...*" (emphasis ours).**
- Page 185 of the ERMP explains that the Medical Practitioners' Forum support exposure reduction through a planned buffer zone. **The entire 6218 post code area should be designated a buffer zone.** Drawing a line through the middle of town does not stop emissions going beyond that line. In fact, people are affected as far away as 15 kms by the emissions. Dividing a small town with the buffer zone, combined with ALCOA owning one-third of the properties, has guaranteed the town's demise. (See Megaw & Hogg, 2004 and Ross, 2003 concerning division of Yarloop into zones).
- **People outside of zone A and B have no choice but to leave the area because they cannot sell their homes. It is difficult to find a buyer for a home located in an area that is infamously polluted, has health risks, and experiences noise and rail problems. Properties have become devalued, amenities and infrastructure in the area are disappearing, and future investment in Yarloop is looking dismal. The ALCOA expansion can only exacerbate the problems.**

- ***Why is the government trying to change the buffer policy to the benefit of big industry (ERMP, p.125, and State industrial buffer statement of planning policy 4.1, 2004)? Is not the purpose of a buffer zone to protect residents from industrial pollution?***
- “We (Working Group) expect ALCOA to honour its expressed long term commitment to see the towns of Yarloop & Hamel prosper” (ERMP, p105). ***ALCOA is buying up properties and businesses have closed down; Yarloop and Hamel cannot prosper when the buffer zone drawn by ALCOA allows for no subdivision or residential living. With no further allocation of land for the town to expand, how is ALCOA going to make the town sustainable and grow? Why would a population DESIRE to buy homes in a town experiencing health impacts, noise and air pollution?*** If future residential development is to be considered it should be moved outside the affected area.
- Page 123-124 of the ERMP states that ALCOA is aiming to create a light industrial area **which will only increase pollution and decrease liveability in the area.**
- On page 185 of the ERMP, ALCOA states it spent \$40 million on emission controls. **According to the Wagerup News May/June 2002 the total amount comes to \$20,252,000 with a further \$2million spent on calciner 3 modifications (as seen in the table below). ALCOA has not given a breakdown of this \$40 million. We can only assume that the rest of the money has been spent on buying up houses in the affected area; this being presented as a method of “emission reduction”.**

WAGERUP NEWS MAY/JUNE 2002

EMISSION REDUCTION	AMOUNT SPENT
CALCINER ODER DISPERSION	\$8 700 000
THE VAPOUR CONDENSER PROJECT	\$6 300 000
FALLING FILM EVAPORATOR	\$5 180 000
ALCOA CONTRIBUTED TO PUT SOTICO WOOD BURNER OFF LINE	\$ 72 000
SUB TOTAL	\$20 252 000
CALCINER 3 MODIFICATIONS	\$ 2 000 000
TOTAL	\$22 252 000

COMMUNITY INVOLVEMENT AND CONSULTATION

ALCOA's methods of community consultation have historically been unsuccessful in reaching purported and perceived goals, and have been experienced as disempowering for the community, frustrating for participants, and controlled by ALCOA to meet ALCOA's needs.

Land Management Meetings with Ann Whitty

- **Meetings with former refinery manager Ann Whitty from 2002-2003 were actually perceived as being responsive, indicating a willingness by ALCOA in taking responsibility for the social impact of land management issues and admitting that relocating the town of Yarloop was worth further investigation. However, Ms. Whitty was replaced by Bill Knight, and the level of trust plummeted. A number of attempts at community consultation have followed.**

Edith Cowan University – Dr. Dyann Ross Study

- ***There has been little true community involvement in the consultation process. An Edith Cowan University project, commissioned by ALCOA, did little to achieve its original goals of negotiating a Land Management agreement between the community and the company, and instead frustrated the community people who were involved. ALCOA pulled out of the project on September 18th 2003 after 18 months of continual meetings, leaving people feeling devastated. When ALCOA was approached to continue the talks, they indicated they would continue only if the negotiations were to start all over again from square one. The disheartened community members declined to continue, as they had already spent hundreds of frustrating and fruitless hours in meetings. The total cost to ALCOA for employing ECU for this consultation – \$630,000.***
- **Dr. Ross stated in her report in September 2003, “The danger and high risk is that the uneven power relations will continue to advantage ALCOA’s interests to a greater extent and possibly at the continuing costs to individuals and/or the whole community. Continuation of the Land Management meetings will need to make clear how the interests of both parties will be promoted without the less powerful party (the communities and individuals) being disadvantaged further. I cannot, now with hindsight, see my way clear to facilitate further meetings until new trustworthy agreements about the decision-making process of the meetings have been worked out.”**
- **ALCOA has never publicly released the final report provided by ECU.**

CCN and Tripartite as Representative of the Community

- **The Community Consultation Network (CCN) and Tripartite are ALCOA-controlled groups. Members of the Yarloop community feel these groups do not represent the community; rather they focus on achieving ALCOA-biased outcomes.**
- **The Community Alliance for Positive Solutions Inc. (CAPS) and Yarloop District Concerned Residence Committee (YDCRC) are the only local groups that represent the community without any ties to Government or ALCOA.**

