

COMMUNITIES AND INDUSTRIES FORUM (CIF)

A forum for communication between industry and the community -all welcome

Minutes of the Meeting held Tuesday 6 April 2010,
5.30 pm – 7.25 pm at the Kwinana Recquatic, Gilmore Avenue, Kwinana

PRESENT

Bill	Adlam	Landcorp
Karen	Boyce	Tiwest
Chris	Brady	LandCorp
David	Cooling	Alcoa
Bob	Cooper	KIC/Rotary Wellard
Erin	Davey	BP Refinery
Steph	Felstead	CSBP
Catherine	Finch	CSPB
Allan	Gade	CORE
Annette	Gade	CORE
Stan	Hall	KPA
Karla	Hinkley	Environ
Debbie	Hoey	KIC
Ron	Kemp	Facilitator
Cr Sandra	Lee	Town of Kwinana
John	Malone	BHPB
Rod	Mapstone	Alcoa
Peter	Macrae	DMP
Scott	McFarlane	DEC
Anita	McInnes	Sound Telegraph
Frank	Mofflin	BHPB
Patricia	Moreton	Kwinana Progress Association
Barry	Nelson	Community
Chris	Oughton	KIC
Craig	Parrick	BHP Billiton
Eva	Ricci	Beeliar KABC
Michael	Rodriguez	CSBP
Shoba	Senasinghe	Coogee Chemicals
David	Tate	Alcoa
B	Telling	Wattleup Resident
C	Telling	Wattleup Resident
Samantha	Torrens	CSBP
Brian	Vidovich	KABC
Les	Vogiatzakis	Coogee Chemicals
Chris	Whitaker	James Point Pty Ltd
John	Wilks	Hismelt
Peter	Winner	Verve Energy

APOLOGIES

Peter	Christian	Verve Energy
Steve	Hesse	Community
Graham	Davey	Community
Cr Leigh	Liley	City of Rockingham
Lorna	Petchell	BHP Billiton

1. OPENING AND WELCOME

Ron Kemp (facilitator) opened the meeting and welcomed all. All were asked to sign the attendance register. To be eligible to vote at each AGM attendees must have attended at least three meetings during the last twelve months. The facilitator then advised attendees of the emergency evacuation procedure for the building and the location of exit doors and muster points.

2. GENERAL ADMINISTRATION

Chris Oughton gave a report from the CIF executive meeting held on 2 March which agreed to the following presentations for this evenings meeting: Alcoa Residue Reuse Strategy, the Proposed Expansion of the Ammonium Nitrate Facility at CSBP, Latitude 32 Industry Zone by Landcorp and National Environmental Pollution Monitoring Network.

Chris explained that following Thys Heyn's departure from BP and the CIF Executive, Brett Swayn, has taken the role of KIC president and therefore is also an industry representative on the CIF Executive.

The meeting was advised that Gary Gray will attend the August CIF meeting as guest speaker.

Annette Gade (CORE) commented on the presentations to CIF meetings. She stated that the presentations from industry are appreciated by the community but said the community would like to hear not only about the positive things being done but also to hear things that may have gone wrong. This will enable the community can get answers to many things that affect them. Chris Oughton thanked Annette for her comments and confirmed these would be relayed to the CIF Executive for consideration for future presentations.

If anyone has any suggestions for future presentations or guest speakers please contact CIF Coordinator Debbie Hoey.

3. MATTERS ARISING FROM PREVIOUS MINUTES

There was no business arising from the previous minutes.

4. PRESENTATIONS

4.1 Alcoa Residue Re-use Strategy

David Cooling provided an update about work concerning re-use of bauxite residue, which has been ongoing for a number of years. His role is with the research and technology group at Kwinana which comprises 70 people involved in research work at Alcoa's nine refinery systems.

He gave an explanation of the processes undertaken by Alcoa that lead to the bauxite residue. Alcoa is looking at re-using this product. The residue is made up of a coarse aggregate type material sized from 1mm to 50 micron and a secondary material called red mud. A third product, lime, is used in the process. Alcoa is investigating extracting and separating the materials and finding uses it them.

The research is focused on three potential products streams. There is a shortage of good quality construction sand in high volumes. From research done Alcoa believes its red mud will be very good sand replacement and there is an opportunity for this product to substitute natural soils. This will also mean Alcoa will not have to store large quantities of by-product, which can be used to make the red sand.

