

CHEMISTRY CENTRE (WA) BILL 2006

Second Reading

Resumed from 28 June 2006.

HON BARRY HOUSE (South West) [9.15 pm]: The opposition supports the Chemistry Centre (WA) Bill 2006, which seeks to establish the Chemistry Centre as a statutory authority. Currently, it is an agency within the Department of Industry and Resources. Establishing the Chemistry Centre as a statutory authority will give it some legislative authority and a degree of autonomy to pursue commercial activities. Other statutory authorities that operate with some degree of autonomy have the backing of legislation, which is an essential part of their operations. Sometimes there is a fine line between the independence of statutory authorities pursuing commercial activities and unfair competition in the marketplace. The opposition supports the creation of this statutory authority.

The Chemistry Centre has a long history. It was established in the 1890s during the gold era. It is rather poignant that we are seeking to alter the structure of the Chemistry Centre during the most buoyant economic times that Western Australia has enjoyed. The only other comparable time is the gold era of the 1890s. The Chemistry Centre has been a part of our history since that time. Initially, the Chemistry Centre's core responsibility was to perform an analytical chemistry function for the government. Over the years, its functions have evolved and changed from primarily mineralogical activities to forensic activities. These days those mineralogical activities are better performed in private laboratories and better followed up by private enterprise.

This legislation came about as a result of the review that was conducted in May 2003. That review produced a report that recommended these changes. In February 2004, a chemistry steering committee put this legislation together. The changes are being made on the basis that the government should remain in control of the high-risk activities that the Chemistry Centre currently undertakes. I refer to activities that relate to forensic science, crisis response, occupational and public health issues and the management of environmental incidents. By way of example, as it was explained to me, if a container that was being unloaded at the Fremantle docks started to leak and required analysis, the docks would become a crime scene and the province of the police, who would collect evidence. The DNA would go to PathCentre and the drug toxicology analysis would be done by the Chemistry Centre. Those three bodies would determine what happened and the appropriate response. Currently PathCentre, the Chemistry Centre and the police are involved in the analysis of such an incident. If an incident results in a fatality, the coroner also becomes involved.

Roughly a quarter of the Chemistry Centre's functions are those core responsibilities. The other three quarters of its responsibilities are conducted in conjunction with private industry or as a service for private industry. For example, the Chemistry Centre has conducted considerable air monitoring for Alcoa. I gather that over the past few years that would have involved what has happened at Wagerup. Commercial activities are conducted on a whole range of products - for instance, the composition and the chemical issues surrounding the production of potatoes, fish and so on.

This bill will establish the Chemistry Centre as a statutory authority. In other words, it will virtually be a private company, with the government as the sole shareholder. The bill sets out in its structure an operation to create a board of management, comprising seven people, to be appointed by the minister. The bill sets out the structure and powers of this new statutory authority, the staffing arrangements, accountability and financial provisions, the dividend payments to government in the future, the tax equivalent payments that will be required, the management standards, its accountability to Parliament and the transitional provisions as the change is made from a government department to a statutory authority. In addition, an amendment that has appeared on a supplementary notice paper in the past few days sets out how rates exemptions that are payable to local authorities will be handled in the new regime. I will have a question about that during the committee stage.

About 90 people currently work in the Chemistry Centre, which is located at the corner of Hay and Plain Streets in East Perth. It is planned to move it to the Curtin University of Technology science precinct at Waterford in the future. It will be part of the greater Bentley Technology Park. This is a logical progression of its activities because it will become an essential part of a minerals and research precinct involving bodies such as the Commonwealth Scientific and Industrial Research Organisation, Alcoa and BHP Billiton. Perhaps the minister in his response could tell us what the government has in mind for the future of the existing site on the corner of Hay and Plain Streets. Will that potentially valuable site be handed to the East Perth Redevelopment Authority to become part of the greater East Perth redevelopment precinct? What will happen to the current staffing arrangements in the transition? These questions have been put to me.

It is important that the activities conducted by the Chemistry Centre are kept in Western Australia. If Western Australia lost its ability to handle forensic analysis, the core responsibility of the Chemistry Centre, there would be a response time of at least 36 hours from that example that I used previously for some analysis of whatever

was happening in Western Australia. That is too long a period in this day and age. We need the capacity to respond to emergencies in a much quicker time frame than that. It is essential that Western Australia retain this function and retain the Chemistry Centre to do the job.

