

THE ALTONA CHEMICAL COMPLEX NEIGHBOURHOOD CONSULTATIVE GROUP

By the late Nessie Hardy

A Brief History...

The largest concentration of the chemical manufacturing industry in the southern hemisphere is situated in Altona, a pleasant bayside suburb of Melbourne, Victoria.

Altona was a quiet residential area surrounded by extensive paddocks which were used as agistment for horses until 1961 when these paddocks became development sites for the chemical industry. Fed the necessary feedstock by the recently expanded Mobil Altona Refinery and

serviced by the industries of the adjoining suburbs and with easy access to ports and major roads, the location seemed ideal to industry but less than ideal to neighbouring residents. Land zoned for residential use extended to within three hundred metres of a large petrochemical plant.

The Altona Chemical Complex brought with it progress, profit, people, problems and pollution. The residents were assured that the noise, smoke and smell associated with the start-up of the various plants would lessen as they settled into the normal routine. The nuisance did decrease but not nearly enough to satisfy residents and there were many incidents involving injury to workers and releases of toxic emissions. Residents were constantly annoyed and fearful. One company alone, B.F. Goodrich (Australian Vinyls) had two potentially catastrophic accidents resulting in the release of six hundred and seventy six tonnes of vinyl chloride monomer (VCM) in one incident and eleven tonnes of the same material in another.

Vinyl chloride monomer is a flammable, volatile carcinogen. Luckily both these releases were dissipated by favourable winds.



Relying on the vagaries of wind strength and direction to save us from disaster was not comfortable. Local residents were also fearful of the effect the constant emissions were having on general health. There were many individual protests but the people felt isolated and ignored. Much anger was expressed to friends and family and concern felt about the health effects of these exposures but most felt powerless to take their complaints further.

Some of the factors that influenced this feeling of powerlessness were:

- There was an understanding of the economic benefit of the industries;
- There was a reluctance to offend those who worked in or received commercial benefit from the chemical industry.

Most residents of Altona are not accustomed to having input into the decisions which most impact on their lives because the area has been virtually disenfranchised from all three levels of government. It is a safe Labor party seat in both state and federal parliaments and the unique method of local government elections in place until recently has meant little chance of changing anything politically.

Although the officers of the Council health department did their best to cooperate, they were frustrated by lack of proof that would stand scrutiny.

Many odours are transitory.

Calls to the industry were stonewalled. There was no communication between management and residents. Even after the Environment Protection Authority was set up in 1971, it was not considered as anything more than a bureaucracy set up to licence industrial emissions. It was remote and difficult to contact after office hours.

In spite of all these restrictions, a small group of concerned residents got together and called a public meeting which was attended by 150 angry people. It was at this meeting that the Altona Environmental Action Group was formed. This group played an important role in focussing the fear and anger of the community and providing a forum for concerns to be discussed with a view to resolving the problems. At the time, many felt the only resolution would be the closing of the industry.

The Action Group questioned the right of the chemical industry to impact on the health, safety and amenity of the local residents. Every development proposal by the industry was opposed.

There were street marches, placards, public meetings, petitions and letters to the editor in both daily and local papers. Indeed it was not unusual for local media to have front-page headlines such as, "TIME BOMB TICKING AWAY IN THE WEST" and 'THE FUSE IS BURNING'.

Things come to a head

The situation deteriorated in 1986, when an application to establish a Social Club on undeveloped land close to the Complex was refused because the Chemical Complex, Environment Protection Authority (EPA) and the Ministry of Employment and Training appealed against the City of Altona's intention to grant a permit on the grounds that the:

- proposed development would be contrary to proper concern for public safety; proposed development would encroach on a potentially hazardous installation; and
- subject land was adversely affected by residual air emissions and industrial noise from nearby industries.

A further important aggravating factor was the Government's quantitative risk assessment study conducted by Technica which found inappropriate levels of risk to residents living close to the Complex.

This finding was of great concern to local residents many of whom lived closer to the Complex than the proposed Social Club would have been. Planning amendments were drawn up which restricted use of all land near the Complex. This action angered the local residents who believed their homes were

devalued and the area stigmatised. The Complex companies were not totally happy with the amendments and other industrial landowners also opposed them.

The situation was inflamed by Company announcements of expansion plans made in ignorance or disregard of local residents concerns.

