# STANDING COMMITTEE ON ENVIRONMENT AND PUBLIC AFFAIRS

# TRANSCRIPT OF EVIDENCE TAKEN AT PERTH WEDNESDAY, 28 NOVEMBER 2001

## **Members**

Hon Christine Sharp (Chairman)
Hon Kate Doust (Deputy Chairman)
Hon J.A. Scott
Hon Louise Pratt
Hon Frank Hough
Hon Robyn McSweeney
Hon B.K. Donaldson

### Committee met at 1.45 pm

VAN DER PAL, MR WILLIAM, Safety Representative, Alcoa, examined:

**The CHAIRMAN**: Welcome to the committee. Have you read, signed and understood the Information for Witnesses sheet?

Mr Van Der Pal: Yes.

The CHAIRMAN: Did you understand its content?

Mr Van Der Pal: Yes:

**The CHAIRMAN**: These proceedings are being recorded by Hansard and a transcript of your evidence will be provided to you. To assist the committee and Hansard please provide the reference for any document so that we can track that document. Please also use the microphone so that Hansard has a good recording.

Your transcript will be on the public record. You may want to make a confidential statement in today's proceedings. If so, you can request that your evidence be taken in closed session. The committee will then consider whether to grant your request. If it does, any public or media representatives in attendance will be asked to leave. Until the transcript of your public evidence is finalised, it should not be made public. If you make it public prematurely, it will not be protected by parliamentary privilege. We hope you will make a statement.

Mr Van Der Pal: I do not have a prepared statement, but I have a lot of evidence. Towards the end of 1997, due to outrage by the work force, Alcoa World Alumina Australia made me a full-time safety representative. It is not a management position; I was elected from the floor. I have worked in that capacity since then. I would like the committee to know that I also became ill from liquor burning emissions. It has had a huge impact on my life. I have been privileged as the elected safety representative in that the company has been forced to give me a lot of documentation. However, I have been restricted in the way I have used it because the company has notified me on several occasions that should I use it in a public forum it would take legal action against me. I have been sitting on much of this information and I welcome this inquiry to present it.

I have a lot of overhead slides. The information I have probably amounts to 10 000 pages. To get through it quickly, I thought I would present it as a package, which will take probably 20 to 25 minutes. It may be better to ask questions at the end unless they are pertinent to the information at the time, otherwise the process will get bogged down.

This first overhead shows the number of complaints to date as follows -

WCHAG 2 709 community 1 500

(direct to Alcoa)

Workers 800 Direct to DEP 200

Complaints in Excess of 5 000.

Most complaints to the Department of Environmental Protection were made at Bunbury.

The next transparency is headed "Worker complaints by union on liquor burning emissions until December 1998" The majority of workers affected are under the heading of the Australian Workers' Union. A large percentage of them are with the Australian Manufacturing Workers Union and almost an equal number of staff were effected. The Communications, Electrical and Plumbing Union made one complaint. There has been much conjecture about why more AWU workers were affected. One of Alcoa's reports states that maintenance workers are subjected to 2.5 times the emissions in the field than is a production worker.

Slide number 3 refers to odour. Much conjecture surrounds odour. It is therefore necessary to clarify what happens on site. I have worked there since 1984. All the workers who work there are subjected to horrendous fumes and odours day in and day out. The fumes did not have an impact on our health, although at times they would take one's breath away and, on moving away to fresh air, they did not appear to have a lasting effect on health. Only since the introduction of the liquor burner in 1996, when workers appeared to have lingering health impacts, were complaints made.

Workers have become ill with no odour present. We do not accept the only thing making people ill is the odour. Workers have become ill when the odour was present. Workers have not become ill while the odour was not present. Sometimes it has lingered for 72 hours, and then within 15 or 20 minutes 20 people have reported ill around the refinery. Workers have also become ill from different forms of emissions such as dust, mist, water droplets, gas and emissions from a cooling tower. Workers have also become ill while the plant was in different modes of operation - in normal operation, during start-up procedure, during shutdown procedure, while cleaning the plant, while cleaning the CTO and while maintaining the plant. No location on the site has not had a report as a result of emissions from the liquor burner.

Slide No 4 shows a sample of workers' complaints. They are from the accident incident forms, which are the official record of what happens to the workers. These forms do not give a full coverage of the workers' health symptoms; they provide a basic description. Some of the descriptions are as follows -

A heavy white dust smog entered the workshop causing breathing irritations.