This bill should certainly revitalise the Chemistry Centre and its operations. Reservations were raised by people involved in the Chemistry Centre during my discussions with them. The minister may be able to provide in his response the justification for some of these issues that have been raised with me. The Chemistry Centre of Western Australia has approximately 90 staff, of which approximately 70 are core customer-interface staff. These 70 staff are capable of earning the revenue. The current income is approximately \$8 million, which includes a government subsidy. The Chemistry Centre has not been able to make a profit in its history and it is unlikely that the situation will change if it needs to earn an additional \$3.5 million to cover the cost of relocation and renting new premises. I understand that the current rent is nil, but in the future the rent for the new site at Waterford will be about \$3 million per annum. At this stage the government input to the Chemistry Centre is approximately \$2.5 million per annum. The main source of income to obtain these extra funds has to come from the private sector and government competitive grants. On the ballpark figures that have been quoted, about \$5.5 million will have to come from either the private sector or government competitive grants. Funding from the private sector must come from areas that do not already supply clients. If not, this will be seen as unfair competition as the government subsidises the Chemistry Centre (WA). On the other side of it, applications for government competitive grants will be difficult as the universities are the traditional applicants for this type of funding, and this is where the main source of their research funds resides. Additionally, these funds are not certain. To base business profitability on such a tenuous source of funds does not make sound business sense. The Chemistry Centre's association with the universities is already established but it will not ensure that the Chemistry Centre receives the additional funds required. Government competitive grants do not extend this far. In other words, there are some concerns and reservations amongst people involved with the Chemistry Centre that there will be a budget black hole in the move to a new statutory authority. My question surrounds where that extra money will come from. Can the government provide an assurance to this house that the new structure will be able to generate that new funding, because that is what it is relying on?

Some 10 years ago the Chemistry Centre had approximately 150 staff. That number has been reduced to the present 90. Further cuts, while requiring the remaining officers to make extra money - some \$3.5 million from rent alone - are unrealistic. The capacity of the Chemistry Centre is being cut and it is being asked to go out and do more. That equation does not seem to fit. On the face of it, it appears that the Chemistry Centre's move to the new site at Waterford will require the government to increase its subsidy. It is currently about \$2.5 million a year. On the estimates put to me, the government will be required to put in about \$5 million per annum. This equates to about 25 per cent of its core activities.

[Quorum formed.]

Hon BARRY HOUSE: It has been put to me that the result of the move to Waterford will be to maintain a series of laboratories that have the potential to provide nothing more than what is currently available in universities, the Commonwealth Scientific and Industrial Research Organisation, existing government instrumentalities and the private sector. The possible exception is the Forensic Science Laboratory, which is currently fully funded by WA Police and does not contribute to the inability of the Chemistry Centre (WA) to be profitable. However, this laboratory, by association with either the WA Police facilities in Midland or the universities of WA - UWA, Murdoch and Curtin - could provide these services to WA Police without the necessity of a new building. If the government is adamant that forensic science should be provided by a single entity under one roof, it is far more sensible to provide the one roof for this activity in association with all the universities and assist these universities in developing the Western Australian institute of forensic science, which can concentrate specifically on research and development and on providing a state-of-the-art forensic facility to WA Police. This institute could be situated as a stand-alone facility either at the Waterford site or at the newly proposed science precinct at the University of Western Australia. That is an alternative point of view.

Another issue that was raised with me was how this extra funding will be raised by the new statutory authority, the Chemistry Centre (WA). If the Chemistry Centre tries to increase its profitability by increasing hourly rates, it can be calculated that for 70 staff to provide an extra \$3.5 million and eventually an extra \$5.5 million, if the government is to remove its present subsidy, there would have to be in excess of a doubling of these hourly rates at the start of the currently structured Waterford initiative. In effect, this would price the Chemistry Centre out of the market and will certainly disable it from entering commercial sector work. This doubling does not take into account any increases in salary or purchase of new equipment in the first five years of its existence. It is one of the issues that the government will have to address with this move to a new authority.