Working Groups

- **During the ALCOA Public Forum held on 11th & 12th September, 2004, approximately 120 community members that attended complained about how ALCOA is impacting their lives, none of which was made public by ALCOA. During the forum ALCOA created five working groups (Emissions and Health, Land Management, Transport and Noise, Social and Economic, Residue and Water) that not only displayed ALCOA-biased outcomes but were also reportedly controlled by facilitators paid by ALCOA.**
- **A member of the Land Management Working Group complained, “the groups are unable to discuss anything associated with another (working) group, even if it is relevant to what they are doing or discussing within their groups.” He continued that employees of ALCOA would interject during the meetings “while someone was trying to establish a point, stating ‘I do not think ALCOA will go for that.’”**
- **Another member of the Land Management group stated that community concerns were ignored.**
- **A member of another working group states the topics for discussion were manipulated so as to focus on topics supporting the expansion. This member goes on to state that members were told that signing the register only signified attendance and that it would not be seen as endorsement, contrary to what is reported in the ERMP (p. 91) as the working group process –“each participant endorsed the meeting notes.”**
- **An Emissions and Health Working Group member stated that the group requested that a fully comprehensive health survey be conducted by an independent body, yet ALCOA insists on maintaining control, opposing inclusion in the survey of people who have had to relocate from the area due to health reasons. A number of members of this working group did not want the expansion to proceed until this survey is done.**

- **Another member of the Emissions and Health group complained that the health effects were not discussed until the last meetings, so the group did not see the HRA until the ERMP was released. Several members stated they felt the community consultation process was manipulative and biased in favour of expansion.**
- **Members of these groups who quit have also communicated their frustration with the process** (several testimonials are attached).
- In ALCOA's response to the working group final outcomes (ERMP, p98), the term "committed" has been applied several times. **What does the term "committed" mean? Is it a guarantee that ALCOA will be accountable and solve any existing or future problems?**
- ALCOA's "commitment" to undertake a health survey (ERMP, p99) responds to the final outcomes of the Health Working Group. **However, an independent party with no ties to ALCOA, such as CSIRO, should conduct the holistic health survey and all findings should be made public.**
- **There was an obvious lack of indigenous representation in the community consultation process.**

SUMMARY

In summary, there remain too many unknowns – chemical compounds, health effects, lack of monitoring in cooling towers and vents, plumes of contamination in groundwater, mudlake expansion – to assess the viability of expansion at Wagerup. ALCOA has not fixed satisfactorily the problems that already exist, for example, the surging events of Calciner 3, nor have they demonstrated that they can successfully handle land management issues in the community equitably without causing controversy. Health issues continue to be swept under the carpet. The Community Consultative process has not been adequate and has been considered manipulative by the community in favour of ALCOA. And ALCOA continue to fail to demonstrate a Duty of Care to the community and its workers, nor do they exhibit a sense of accountability, transparency or fairness in their dealing with the community and the government.

ALCOA boasts awards for social responsibility and environmental guardianship. They are a signatory to the WA Cleaner Production Statement through the WA Sustainable Industry Group, which is a signatory of UNEP's International Declaration on Cleaner Production. But actions speak louder than words. ALCOA's spin doctors work overtime to keep their image sparkling clean. Meanwhile, spills go unreported, communities are destroyed, and numerous pollution-related court cases against ALCOA are being heard or settled in courts around the world at this time. All the public relations in the world will not make ALCOA a good neighbour. Only a concerted effort to demonstrate their Duty of Care through appropriate action will untarnish their blighted reputation.

As well, the Department of Environment has failed to demonstrate fairness when a meat plant in Hazelmere is fined \$25,000 for unacceptable levels of smell over two days time, yet ALCOA has disrupted the environmental health and safety of the areas surrounding Wagerup and Kwinana for years, not only with noxious odours, but with dangerous chemical emissions and numerous caustic spills, with no fines issued. ALCOA is treated as if above apprehension.

CAPS' RECOMMENDATIONS

1. NO EXPANSION FOR ALCOA AT WAGERUP UNTIL:

- **A FULL, COMPREHENSIVE CSIRO STUDY IS IMPLEMENTED, AS PREVIOUSLY APPROVED BY THE COMMUNITY, INCLUDING THE ASSESSMENT OF SOCIAL, HEALTH, AND ENVIRONMENTAL IMPACTS,**
- **NEW STATE-OF-THE-ART TECHNOLOGY BE USED BY ALCOA TO CUT EMISSIONS AND CONTAMINATION,**
- **AND THE ENTIRE IMPACTED POPULATION IS RELOCATED OUT OF HARM'S WAY AND SELLERS ARE FAIRLY COMPENSATED.**

2. THE DEPT. OF ENVIRONMENT MUST BECOME:

- **MORE RESPONSIVE TO COMMUNITY CONCERNS,**
- **MORE STRINGENT IN TERMS OF LICENSING REQUIREMENTS AND POLICING,**
- **AND MORE EQUITABLE IN HANDLING VIOLATIONS.**

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