Odour causing eye irritations and sore throats, breathing restrictions.

Odour drawn into security building via airconditioner, \*problem security have to stay in building to answer emergency phone calls etc.

Walking into change room smelt toxic fume irritating nose and airways.

There are about 800 of them.

Slide number 5 shows samples of the complaints from the community. The names have been deleted. Mr X was a staff member, who phoned from home to report that the smell was blowing across his house causing sickness to his family. He was very angry. At the time of the call a patrol of the area noted the odour was very bad near the highway. The second complaint was from a staff member going home. Mr Y was driving south along South Western Highway, approximately one kilometre before Yarloop. He noticed a strong smell from building 48 liquor burning. He suffered minute blistering between the fingers, accompanied by severe itching and a sore throat, which continued for several days.

I am sorry about the fine print on overhead No 6. That is what an accident report looks like. Alongside the heading "Short Description" it says "Foul odour ex liq burning in commercial/stores bld". Under the Heading "What Occurred" it reads -

Odour detected by employees in 143 causing eye irritations and sore throats.

Under the heading "Immediate Temporary Control" it reads -

You tell me. Seems when the refinery neighbours complain the bld is turned off. But employees are to put up with it.

Attend medical centre for eye drops.

The sad part about attending the medical centre is that people get ill because the airconditioner pulls the emissions into the medical centre.

The next slide is another report by the same person. The first report he made was about 9.45 am that day. He decided that at about 2.45 pm he would put in another one because he was subjected to the odour all day and suffered from burning throat and eye irritations. He was in his office and was subjected to those odours for about six hours.

Another accident and incident report states -

At approx 2300 the operators in building 25X noticed an odour which, with the wind direction from the south, seemed to be coming from building 48.

That is the liquor burner. It continues -

After a short period of time all the operators began to get sore throats and felt nauseous.

The worker's immediate temporary control was as follows -

Contacted building 48 operator to check procedure on possibility of shutting down building, then moved whole 25X crew to 30X.

It states also, under the heading "How, why and prevention" -

Emission from building 48 caused operators discomfort to the degree that they were forced from their operating area. Wind direction and speed ensured fallout was not dispersed prior to or above operating area.

That incident would have been attributed to one person, yet it covered six to 10 workers. Therefore, even though there have been only 800 worker complaints, some of these complaints be multiplied numerous times.

Another complaint - again from a staff member - is -

Odour detected by employees in bld 143 causing headache to some staff

That staff member's immediate temporary control was to knock off early, yet when the workers ask to do the same thing, they were told that is not palatable to the company.

The next slide is a list of the initial symptoms. The worker symptoms come from the accident and incident forms, which, as I said, are not a comprehensive list; and the community symptoms come from the community group WCHAG. We have compared the symptoms and have found that many of them marry up. I will not go through them all, because I will make this list available to you.

Because the staff continued to get ill within the buildings, Alcoa put carbon activated filters into all of the airconditioners. The next slide is an e-mail that states -

The program for installing the Carbon Activated filters will begin on this Thursday 14th and be completed by the Tuesday 19th.

The sheetmetal boys begin installing brackets on Thursday and the fridgees will install filters as soon as the sheetmetal boys complete the brackets.

The carbon activated filters were installed primarily for people who work in the offices. As I said, the maintenance workers continue to work outside. The carbon activated filters tended to reduce the effect, because on a bad day if we had continuous fumes for four or six hours-plus, it had a delay effect of about four hours before it would overcome the carbon activated filters, so there was a large benefit. Therefore, you can see that the company has gone to some expense to protect the staff, because even the receptionists were finding that at times their eyes would burn, and they had to take out their contact lenses otherwise their eyes would become ulcerated, and things of that nature.

The next e-mail is very interesting. It is from Neil Evans, who is the industrial hygienist, and is one of the maintenance workers. He says -

Yes the stuff put out the stack is harmful, very toxic indeed BUT that is at the stack release point. We specifically built a 60m stack so that the dilution of the plume would be sufficient so that if our worse predictions of the emission levels came true we would still achieve 19000 times dilution. This brings the ground level concentrations (assuming heterogenous mixing with air) to well within Occupational Exposure Standards.

The point I wanted to make was that the smell is most likely a smell only. Pyrolysis byproducts (burning) are typical hydrocarbons with fused aromatic rings, nitrogen and oxygen compounds. Many of these are extremely potent olfactory (smelly) agents. To date the plant has not been operated long enough to allow the WG Env Dept to carry out an ambient sampling programme aimed at identifying the concentrations of the chemicals released. But even the worst case scenario says the levels will be extremely low.