An alternative to the current Waterford initiative, and I ask the minister to indicate whether it was considered, is to devolve and amalgamate the existing facilities and, if the government is so willing, to subsidise these for some five years at the rate at which the Chemistry Centre (WA) is presently subsidised so that it can achieve

international excellence and best practice. It would be proposed to devolve and amalgamate the Chemistry Centre laboratories as follows: the environmental aspects, including emergency response and spills, with the Department of Environment and Conservation and the Environmental Protection Authority; agriculture and the food and biology laboratory with the Department of Agriculture and Food; DNA and the food monitoring program with the Department of Health; forensic, racing and emergency response with WA Police in association with the universities in WA; and toxicology and DNA with PathWest and WA Police, with a strengthening of the infrastructure of PathWest. That was put to me as an alternative to the structure that is proposed in the bill. Nevertheless, the move seems to be in the right direction. It will consolidate the Chemistry Centre (WA) with a legitimate legislative base. It will retain the core services that are required by government in a very timely manner for its use and will also give it some autonomy to go into the marketplace to generate funding on a commercial basis.

The questions I have asked really surround the financing of the whole centre - how it will be done and what some of the pitfalls might be - in moving to the new site in Waterford. It is certainly a logical extension of the Chemistry Centre to be located with those other research facilities at Technology Park, Bentley, and I am sure a state-of-the-art facility will come out of this bill in the years ahead. The opposition supports this legislation.

HON KIM CHANCE (Agricultural - Leader of the House) [9.35 pm]: I thank Hon Barry House for his support for the Chemistry Centre (WA) Bill 2006, which is consistent with the support for the bill that the opposition has shown from its inception. The key issue involved in this bill was made quite clear by Hon Barry House, and I do not intend to go over the process again. It is a simple proposition and a very simple bill for something so profound and complicated. The proposition that we are looking at effectively provides the Chemistry Centre (WA) with a degree of autonomy as a statutory authority rather than as a state agency.

Many of the questions that Hon Barry House asked towards the end of his contribution are bound up in that same simple proposition. In a sense, the ChemCentre, while it has already gained an international reputation, has been limited in its capacity to do things outside its more traditional scope. It has been hampered because it has been an agency of another agency of the state government; that is, the Department of Industry and Resources.

The concept that we are looking at is not simply a change to its corporate status. It is a change in what it is able to do. I understand the issues that Hon Barry House raised and it is quite possible that they may well challenge the ChemCentre in its early years. Ultimately, there are things that are happening in science in this state at the moment and what is happening with the ChemCentre fits in perfectly. There is no doubt the ChemCentre is regarded as one of the real leaders in science in WA. The things that are happening are not happening independently of each other.

I will refer to the way in which I am involved. It is significant that the ChemCentre will be co-located with Technology Park, Bentley, a part of the campus of Curtin University of Technology. Curtin University of Technology, in turn, has entered into an arrangement with the University of Western Australia, Murdoch University, the Department of Agriculture and Food and now the Commonwealth Scientific and Industrial Research Organisation to form Agricultural Research Western Australia. Together those five partners - I will deal with the original four first; that is, those five less CSIRO, because CSIRO's role is slightly different - have a research and development budget that is about critical mass for scientific legislation. When I refer to critical mass, I mean at least on a national and regional scale - something like \$90 million to \$110 million on current levels. What will be geared from that combination will be closer to \$180 million. It is a serious R&D centre. Where the ChemCentre fits into that is central. Already, the ChemCentre is of central importance to agriculture. We will discuss some of this in relation to a report that was tabled today when we debate the Biosecurity and Agriculture Management Bill.

The forensic services, both animal and plant, that the ChemCentre offers and performs for the state are already important. However, that is an area in which there will be considerable growth in terms of its market. I think only about 30 per cent of ChemCentre's revenue is actually generated from outside contracts. The others are, fundamentally, services to government agencies. Alcoa is a big customer, as is the Water Corporation. We can argue that it is in fact a contractual arrangement, but we could argue that it is also from government. The desalination plant on the Burrup was a big contract. That really just touched the edges of what the ChemCentre can do. It may take a while to realise its potential. I think Hon Barry House's words are helpful. We might be able to fill them out a little bit in the committee stage, and we should go into committee. Even though I would like to move on with the bill, a committee stage would be a good idea to tease out some of those arguments when I have advisers with me who know something about the ChemCentre.

The staffing matter is a question I encourage members to ask in committee. I believe the staff complement is about 97 and that all those staff will be needed after the move and, indeed, the government is hopeful that the number of staff will grow, not contract, as the amount of work available to the ChemCentre grows.