A pilot plant was constructed at Wagerup 18 months ago to research removing unwanted product from the bauxite. The process involves a screening, washing and carbonation

plant. The sand is washed free of soda and residual high pH still associated with sand is neutralized with CO₂. The pilot plant at Wagerup has been decommissioned and is being re-assembled at Kwinana and will be in production very soon.

Alcoa provided product to Main Roads for use in road building Green Mills Road at Pinjarra. The red sand was used on a 700m section of road as sub-grade in May 2009. Main Roads subsequently replaced limestone with the red sand on a further 300m section of the road. The area is signposted as a trial construction section and all of the test work done by Main Roads indicates that it is performing better than normal road construction. Alcoa is now looking for other demonstration projects to test the product.

A second test project was to top-dress golf course fairways. The user was looking for inorganic product to reduce run-off from golf courses. The sand used in this trial performed better than other products used. Alcoa then top-dressed Fairbridge Oval and used 2000m³ of sand to fill undulations on the oval. Prior to this work the oval was deemed unsafe. The top dressing was completed in December 2008 and by the middle of winter in 2009 there was complete coverage.

All research done to date shows that the product meets regulatory requirements for land fill. Alcoa is discussing with DEC if the material can be qualified for landfill. The definition will need to be amended and is being discussed and there has been media interest in the trials undertaken.

Where to from here? The pilot plant will be commissioned at Kwinana shortly and Alcoa is looking for opportunities for further demonstration projects. They are working with DEC to meet government approvals. WA has no regulatory regime to assess these kinds of materials and Curtin University is reviewing what is being done in other states in an attempt to resolve these issues.

Alco is working to understand the sand market and confirming the product's financial viability. The target is to produce around 500m tones per year as a first step and Alcoa is talking to potential developers and others who may be interested in collaborating on the product.

Questions and Answers

Alan Gade CORE:

- Q:** Many years ago I asked Alcoa why they didn't process bauxite on site and never got an answer. It would have saved a lot of the land down here being desecrated by mud lakes. How is the caustic neutralised, when most of the CO₂ would escape from the sand into the air?
- A:** We produce at Kwinana because in the 1960's we were encouraged to develop in this heavy industrial area and land was made available for the refinery. It would not be financially viable now to relocate.
- Q:** I've worked at the mud lakes at Kwinana and at Pinjarra and Wagerup. The Pinjarra refinery was already going when the Kwinana refinery was built.
- A:** Kwinana was built in 1962 and commissioned in 1964, Pinjarra was commissioned in 1972 and Wagerup was commissioned about seven years later. When we add the CO₂ if there's any caustic there it's sodium hydroxide and the CO₂ reacts with that to form a carbonate. It remains as a carbonate solid and the washing process removes much of that. Sodium hydroxide sucks CO₂ out of the atmosphere and naturally converts it to sodium carbonate.

Chris Brady – Landcorp:

Q: A lot of new industrial sites need sand filling. From a developer feasibility point of view how does using red sand compare to natural sources of fill cost wise? Is 500,000 tonnes the same as 500,000m³?

A: From the pilot work we've done we are getting an understanding of the costs involved in production. One tonne equates to one 1.6tm³. We could produce millions of tonnes a year but we need end users for the product.

There were no further questions. The facilitator thanked David for his presentation and invited him and the following presenters to stay behind at the conclusion of the meeting to answer any questions that attendees might have then.

4.2 Proposed Expansion of Ammonium Nitrate Facility

Michael Rodriguez from CSBP presented. He outlined the activities of CSBP in relation to the proposed project and gave a brief background about the company. CSBP was established in 1910 and is celebrating its centenary this year. The business started in fertilizers and now has two divisions, chemicals and fertilizers. This project fits within the chemical division. Most of the manufacturing facilities are located at Kwinana but there are chemical manufacturing facilities on the east coast of Australia and Australian Vinyls, which manufactures PVC resin. CSBP manufactures ammonia and ammonium nitrate. CSBP has a 50:50 joint venture with Queensland Nitrates.

The process of making ammonium nitrate solution was explained. In WA CSBP is the sole manufacturer of ammonium nitrate which comes in solution and prill forms. The prill form is a solidified product and is predominantly used in the resource sector as an explosive. There is a growing liquid fertilizer market. Current capacity at Kwinana is 520,000 tonnes per annum (solution) and 425,000 tonnes is converted to prill. In February 2008 CSBP commissioned an upgrade of its ammonium nitrate facility at a cost of \$400m. The nitric acid plant is a net producer of power and produces 3 MW of power excess to requirement. The first ammonium nitrate plant was commissioned in 1996 with a capacity of 260,000 tpa. The second plant was commissioned in February 2008. The prilling plant was commissioned in 2008 with a capacity of 425,000 tpa.