A stalemate had been reached.

A Way Forward - the ACNCG

The Minister for Planning then invited the Labor Member for Werribee, Dr. Ken Coghill to investigate ways in which the various parties could be brought together and an equitable solution found.

In late 1988 Dr. Coghill held a number of public meetings to which he invited residents, representatives of the Chemical Complex, the City of Altona, the EPA and the Department of Planning and Environment.

As a result of these negotiations the Altona Complex Neighbourhood Consultative Group (ACNCG) was set up to facilitate discussions between industry, regulators and residents.

The Consultative Group is resourced by the local

council and is chaired by a City Councillor. Meetings are held monthly and rotate between the various industry sites and council offices. Minutes are taken and distributed by a council employee. Other council officers are also present with the Health, Planning or Environment departments usually represented. The Victorian Workcover Authority (VWA) is represented at meetings. The EPA which has provided invaluable assistance has been represented by at least two officers at every meeting. The Chemical Complex which consisted of seven sites at that time had an obligation to be represented by their senior site managers.

In fact, this commitment continues to be observed today and it is rare for any company not to be represented by top management. The Environmental Advisor and the Community Liaison Advisor employed by the Complex are always in attendance. There are presently eight residents or community members. The Environment, Health and Safety Managers of all companies usually attend and other employees are welcome.

The matters of concern raised at these meetings were considered when the next amendment was presented in April 1990. The principle change in this was that the residential zone would retain its Residential C status. This took the sting out of residents' objections to a degree but having been alerted to the danger acknowledged by the authorities a small group continued to be involved

in discussions with Council, EPA and Industry.

The first meetings were very difficult with the Complex representatives expecting to be shouted at and the residents expecting to be patronised. Visiting a company's premises took courage and was seen by some onlookers as "selling out". This suspicion made it extremely difficult to make any progress and often members felt that it was a waste of time and energy but gradually the barriers have been lowered.

The 'them and us' attitude decreased as the industry representatives learned that it was possible to explain technical problems to untrained people (untrained, that is, in chemical or mechanical engineering) and the residents have learned to focus on the problems at hand.

Over the years there have been instances of paternalism and shouting but there has been laughter too. Most importantly, from an environmental point of view, there has been a substantial reduction in emissions and other adverse effects from industry and a more responsible attitude now generally prevails.

ACNCG Meeting Arrangements

With various mergers and plant closures, the Altona Chemical Complex now consists of BASF Australia Ltd., Dow Chemical (Australia) Ltd., and Qenos Pty Ltd. Qenos has four sites, namely: Olefins, Plastics, Elastomers and Resins which makes up seven plants in all. Each site hosts the ACNCG annually. The Annual General meeting is hosted by the Hobsons Bay City Council.

A light meal is served and the meeting proper beings at 6.30 p.m. with a presentation by the host company. This encompasses the company's environmental and safety performance of the previous year.

An annual "state of the environment" report is circulated with any other relevant documents, e.g. minutes of the previous meeting, background papers and the current agenda, several days prior to the meeting date. This information is discussed in detail by anyone in attendance.

Comment on the host company's environmental performance is then made by the EPA followed by comment from any attending VWA representative on safety performance.

Copies of annual reports are available to all. These

reports have been found to be extremely useful in focussing attention on performance and trends in health, safety and environmental matters.

These presentations are followed by EPA, Workcover, City West Water and Council's reports detailing any complaints received during the previous month. These reports include details of planning permit applications, Works Approvals and licence alterations requested for the Complex or the surrounding area.

This procedure was negotiated when the State government granted the Complex companies as-of-right planning privileges which meant that the industry was not required to notify their neighbours of all developments on their sites. The compromise reached then was that industries would notify the ACNCG as early in the planning procedure as possible of any on-site changes contemplated. It is the ACNCG members' responsibility to advertise the information as widely as possible into the community and to assist industry to focus on the need to reduce the environmental impact of any new development.

This demonstration of the acknowledgment that the community does have the right to know of potential impact on them by industrial processes is one of the more encouraging outcomes of the greater co-operation between industry and its neighbours. This is not to say that Australia does not need Right

to Know legislation but this local initiative should demonstrate that not only would it possible to live with such legislation but that if industry has nothing except commercial secrets to hide it will not be a problem to them and will help to break down barriers. Ignorance breeds fear.