Another document that I do not have with me but that I will provide as evidence states that the dilutions will not be 19 000 times but will be 200 times. That document is from the research and development department. Therefore, when we say this is toxic stuff at dilutions of 19 000 times, which is well below the occupational standards, it is even more toxic if we take it to 200 times. The company was never able to do sampling when the workers became ill. We asked the company on numerous occasions to do that, but each time the answer was that we do not have the testing equipment on site; or we do not have a person available to do it at the present time. Therefore, we do not accept that the testing that was done was representative of when the workers became ill.

The next slide lists some of the known chemicals that come out of the liquor burner, and it includes chemicals such as acetone and benzene. Most of these chemicals have long-term health effects, some are reproductive toxins, some bio-accumulate, and quite a few are carcinogens. Some people in the community believe that their health problems did not begin with the installation of the liquor burner. Another process - the oxalate kiln - produces similar emissions, and we believe that this could have been slowly contributing to people's ill health over a long period. No other place in the world has a liquor burner and an oxalate kiln together. What we have here is a combination. Both of the processes are incinerator-type processes. Some of the people who had been working in the oxalate building for a long time believed that the emissions were making them ill, and the communication that we got from the company was that the people who were working in that building needed to be very careful, because the dust and emissions within that building could damage their lungs.

The next slide is a copy of a liquor burner dust sample. The dust concentration is 336.25 milligrams per cubic metre. If that is calculated into an hourly rate, that equates to in excess of 125 kilograms of dust per hour. This test is on the high side of the results, but it is an indication that at times the amount of dust within that building becomes uncontrollable and is a major problem for workers. The majority of that dust is sodium aluminate. The next slide is a hazardous materials report, and it states -

Has a markedly corrosive action upon all body tissue. The symptoms of irritation may be evident immediately. Its corrosive action on tissues causes burns and frequently deep ulcerations, with ultimate scarring. Ingestion causes very serious damage to mucous membrane or other tissues with which contact is made.

It can cause perforation and scarring, nausea, vomiting and abdominal pain.

Mists, vapours and dust of this compound cause small burns. Contact with the eyes rapidly causes severe damage to the delicate tissue.

Inhalation of the dust can cause damage to the upper respiratory tract and to the lung tissue.

I believe this is only part of the emissions to which the workers are exposed.

The next slide is just one of a number of pages that detail the chemical make-up of what comes out of the liquor burning stack. That gives a proper picture of that chemical make-up, and when Alcoa uses specialists, that is the information that it needs to give to them.

The next slide was made prior to when the liquor burner was built, and it is consistent with the information that was given to the work force. It states -

Prior to commissioning of the plant at Wagerup, there had been no indications of health issues associated with liquor burning emissions.

We know that many workers and local people at Kwinana were affected by emissions. Alcoa says that perhaps the people in the local area got used to the emissions. However, our train of thought is that perhaps people got sick of complaining, because there was no action. However, the liquor burner at Kwinana is half the size of the liquor burner at Wagerup. It also comes from a different ore body, which means that the minor emissions that come out may be significantly different.

The workers and the community say that there was no adequate consultation or notification with the community that Alcoa was to construct and operate a liquor burning plant that would emit potentially offensive odours. Why was no notification given when Alcoa's modelling of emissions suggested that it would impact on the local community and work force?

The next slide contains excerpts from Alcoa documents, and I will supply the full documents to give an example of what Alcoa knew before it built the liquor burning facility. The slide states -

Odours will be present and may be detected in Yarloop and Waroona/Hamel towns under unfavourable wind conditions. The worst combination of conditions could lead up to 13 occasions per year (Yarloop) and 43 occasions per year (Waroona).

Alcoa's definition of an occasion is one hour. At times those towns are impacted upon for 72 hours at a time; so in one hit they have exceeded what Alcoa says will be the impact on these towns for a whole year. If Alcoa wanted to set up a piggery, it would have to advertise, and it would be put out of business. Alcoa knew this before it built the facility, because this document was written in 1994, almost two years before the Wagerup liquor burner came on line. It states also -

The administration building and car park will also experience odour exposures at several times the detection threshold relatively more frequently than other areas of the plant.

For these reasons and the history of workforce complaint associated with the Kwinana Liquor Burner -

It is acknowledging that Kwinana has a history of complaints; and this was written by Alcoa's research and development department -

I urge you to give close consideration to options aimed at reducing odour emissions within the process and post process odour controls and possible relocation of the planned position to offer a better 'within plant' exposure pattern.