The expansion proposed will meet the increasing need for ammonium nitrate being driven by the resources sector which is growing at 10% pa. A feasibility study was undertaken in 2008. The CSBP board approved a FEED study to define the scope, arrive at estimates and work through processes to take the project to its next phase of getting sanctions from the Wesfarmers Board to proceed.

The new plant will be located to the north of the existing plant and will be similar to existing plants, with technology enhancements. The prill plant will be upgraded by 195,000 tpa and the ammonium nitrate bag storage area will be expanded to cater for the additional production. CSBP will not upgrade its ammonia facility but will import ammonia.

The project will go to the EPA this month for assessment at PER level. An environmental scoping document defining the project's parameters will then be prepared with a public consultation and comment period. CSBP will address air quality, noise, major hazard risk, transport (which will involve around 15 trucks per day leaving the site daily), greenhouse gases and energy efficiency issues. The main greenhouse gas emission from the plant is N₂O and there will be minimal impact on water usage.

The FEED study will be completed by the end of 2010. Pending approval from the Wesfarmers' board, design and construction will take place during 2013 with commissioning in early 2014. CSBP will keep the community informed of progress.

Questions and Answers

Annette Gade, CORE:

Q: You've talked about upgrading the prill plant. There's been an ongoing problem regarding to white clouds from this plant and this happened again last week. It goes through Rockingham and other areas.

A: The emissions from the new prill plant are at least a factor of ten lower than they were from the old plant, which is now shut down. I think you may have been referring to the old plant. I'll take your query on notice to try to see where that white cloud has come from but the new plant has world's best technology installed for particulates removal. The emissions from the prill plant are basically invisible now. I'll get details of what you're talking about and we can follow it up to see if it's coming from CSBP and I can get back to you.

Allan Gade:

Q: I was fishing last Saturday night you could see the haze from the ocean. You can't see it from the land.

Sam Torrens, CSBP

A. The old prill plant did have a white hazy emission but the new plant's technology has removed that. The old plant has been decommissioned so I am interested to find out more information about what you saw, the date and time and when and we can have a look to see if it is emanating from our site or if it's coming from other sites.

There were no further questions. The facilitator thanked Michael for his presentation.

4.3 Latitude 32 Industry Zone

Bill Adlam, Landcorp presented a brief overview of Latitude 32. Landcorp shares ownership of this land with 160 others. The area is 1400 Ha in size. Landcorp will develop around 15% of the land but most will be developed by the private sector. Landcorp's role is to ensure all planning requirements are in place and these include the district structure plan and the associated master plan, both of which will be advertised for public comment simultaneously.

The presentation covered how the public comment process will take place. The comment period will be open for eight weeks. Landcorp will treat this period as a listening process to take on board people's issues about Latitude 32. Feedback will be given to the community.

The district structure plan will provide details of a practical way to deliver this general industrial area which is important for the long term development of Perth and supporting industries in Kwinana. The plan is a blueprint layout of how the area may develop and has taken into account the intermodal terminal which incorporates a road/rail facility and the master plan amendments. Landcorp is still waiting on approval by the WAPC for those.

A community reference group was formed and has provided valuable input. A number of changes have been made to the structure plan as a result of this group's input to include more environmentally sensitive areas with an interface between the industrial estate and the rural areas nearby. Landcorp has also been meeting with the local authorities, industry groups and will meet more land owners.

Prior to the public comment period Landcorp needs WAPC approval of the master plan. Landcorp will also try to get targeted sessions with the public to discuss particular issues. This will consist of a variety of information meetings and workshops covering areas within and outside of latitude 32. It is intended to have those sessions early in the public comment

period. Landcorp will keep encourage people to comment to ensure everyone has the opportunity to lodge their comments.

It is Landcorp's intention to have all submissions independently reviewed and submit suggestions and recommendations to Landcorp. That information will be fed back to the community, industry and to government agencies. Landcorp will ultimately make a recommendation to the WAPC who are the final decision makers in the process.

Questions and Answers

Bob Cooper: Wellard resident

Q: What are you putting in place to ensure we don't have another fiasco like Cockburn Cement where the rural areas become urban areas and then there is nothing but complaints from people who have their back door up against industry? What are you going to do to compensate the landowners around Latitude 32 areas when they can't develop?

A: You'll be able to see what is planned in the draft structure plan. We know it is important that we don't have that conflict on the boundary of Latitude 32 and ensuring that doesn't happen has been part of our work. We have also been working with the local councils to minimise the possibility for conflict.