Another outcome of the acknowledgment that the community does have a right to know is that if an incident occurs in any of the Complex companies which could have had a health, safety or environmental impact on the community the Site Manager and other employees involved in the incident attend the next scheduled ACNCG meeting to describe the incident and answer any questions. This information gives valuable insight into the efficiency of the plant and management and should prove effective in maximising safety in the workplace as it is embarrassing for a manager to have to report faults to peers and neighbours. If the incident is serious the relevant company will hold a special ACNCG meeting as part of their Environmental Monitoring Team process (refer below).

Each company reports on progress being planned or in process, the progress of Environment Improvement Plans, training programs, emergency response exercises or ongoing issues, e.g. contaminated ground water or disposal of odorous wastewater.

The EPA and VWA discuss any breach of licence or changes in procedure which may impact on the Complex or the local area.

Resident members discuss local issues which may involve the Complex and report on meetings attended on behalf of the ACNCG or as an adjunct to it.

Meetings are open to all and visitors are welcome to become involved in discussions.

Environmental Monitoring Teams (EMT)

Dealing with three companies on six sites is complicated. So much so that residents felt that they didn't have enough time to explore and digest all the information provided at the monthly meetings of the ACNCG. Moreover, the meetings were taking far too long.

It was decided to create sub-committees called an Environmental Monitoring Team (EMT) for each company whose principle task would be to help formulate and monitor the Environment Improvement Plans for each individual company. These EMTs meet bi-monthly and report back to the ACNCG which now also meets bi-monthly.

This system has resulted in a more focused and hands-on consultation with individual companies where reports are detailed and incidents examined and discussed with a small, dedicated band of residents, the EPA, Work Safe, and City West Water representatives.

EMT Minutes are included in the ACNCG's Agenda and clarification and explanation given to the broader group if requested.

Issues of a general and/or inclusive nature i.e. emergency response, regulations, town planning, land zonings etc. are discussed with the larger group at ACNCG meetings.

All meetings are open to all.

Groundwater

One of the ongoing and most serious issues dealt with by the ACNCG is that of contaminated groundwater which has, in some instances, spread from "hot spots" within the Complex beyond the boundaries.

Presently (2004) three sites have a problem with contaminated ground water which has resulted from accidents and/or poor waste disposal practices in the past. They are the former

Australian Vinyls site, Dow Chemical and Genos Olefins.

Although Australian Vinyls Altona closed their site some years ago (February 2002), remediation work to cleanse the groundwater is still being carried out by the site's owners, Orica Limited, who set up a firm, Altona Properties Pty. Ltd., to manage this task.

Results of trials and investigations are reported at EMT and ACNCG meetings as well as at especially convened meetings held in community halls to discuss remediation efforts.

Benefits and Achievements

The ACNCG has been host to many people from Australia and overseas who are interested in studying the group's method of consultation. In addition, members of the ACNCG have been invited to address other industry/resident groups and to assist them in developing lines of communication.

For some time a member of the ACNCG was a delegate on the National Community Advisory Panel for the Responsible Care program of the Plastics and Chemical Industry Association. This position involved assisting the formulation of Codes

of Practice which form the core of the program and ongoing input to discussions of compliance with the codes and the spirit of Responsible Care.

Sub-committees and individual members of the ACNCG have been involved in a various activities over the years and continue to participate in a number of consultative processes. An example of these are:

- Submitted comment to the Coode Island Review Panel;
- Assisted in the formulation of the National Standards for the Control of Major Hazard Facilities;
- Assisted in the regional emergency plan (DISPLAN);
- Group gained government funding for beautification projects (tree planting etc.) and carried them out with the assistance of the wider community;
- Participation in various training workshops with industry employees;
- Assisted the EPA by meeting with interstate and overseas visitors and sharing their experiences;
- Being involved in formulating the Corporate Plan for the new City of Hobsons Bay;
- One member is involved with the Victorian WorkCover Authority as part of their

community/regulatory authority consultative processes;

- Two members are office holders at the local Migrant Resource Centre;
- A number of members also participate in various community/industry consultative groups within the western suburbs.

The above activities are not by any means comprehensive, they are merely an indication of the network of communication which results when interested people seize the opportunity to make a difference.