That was written on 22 June 1994. Another excerpt states -

There is a very significant risk of adverse public and workforce reaction should the WAGERUP liquor burner produce unacceptable levels of odours. Currently there are no post treatment technologies readily available that could be implemented in the event that odour emission rates are higher than those used in the modelling exercise . . .

Finally we recommend that Alcoa continues to inform employees and the surrounding community of the work that we have in progress on the odour problems from liquor burning.

That document was written in 1995. Sadly, there was no communication to the workers or the community. In fact, the workers were told that we are getting a state-of-the-art plant and there will not be a problem; and if we have any problems, we will close it down immediately.

The next slide is headed "Table Wagerup Liquor Burner - Ground Level Odour Concentrations".

The eventual stack height was built at 60 metres. Had it built an 80-metre stack at building 146, there would have been a reduction in odour concentration from 3.8 to 2.1. At the bottom of that document it reads -

Further examination of locational factors within plant dispersion was also performed. The most desirable location for a 'smelly' item of plant would be in the north west sector of the refinery, as winds from this quadrant are the least frequent of all directional sectors.

Where did they build it? They built it in the south west sector of the plant where the majority of workers were exposed to the emissions!

A specific location at the south west corner of building 45, immediately adjacent to the north south road, was mentioned after the meeting. Data on wind speed and frequency distribution from the south east quadrant indicates that this would produce slightly less odour exposures than would the present location . . . (Mainly buildings to the west and north west of the main north south road.) the reduction in incidence of odours may only be of the order of 5 - 10%, though, suggesting this alternative is of marginal value.

They had opportunities to reduce the emissions. The technical manager at the time said that they were being far too conservative with engineering and research so Alcoa cut the building program to the bare bones.

**The CHAIRMAN**: Was the name of the person that to whom you referred on the bottom of the page?

**Mr Van Der Pal**: No, that is not the technical manager. This document was written by Patrick Coffey, who suggested those options were available to the technical manager. I cannot remember the technical manager's name.

**Hon J.A. SCOTT**: Who is Peter Forster?

**Mr Van Der Pal**: He is also in research and development.

The next slide is a memorandum from Peter Forster and Patrick Coffey, headed "Environmental and Workplace Standards for Odours". They are saying that if the proposed guidelines were developed as were Queensland's guidelines at the time, Alcoa would have to maintain protection for its neighbours for 99.5 per cent of the time. That would equate to 43 hours or 44 exposures per year. Further into the document they indicate that, at present, Alcoa exceeds those limits 85 per cent of the time. This slide is headed "What Are The Problems With Kwinana's Liquor Burning Plant?". It was developed by the industrial hygienist at Alcoa, Wagerup a year before the liquor burner was built. It was a risk assessment to show the workforce what would be the impact of the liquor burner. The presenter says -

The dust is much like a residue dust or caustic mist. May irritate the eyes, nose, throat and lungs. Carbon monoxide is a colourless, odourless toxic gas that when inhaled it is absorbed into the bloodstream and reduces oxygen uptake by haemoglobin;

- -VOC's are a complex mixture of over 200 different chemicals;
- -Benzene is a Category A carcinogen which means it is known to cause cancer in humans;
- -Odour itself is not a health concern but may cause short term acute exposure effects such as nausea and headache. Odour is responsible for the majority of Kwinana's external complaints.

Sadly that was not presented to the work force because it was too controversial. We heard a totally different story. The next slide is headed "Will Wagerup Liquor Burning Plant Be The Same As Kwinana?" - "Hopefully not!"

That gave as a great deal of hope!

This slide shows a document we received recently, which refers to 1990 and reads -

The following aromatic hydro carbons have been identified in the liquor burning stack samples taken to date.

Although their concentration is unknown at this stage, we should do some "homework" on how we communicate this information since many of the compounds are known carcinogens - some of them potent carcinogens.

A list follows those comments. That has not been shown to the work force yet. The research department is saying that that information should be communicated to the workers so that they know the risks associated.

This next slide shows dust concentration levels. It is the results of a series of testing. As I said earlier, the previous level I gave was 336, which I indicated seemed to be on the high side. However, the example highlighted reads "49 Scrubber on, ESP on. Unit on standby with no feed. Heavy dust emission evident". Alcoa discredits many of its neighbours by saying that the liquor burner was not on when it was supposed to be having an impact. We found that the liquor burner did not have to be fed. If the fans were on, emissions occurred and odour emissions continued for days after just with the fans running.