Chris Brady, Landcorp

The City of Cockburn has been very definite that the rural area to the east of Latitude 32 is going to stay rural. They are not prepared to have any urbanization of that area. The facilitator thanked Alan for his presentation.

4.4 National Environmental Pollution Monitoring

Karla Hinkley presented on behalf of the Kwinana Industries Council. This presentation, prepared by Environ Australia, on air quality management in Kwinana is the first in a series of three on this topic and will focus on criteria pollutants. The next presentation will be on toxic organic compounds and the final presentation will be on heavy metals. The aim is to inform the local community about the measures being taken by industry to minimise air pollutant impacts in the area. All presentations will be publicly available.

An aerial photograph was shown which outlined the core KIC members, they being Water Corporation, Cockburn Cement, Alcoa, Verve Energy, Hi Smelt, Wesfarmers LPG, BP Refinery, Tiwest, CSBP, Fremantle Ports, Coogee Chemicals and BHP Billiton. These members produce a diverse range of products.

This presentation will focus on sulphur dioxide and particulate matter (PM) with size pm10 to pm 2.5 microns as well a looking at oxides of nitrogen, particularly nitrogen dioxide.

NOX and SO₂ emissions are produced from the combustion of fossil fuels. Kwinana industry typically uses natural gas and coal for combustion. The amount of SO₂ produced depends on the sulphur content of the fuel or raw materials used. Natural gas has a low sulphur content and when combusted SO₂ emissions are minimal. WA coal also has an extremely low sulphur content by international standards. The amount of NOX produced depends on the type of fuel and combustion and is affected by temperature that the gases are combusted at, and fuel to air ratio will influence the emission of NOX.

PM can be produced by incomplete combustion of fossil fuels, e.g. smoke from bushfires or motor vehicles and also from material handling and storage activities. The amount of PM depends on the fuel type in the case of combustion byproducts and in the case of materials handling depends on the properties of the materials, e.g. moisture content and weather conditions and wind streams.

A summary of the major contributors of criteria pollutants in Kwinana was outlined. The major source of SO₂ is from fossil fuel electricity generation and from petroleum refining while the major source of NOX emission comes from fossil fuel generated cement and lime manufacturing. PM10 to PM 2.5 come principally from alumina production, electricity generation and petroleum refining.

The National Pollutant Inventory (NPI) was the source of data for the 2008 reporting period. All data is freely available to the public. It details 93 substances deemed to be environmentally important. Facility operators determine their emissions annually government agencies are responsible for recording emissions for motor vehicles, households etc.

The quantity of emissions released by all industry located in Cockburn, Rockingham, Kwinana local government areas compared to the total emissions for industry in WA was reviewed. Air emissions from Kwinana industry make up less than 11% of the state's total emissions for the criteria reviewed. The NPI data compared emissions released into the Perth airshed from Kwinana industry to other domestic sources, e.g. motor vehicles. Kwinana is the most significant source of SO₂ within the Perth airshed and emissions from motor vehicles are more significant than NOX emissions from Kwinana industry.

Kwinana industry emissions for PM10 are lower than domestic and motor vehicle emissions into the Perth airshed.

Natural gas has become the fuel of choice for most industry on the strip. This has resulted in a significant reduction in SO₂ levels in Kwinana. Industry also uses various pollution control methods to minimise emissions. Two case studies were presented which illustrated how industry is managing emissions.

Information about ambient monitoring was provided together with DEC's monitoring requirements. The monitoring network is extensive. SO₂ levels have remained relatively constant for the last 10 years and are consistently below the relevant ambient air quality standards. NOX levels at Rockingham have remained relatively constant over the last decade and are below the relevant ambient air quality national standard. PM10 levels from the South Lake monitoring site show there had never been a year with greater than five exceedances. Most exceedances that do occur are typically associated with smoke haze. The exceedances in 2008 have been confirmed by DEC as being attributable to bush fires.

The DEC publishes an annual WA air monitoring report which includes the Kwinana area's results and these are available on the DEC and KIC websites.

Questions and Answers

There were no further questions. The facilitator thanked Karla for her presentation.

5. GENERAL BUSINESS

5.1 Tiwest

Karen Boyce advised that the shut down of the Tiwest plant intended to occur in the middle of March had been postponed to the middle of April. Information will be posted on the appropriate websites and on the information telephone line will operate.