By far the most important indication of the group's effectiveness is the reduction of emissions from the Complex since the ACNCG was formed in 1989, although the group doesn't claim sole responsibility for this improvement.

During this time many people have recognised the necessity of reducing industries impact on the environment. The Complex has accepted its obligation to reduce nuisance and risk to their neighbours and its impact on the wider environment. Much work has been done to accomplish this end.

The tables below illustrates the considerable changes in the Complex emissions and use of resources over the past fifteen years:

	1989		1999		2005	
BASF	Consumption	Consumption per unit of Product	Consumption	Consumption per unit of Product	Consumption	Consumption per unit of Product
VOC Emission Kilograms	37	1.6	0.27	0.08	1.83	0.046
Water use Kilo Liters	N/A	N/A	106602	3.21	79323	1.94
Electricity use KWH	N/A	N/A	4845	0.146	4565	0.112

	1989		1999		2005	
DOW	Consumption	Consumption per unit of Product	Consumption	Consumption per unit of Product	Consumption	Consumption per unit of Product
VOC Emission Kilograms	179.6	1.66	24.5	0.34	22.6	0.26
Water use Kilo Liters	N/A	N/A	270436	3.22	236165	2.76
Electricity use KWH	N/A	N/A	17087718	203	15215040	178

	1989		1999		2005	
QENOS	Consumption	Consumption per unit of Product	Consumption	Consumption per unit of Product	Consumption	Consumption per unit of Product
VOC Emission Kilograms	3719	8	1062	1.5	727	1.5
Water use Kilo Liters	N/A	N/A	4179000	6.05	3342000	6.97
Electricity use KWH	N/A	N/A	235000000	340	165709000	346

Qenos production was low in 2005 elevating resource use per unit of production

The Complex Environment Advisor and the Complex Community Liaison Advisor

Owing to the increased communication between industry and neighbours and the complexity of regulations, the Altona Chemical Complex employed a full-time Environmental Officer on a contract basis. The role was re-defined by the Complex companies in December 1997 when it was decided to share responsibilities between two Qenos employees. These advisors are contracted out to the other Complex companies on a part-time basis.

Both are based at Qenos Olefins site. The duties of the Complex Environmental Advisor and the Complex Community Liaison Advisor have incorporated the following:

- Liaising between industry, regulators, Council and residents and representing the Complex on matters affecting all of the companies;
- Facilitating the direct telephone links which have been introduced into the local kindergarten, schools and Migrant Resource Centre as a means of alerting them immediately to any emergency at the Complex

- Producing The Consultative Chronicle; and
- Overseeing the operation of the Environmental

The Consultative Chronicle

The Consultative Chronicle is the newsletter of the ACNCG. The newsletter is printed three times annually and is the principle method of communication between the ACNCG and the wider community. Each edition is delivered to approximately 10,000 households and businesses in Altona and Altona Meadows. A further 2,000 copies are mailed to community organisations and circulated to employees within the Complex companies.

The newsletter is produced by a sub-committee of the ACNCG. The newsletter is financed by the Altona Complex except for one edition annually which is financed by the City of Hobsons Bay. It is recognised as conveying the views of the entire ACNCG. To this end all members are supplied with a draft copy before publication with the right to criticise and change content. As with all activities of the ACNCG constant vigilance is required by all to ensure that the information conveyed is unbiased, factual, relevant and interesting to the general public.

The ACNCG has recently established their own website; www.acncg.info and email address; acncg@qenos.com.au. Recent copies of the Chronicle can be accessed on the website.

Environmental Action Line

The environmental Action Line was set up following discussions between ACNCG members about the difficulties in reporting nuisances which may be dangerous to health but which may also be transient and so impossible to detect by the time an investigator arrives on the scene.

The Environmental Action Line is a free-call hotline (1800 061 050) set up by the Complex to provide an immediate response to residents concerned about operations in or about the chemical complex. The responsibility of servicing the line has been shared between the companies though since mid 1994 the 24 hr, seven days a week line has been staffed by Qenos Olefins shift personnel.

Each call is recorded and details passed on to the EPA and Council within two days. Personal details of the complainant are not passed on. All calls are investigated immediately and, if the source of the problem is within the Complex, endeavours are made to have the problem addressed and to notify

the caller of the result as soon as possible. The caller may elect to remain anonymous and will under these circumstances not receive a call back.