This slide shows another memo from Peter Foster and Carim Armanios, headed "Volatile Organic Compounds In Wagerup Liquor Burning Stack Emissions". The final paragraph reads -

At this stage, the odour emission rate has not been measured from the stack. However, atmospheric dispersion modelling using an estimated odour emission rate has shown that an 85% reduction in the current rate is required to comply with the Department of Environmental Protection's (DEP) proposed odour guideline in areas adjacent to the refinery. That result suggests a large reduction (70%) in the odour emission rate would still be required, even with the reduction associated with the lower TOC levels.

They acknowledged they could not comply with proposed legislation. This slide shows a list of workers, some of whom may appear here. I believe that John Swales has appeared before this inquiry. An interesting case involved Gino Pisconeri, who required neurosurgery. For two years he was told by the Alcoa medical centre that he had a psychosomatic condition. If he had not sought external help, he would not have been diagnosed as having a neurological problem. Who knows what would have happened if he had not sought external help? Another situation involved Janet Sutherland, who was Alcoa's internal communications officer. Due to ongoing effects of the emissions on her health she left the employ of Alcoa in December 1997. Alcoa wanted her to stay, and asked her to wear a breathing apparatus inside her office. That demonstrates how bad the emissions were around her office. The emissions also had a significant impact on vehicles. This slide shows vehicle damage claims. As can be seen, at times up to 16 cars were damaged. The stuff became etched into the glass. This is not a list of work vehicles; it shows employees' vehicles in the plant car park, which would be 500 to 800 metres from the liquor burning stack.

This slide is headed "Dr Brian Galtin Fenzi", who was employed by Alcoa to investigate the numerous complaints by Alcoa's employees and nearby community. He is the DME's senior health consultant. The next slide is a facsimile transmission to Dr Brian Galton-Fenzi from Ron Stone, the EH and S manager at the refinery. It reads -

RE: WAGERUP LIQUOR BURNING IMPACT ASSESSMENT.

Brian

... Your suggestions on how we could manage the "risk" associated with managing the problem are appreciated however I was also expecting to get feedback from you regarding

the validity of our conclusion of "no long term health effects associated with the operation of the Liquor Burning Plant".

The next slide shows a letter from Brian Galtin-Fenzi to Ron Stone and reads in part -

I note your requirement to answer "there is no long term health effects associated with the operation of the liquor burning plant" and will present a summary document regarding this, in the near future.

Two weeks later, Mr Galtin-Fenzi provided a summary document. The bottom line reads -

Long term health effects arising from these substances at these levels, specifically will not be a problem.

Alcoa has prompted him on what to say. In the end he used their words verbatim.

That gives the workers a great deal of confidence in other reports sought by Alcoa. In the middle of his note he says -

I have not received any reports on employees' symptoms and concerns. Therefore I cannot comment on whether there may be other substances eg. Caustic dust could be present and possibly causing symptoms.

How could he say there cannot be long-term health effects when he had not even examined the workers to see what their symptoms were. Dr Brian Galtin-Fenzi wrote another long document and ways to appease the community. I will provide that as a full document to this inquiry.

#### **The CHAIRMAN**: Is that the title?

Mr Van Der Pal: The document is titled "Liquor Burning Impact Assessment, Some Health Issues Considered". It contains many horrendous statements. Dr Galtin-Fenzi believes his suggestion for overcoming the problem was, "to get the involvement of an independent female communicator who has good technical knowledge, as females are seen as better listeners. He indicated that Alcoa should bribe the community so that when the community feels it has blackmailed Alcoa and there has been a redistribution of profits, the community will lay down and not create any further problems. I find it strange that suggestions such as that have come from an occupational physician. It sounds more like someone in the communications industry.

The next slide is headed "Calls For Health Surveillance". Alcoa seems to have suggested that it has willingly undertaken health surveys. The dates on this slide show the dates of calls for health surveys and letters and documents that I am happy to provide. There are three pages of them, but I will not read them all now. Copies of them will be presented separately to the inquiry.

#### **Hon J.A. SCOTT**: Are they legal demands?

**Mr Van Der Pal**: There are legal and safety representative demands. Professor Andrew Harper and Professor Bill Musk from Sir Charles Gairdner Hospital suggested that health surveillance should be undertaken. Demands were also made by unions and the community.