She advised that there had been some articles published recently regarding Tiwest stating that multiple contractors had been gassed at the Tiwest site and that Tiwest

was under investigation by WorkSafe. That is not the case. She advised that Tiwest is has construction works being undertaken for its expansion project and there are a large number of contractors on site and non are working on Tiwest operations equipment. Tiwest had conducted onsite inspections of people who had indicated concern and they were sent for medical assessments with doctors or in some cases to hospital because GPs had not been available. She noted that some contractors reporting suspected inflammations were working in areas were Tiwest employees worked. Tiwest employees had not experienced the same condition.

She confirmed that the plant is operating as it always has and that Tiwest takes the health and safety of everyone on site very seriously. The company has been working to increase the level of contractors' knowledge about standard operating procedures. Information sessions were held regularly with daily safety briefings so contractors fully understand the procedures at the plant. WorkSafe has visited Tiwest to follow up information provided to them. Tiwest is not under investigation by WorkSafe.

Karen thanked the meeting for the opportunity to clarify the inaccurate information that had been published.

5.2 Coogee Chemicals

Les Vogiatzakis, Coogee Chemicals (CC) recently purchased the Terminals West business, the tank terminal adjoining CC. Gull Petroleum, the previous owner are moving out of that business. CC have not taken on the petrol station side of their business and the Gull brand will continue there. This will make CC one of the biggest tank terminals businesses in Australia. If anyone has any concerns Les is available for discussion after the meeting and on 10 May we will be hosting the Kwinana Industries Public Safety Liaison Group and all are welcome to attend.

5.3 Toxfree

Allan Gade, Conservation of Rockingham Environment, commented that Toxfree were asked a while ago to make a report to this forum and that hasn't occurred. Chris Oughton, Director Kwinana Industries Council, advised that he had been to see Toxfree to invite them to present at this forum. The manager of the facility will pass the invitation through to his manager and we are waiting for him to respond.

5.4 James Point

Chris Whitaker, Chairman of James Point Group that is going to build, own and operate some new port facilities in Cockburn Sound announced announce that the environmental scoping document for a proposed international container facility at James Point will be released on the 19th of April and will be in the public arena for four weeks. The EPA has set the highest level of assessment for it in the environmental review and management program. The environmental scoping documents detail what is proposed, what is known and not known about the receiving environment, what the critical environmental factors to be addressed are and the studies planned to be undertaken in preparation of the ERMP. Following public input the scoping document will be finalised by the EPA and instructions will then be given to the proponent to prepare the ERMP.

The container facility will be a rival or alternative proposal to the island proposal that Fremantle Ports have proposed to build just off Alcoa. It is Mr Whitaker's belief only one new international container facility built in Cockburn Sound. The James Point facility is a private funded alternative to the publicly funded Fremantle Ports facility.

An invitation was extended to people interested in Cockburn Sound to review the scoping document and provide your input on the issues that they believe need to be examined thoroughly.

5.5 Cockburn Cement

Scott McFarlane, DEC, advised that the DEC issued a draft license last week for Cockburn Cement in response to some community concern about dust and odour. The draft license has been issued as an additional consultation period open for the community to make comment. He invited interested people to review the draft license and to submit comments. It is available on the following website: www.dec.wa.gov.au/community-updates.

5.6 Verve Energy

Peter Winner, Verve Energy, referred to a mention of some traces of asbestos found at the Kwinana power station earlier this year. He confirmed there is an asbestos management program at Kwinana Power Station which has been used for many years. Awareness has been heightened since the demolition of part of the station which began in the middle of last year to make way for the construction of the new high efficiency gas turbine.

On February 28th a boiler was dropped which created some dust, rust mainly. Following that there were some reports that traces of asbestos had been found. That led to an intensive sampling program, with around 800 dust samples taken. The results has found there was no trace of asbestos in the air samples and there were around 30 traces of asbestos found in the dust samples. There was nothing in the air samples.

WorkSafe has visited the site and given notice for Verve Energy to ensure all contractors and employees are aware of and given training in the management of asbestos cleaning. An independent audit of the process for sampling was undertaken and the result of that has advised that all processes are in order. None of the samples which were positive exceeded the national guidelines. All reports indicate that it is a clean site. The areas where traces were found have been cleaned and continuous monitoring will be maintained as part of the asbestos management program.

There was no further general business.

6. DATE AND TIME OF NEXT MEETING

Ron Kemp thanked attendees for attending the meeting. Attendees were asked to complete the attendance register prior to leaving the meeting if they had not already done so. The meeting concluded at 7.25pm.

The next meeting will be held on Tuesday 1 June 2010, 5.30pm at Kwinana Recquatic, Gilmore Avenue, Kwinana.