The hot line has reduced the tension between industry and its neighbours as complainants can now receive immediate replies to concerns knowing that the EPA and Council will also be involved. An information magnet advertising this number has been distributed to all households who receive the Consultative Chronicle.

This hot line does not replace the service provided by the EPA and Council but provides an alternative service twenty-four hours a day and on the spot investigation.

All calls on the environment hot line are reported to the ACNCG at the next meeting.

If an incident occurs at a Complex site which results in multiple complaints the company involved will contact all households in the area affected with a printed apology and explanation.

Complex-Schools-Council Telephone Network

A Complex-Schools-Council Telephone Network has been installed to enable local schools,

kindergartens and the Hobsons Bay City Council to be notified promptly if there is an incident which may either cause concern or present some risk to the schools and the wider community. The phones can also be used by the schools, kindergartens, Council or the Westgate Migrant Resource Centre to seek information from the Complex.

The Telephone Network consists of direct-dial telephones in eight local schools and kindergartens, Westgate Migrant Resource Centre and the Hobsons Bay City Council. These telephones are not connected to switchboards and have unlisted numbers to facilitate communication.

Odour Detection

A particular problem encountered by local residents and the industry, was the difficulty of identifying odours travelling off-site which resulted in a complaint being registered.

With this in mind, Qenos invited interested residents to visit each of their sites annually to help them to recognize any errant odour they have noticed off-site. This assists the plant operators to correct the problem causing complaint. The people who regularly undertake these “odour tours” also score the various odours they detect on-site for intensity in comparison to former years.

Accredited Licensee

Because of the reduction in emissions from the Complex and elsewhere, volatile organic compound emissions have been significantly reduced by all Complex companies since 1989. To ensure ongoing improvements in cleaner production, the EPA has formulated a new system of regulating companies which have a good safety and environmental record, good management systems in place and a commitment to clean and safe production.

The following criteria must be met before a company will be considered for this new and coveted Accredited Licensee status:

- An Environment Improvement Plan (EIP) must be formulated with the assistance of the EPA, Council and the community. The EIP will detail improvements to be made and set target dates for the completion of this work;
- An Environment Management System must be in place and certified against an approved standard; and
- An Environmental Audits Program must be in place involving independent auditors.

Companies which qualify for Licensee status benefit by having;

- Less stringent inspection of their compliance with regulations (which will not be more relaxed than before).
- Exemption from some works approvals requirements.
- Lower licence fees.

This new and somewhat revolutionary concept of placing more reliance on the industry to be responsible for compliance to the standards set by the regulatory bodies is controversial. It relies heavily on involvement by community members and of their being alert and aware of company practices and, more importantly, company culture.

This is difficult to obtain and even more difficult to sustain. To be an active member of an EIP team demands a large commitment of time and effort. The possibility of a compliant resident member being used to confirm or validate poor performance should be seen by industry and all other participants as the weak link which could destroy an otherwise worthy initiative. It may also be difficult to recruit enough people from the wider community who feel competent to discuss technical matters pertaining to a chemical plant and who feel that their effort would be worthwhile.

It is important that the EPA maintain a close relationship with their Licensees and other members of the EIP teams. This is especially important when there is a change of management

in industry as company culture is fostered from the top down.

The Licensee policy is in its infancy. If it is to grow it must be nurtured but it will succeed only if the community considers that it is a better method of assisting industry toward clean production. Success will be measured in:

- A reduction of incidents affecting health, safety and environment.
- An improvement in the stewardship of raw materials and products.
- Reduction of resource use.
- The elimination of waste.

Towards the Future

We expect that industry management will achieve a higher standard of excellence if they are encouraged in their efforts and rewarded for their achievements than if they are forced to comply with a minimum standard and threatened with punishment if they fail.

Standards must be set and sanctions legislated, but the efforts of the Altona Complex Neighbourhood Consultative Group, Responsible Care, Community Right to Know, Victorian

Workcover Authority and the Environment Protection Authority are all focussed on ongoing improvement in the health, safety and environmental performance of the chemical industry which goes well beyond any that is presently required by law.

Together we are trying to create a culture of care and responsibility.

For further information contact:

Phone: 03 9258 7436

or visit the ACNCG website on

www.acncg.info