Alcoa commissioned Bill Musk to undertake a survey, which covered 488 workers, 50 per cent of whom said that when they were exposed to liquor burning emissions they felt it had an impact on their health. Alcoa employs about 600 workers, but 488 participated: I have done a quick calculation, and 132 of those workers were staff. At this stage, the carbon activated filters had been installed for a long time. That means that if 10 per cent of the staff are still getting ill, the impact on the field workers will be as high as 65 cent. The staff are certainly still getting ill.

I should mention that Alcoa also installed a catalytic thermal oxidiser. At the time that was installed, it seemed to reduce the impact on the work force. However, that was not due primarily to the commissioning of the CTO, because what Alcoa did at the same time was get the burner management under control by getting the emissions that were coming out of the stack to roughly the same temperature. That meant that it successfully got the emissions off the refinery site, so the

workers were not being impacted upon. However, what happened was that the community was then being impacted upon far greater than the work force. Due to the weather conditions of the past years, with the mild winters, we have not had as many temperature inversions, so the emissions have not been coming down on the work force as much as they have in previous years.

The next slide is a letter that has been written by Professor Chris Winder, who is the person who compiled the occupational health and safety standards that we work by today. We sent him all the information that we could. He says -

In Mr Pinzone's case, it is apparent that the operator of the liquor burning plant (Mr Pinzone's employer) did little to deal with what seems to be increasing worker and public concern about plant emissions, and in at least the case of Mr Pinzone, emergence of clinical disease. As such, in my opinion, the operator of the facility breaches statutory obligations under Western Australian occupational health, safety and welfare legislation.

I would have liked to present a lot more information, but time does not permit.

**Hon J.A. SCOTT**: When we held the hearings at the plant, one of the people suggested that when he was ill he was asked to sign up to get a disability rating and was asked to say it was for a different injury rather than from emissions. Have you found there has been any disguising of the illnesses of workers in the process?

Mr Van Der Pal: John has given me a folder with documentation on his case, with all the medical reports. I have handed that to Dave. In John's case, they used the Alcoa internal superannuation fund to cover up what they paid him out for. John's application was primarily on the basis that he has chemical injury. However, since it has become public knowledge, all of a sudden it has become very difficult for other workers to be paid total and permanent disability. It is known that Alcoa has used the superannuation fund and total and permanent disability to pay out a lot of elderly workers at Kwinana. I cannot comment, because I do not know all the facts and figures on how many workers, but it is well known.

**Hon B.K. DONALDSON**: Is it correct that most of the complaints seem to have occurred after 1996.

Mr Van Der Pal: Yes.

**Hon B.K. DONALDSON**: You and the people being affected believe the installation of the liquor burner has been the cause of the trouble; prior to that there were few complaints from either the community or the workers?

Mr Van Der Pal: You need to remember that during the months between July and December, the liquor burner may have been on for only two or three days per month, and Alcoa would get a peak of complaints from the community and work force on those days. Prior to the installation of the liquor burner, Alcoa would receive approximately 20 complaints from the community a year, and perhaps 20 from the work force. However, that number has jumped, and we are now looking at 1 000 complaints a year as opposed to 40 a year. That has happened since the advent of the liquor burner. The liquor burner was the primary cause in 1996 and 1997. In 1998, the chemistry of the refinery changed and there were complaints from several different operating areas. I have a gut feeling that the liquor burner has changed the chemistry of the refinery. One of the things that has happened is that Kemerton dumps its chemicals at the mud lakes. They bring in truckloads of chemicals from Kemerton. Those chemicals ultimately go into the liquor stream and are re-burnt in the liquor burner. That is one possible cause. It also dumps 180 000 litres of oil on the mud lakes for dust suppression. That oil also finds its way into the liquor burner at some stage. Thirdly, it has moved the ore body approximately 12 kilometres away, and that change in the ore body may mean a change in the impurities that are coming down in the soil.

**Hon B.K. DONALDSON**: When was that change?

Mr Van Der Pal: I believe it was in 1999.

**Hon FRANK HOUGH**: When the employees go on annual leave for four weeks, does their health improve?

Mr Van Der Pal: A lot of the workers cannot pinpoint what actually happens to them, but it has become common knowledge - I can mention names here - that one of the workers, Roy Rodgers, has gone on holidays on several occasions and has found that every time he has gone away he has became better. However, by the time he left Alcoa because he had proved to himself that it was something in his work environment that was making him ill - and he has now been off work for 10 months - he had become so ill that they call him the bubble boy, because he does not have a life. I was off work for 18 months, and it took me 10 months before my body seemed to regenerate and get some resistance again. Everyone is an individual. I do not say 10 months is a magical figure, but it seems there is some improvement after a long period away from work, although there appears to be some permanent damage too.

**Hon LOUISE PRATT**: You said with regard to the timing of sampling that you could not get samples taken at times that corresponded with workers' health complaints. We have been told by Alcoa that the emission sampling was contracted out, and that was done to maintain independence and expertise. Do you have any other comments about that?

**Mr Van Der Pal**: Alcoa did virtually all in-house sampling for the first two years. However, after it had put the CTO on, it then got too big for it to handle. Alcoa did not agree to put the CTO on, but the metal workers union threatened to take it to the Supreme Court on 25 November 1997, and from that day Alcoa shut down that plant until the CTO was installed in approximately May 1998. We demanded that Alcoa use Curtin University to do some independent sampling, and Alcoa realised that it had to get a raft of independent sampling done and the sampling program was far too big for its own internal people to handle. Most of the damage to the workers was done prior to the installation of the CTO.

**Hon KATE DOUST**: I noted that on a couple of the slides you list the types of complaints that have been made to the company about the effects that people have been suffering, and that you had raised the issue with both WorkSafe and the Department of Minerals and Energy and seemed to get the run around about who was responsible -

Mr Van Der Pal: That is correct.

**Hon KATE DOUST**: Did you ultimately get anyone to come out to inspect it?

Mr Van Der Pal: The Collie branch of DME is responsible for Alcoa Wagerup and did come down on several occasions. A lot of people were of the belief that Alcoa would fix the problem. Alcoa also asked the work force on a number of occasions to please be patient; it would fix the problem. A lot of the workers had confidence in Alcoa. The DME had confidence in Alcoa, as did, I would say, the local politician, John Bradshaw. It was not until earlier this year, when John Bradshaw became impacted upon by the emissions when he went to visit one of his constituents who had complained, and experienced 15 minutes of having a burning nose, eyes and throat, that he thought, "This is bloody awful; people cannot put up with this for 36 or 72 hours." Everyone was tolerant of Alcoa. Alcoa is trying to make us out to be a bunch of ratbags. We were an extremely tolerant work force and gave Alcoa all these opportunities. It asked us to please give it time; but when people's health was being impacted on not for 15 or 20 minutes but for days, weeks and months on end, people said they had had enough.

**Hon KATE DOUST**: You talked about how there was no consultation or notification to either the employees or the union representatives about the installation of the liquor burner. With all the types of chemicals that you are dealing with, what type of training is provided to the workers about the hazards that they are exposed to, and are they provided with material safety data sheets for those chemicals?

Mr Van Der Pal: There are some basic MSDSs, but that complicated list that I showed you is what is actually coming out of the burner. You cannot find MSDSs for those chemicals. The other part of it is that we are not talking about one chemical affecting one person. We are talking about a range of complicated chemicals synergising and having effects on people. There has been a raft of possible explanations. Alcoa believed for a long time that it was an aerosol effect in that there was a particulate or water droplet at the centre and gases were attached to it. We have very complex chemicals here. No-one can really explain or understand what is happening.

**Hon KATE DOUST**: As a representative, when you realised the liquor burner was to be set up and you had not been notified, how far did you take that issue of lack of consultation and notification? Did you take it outside the company and make a formal complaint?

**Mr Van Der Pal**: Yes, I did. I took it to the DEP people, and when I showed them this documentation, they were aghast and said, "Alcoa never showed us this before it built the facility". I then said, "Here is a copy", and they said, "Sorry; we are not allowed to get a copy off you". The DEP then stuck its head in the sand and did not even get a copy from Alcoa.

**The CHAIRMAN**: Do you remember the name of the people at the DEP?

Mr Van Der Pal: Chris Bishop and Guy Watson.

**Hon ROBYN McSWEENEY**: Your information goes from 1994 to 1998. Do you have any more documents from 1998 until now that you have been able to access that say there has been an improvement or otherwise?

**Mr Van Der Pal**: I have 10 000 pages of documents. The number of documents would probably go to about 1 000. What I have shown you today is just a sample.

**Hon ROBYN McSWEENEY**: What about the past three years?

**Mr Van Der Pal**: I have documentation of what has happened in the past three years. I have Barry Carbon's document that has just come out as well.

**Hon ROBYN McSWEENEY**: You said that you had not been given a safe position yet. What does that mean? Are you still employed by Alcoa?

Mr Van Der Pal: After I had the 18 months off work, I was successfully employed at the minesite for 18 months. In July this year I experienced those liquor burner fumes again at the minesite. I called all the managers out to experience it, and they said it was like burning wet cement in the nose. They told me to go home immediately. Since July I have been quite unwell. I have been very ill for the past four weeks, and it has only been in the last two to three days - which is too short when you have this illness - that there has been a sudden kick off and I have had an improvement. The actual effect of the chemicals is a bit like the difference between being blind and being deaf. If you are blind, people are sympathetic. If you are deaf, people often think you are stupid. That is what happens with us. You cannot see a lot of the impact. One impact is that something in this room is affecting me. I have a huge sweat on me now. That is an indicator that this room is hostile to me. That is the sort of thing. You get a tight chest, but no-one can see that. Alcoa predicted the symptoms very well. Headache, irritated nose, eyes and throat, and nausea account for 80 to 90 per cent of the immediate symptoms, but no-one can explain the diarrhoea that you might have for the next four weeks. Why do you have sleepless nights? Why do you have sweating? Why do we have to urinate six times a night? There is this grey area. One thing that I find incredible is that all the medical staff from Alcoa do not believe in multiple chemical sensitivity, yet the guy who wrote the definition, Mark Cullen, is the international medical director of Alcoa. Alcoa has got the world's leading expert in the field, yet all our local doctors say it is bulldust and does not exist.

**The CHAIRMAN**: I suspect that when members read your finalised transcript and as the inquiry progresses we will come back for further clarification.

**Mr Van Der Pal**: I would welcome coming back and clarifying any matters.

**Hon J.A. SCOTT**: As a workplace safety representative, do you find that the current regulations properly protect workers in the workplace or do you find them somewhat frustrating?

Mr Van Der Pal: There is a huge amount of frustration. For example, when we seek access to the Department of Minerals and Energy inspectors, they often spend two or three hours a day in the office with management and then give us 10 to 15 minutes to explain our position before they say that they must head off to Collie. We do not get a fair hearing. We wrote numerous letters to Jim Torlach, the then State Mining Engineer. We have also written letters to people in higher positions in the DME. We often did not receive a response. Several months later when we asked why we did not receive a response we were told there was an inquiry into deaths in the goldfields and there was not enough time to deal with our issues. We do not believe we have had a fair hearing.

**Hon J.A. SCOTT**: I was referring to the regulations under which you work, which are supposed to protect workers' health, and whether you are protected from multiple chemicals rather than individual chemicals.

**Mr Van Der Pal**: When it comes to guards around machinery, workers are protected; that is straightforward. However, when workers report with symptoms - not just one or two workers, but many - if the injury is not visible, people think that they do not have to deal with it. We are not protected in that regard.

**The CHAIRMAN**: Have you had any dealings with the mining and management liaison group under the Environmental Protection Act conditions?

Mr Van Der Pal: No.

**The CHAIRMAN**: At the very beginning of your presentation, you said that you would show us many documents that you had received because you are a safety representative at the plant, but you had been warned by Alcoa that the documents were confidential and you should not make them public. Will you expand on the communication you had with the company regarding keeping this information confidential?

Mr Van Der Pal: Firstly, Alcoa has indicated to me on a number of occasions, once in writing, that it would consider taking legal action against me should Alcoa see any of the documentation in the public arena. Secondly, the Department of Minerals and Energy has warned me verbally that should I show any documentation outside Alcoa, it would have the right to seek legal redress against me.

**The CHAIRMAN**: Can you put names to that?

**Mr Van Der Pal**: Robert Sherwood is the name of the person from the Department of Minerals and Energy. I believe that the letter I received from the company came from Bill Moss, but I could be corrected on that.

**The CHAIRMAN**: Thank you very much for coming and providing us with this material. I stress that once the process is finalised your evidence is protected by parliamentary privilege. As I said, the committee is very likely to get back to you with further specific questions because you have given us some material to absorb today. If you are available you might like to work with Dave Driscoll, our committee clerk in photocopying the documents.

**Mr Van Der Pal**: Many of these transparencies are excerpts from documentation. To get the full understanding of their contents - you have seen only my version - I am happy for you to see the whole document and read into it the intent of the document. I will make them available. Thank you for having me.

Committee adjourned at 2.50 pm