The last matter that Hon Barry House raised was the alternative arrangement: why not relocate the specialist divisions of the ChemCentre with existing specialist divisions of existing scientific organisations? The Department of Agriculture and Food was one of those. The point we must make here is that the hardware and the human resources that are used in science today have become increasingly more focused and specialised and, from the hardware point of view, unbelievably expensive. There is more specialisation at one level and less specialisation at another. I learnt an enormous amount going through Murdoch University's microscopy laboratories last year. This is really about DNA; about cell science. What struck me - it had not really had an impact on me until I saw what the staff were doing there - was that the old paradigms in biology between plant, animal and human science just do not exist any more. The silo walls between those branches of science no longer exist. We are talking about cells, and it does not matter to a cell whether it is part of a mouse, a man or a plant. The science of biology has moved on. Many scientific institutions have not quite grasped that yet. They know it, of course, intellectually, but they have not quite grasped that emotionally, so we still hear scientific institutions saying that they are the centre of excellence for a branch of science, without recognising emotionally that that branch of science does not exist any more; that we are talking about the science of cells. The old divisions that used to exist are really dissolved now. That means exciting things, and this is just in the field of biology. I imagine it is the same story in the non-organic sciences. I do not know. The organic sciences are now such that the equipment is unbelievably expensive and it becomes obsolete in an unbelievably short time. The people are becoming more highly specialised even though the fields are broader and sound more like generalists. It is a time of change in science. We need the kind of specialties that these people can bring, but at the same time we need to be able to link those specialties to each other so that we get a cogent spread of resources. I think the move to Curtin University of Technology will be a vital part of that because it means that the ChemCentre will be a central part of this new thing that is happening. The possibilities of this are immense.

I refer again to my own field for a moment. The wheat, rice, oat and barley growing industries are among the oldest forms of agriculture on earth - probably 6 000 to 8 000 years old. In all of that time and with all the advances we have made, we have been working from a common gene pool. Virtually the whole world has worked from a tiny little gene pool, which originated from the fertile crescent in Mesopotamia. In China, there is another gene pool. If the fertile crescent gene pool is the size of a 20 cent piece, the Chinese-Mongolian gene pool is the size of a basketball. That is the difference between the two. We are yet to start extracting the advantages that that mass of DNA, or scientific knowledge, can bring. We talk in agriculture about breeding crops for frost resistance, for example. In Mongolia, native serial grasses are grown that survive temperatures below minus 45°centigrade and still set viable seed. That is a gene I would very much like to capture in a serial construct, and it is the beginning of things, not the end. That just indicates what we must do. When we get into the animal sciences and human health issues - I know there are ethical issues here - the field of science that is available to us gives me the impression that we are just about to start on a new field of science.

Hon Barry House: That begs the question: why do you maintain your moratorium on GMO?

Hon KIM CHANCE: To imagine that genetically engineered crops are an important component of this is to take a very narrow view of the world. The importance of genetically modified organisms in commercial crops in this vast field of the industry called biotechnology represents a tiny sliver. Scientifically, GM crops within the whole sphere of biotechnology are a tiny sliver - almost insignificant. Commercially, I grant members that it is very significant. Commercially, that is all they have at the moment to keep driving investment into the industry. However, to think or even imply that we can take the benefits from the science of biotechnology and apply them to the benefit of mankind through only this proved mechanism that we call genetic modification is really selling science short. There are other ways of doing it. We already know that. We have been using mutagenesis, for example, for years in Australia, and that is even cruder.

Hon Bruce Donaldson: Why do you call introducing one gene from the gene pool crude science? I don't think it's crude.

Hon KIM CHANCE: I do not think we should go into that, but if we were debating that issue, I would answer by saying that it is about the way in which that gene is inserted into the DNA. Sometimes it is done in a pretty random way. We will get to that later. That is the physics of biotechnology and I am not an expert on it. However, this is an exciting field. Whatever members think about GM crops and food and their introductions, and the possibility of getting that process into animals and cloning of animals and humans - this is where we start getting into real ethical issues - it is immensely exciting stuff. It means that we could, in theory, even in an ethical way perhaps - I do not know - eliminate a range of diseases that affect mankind. It is all out there to do. That is why I say we are just starting. We need a scientific critical mass, and this is a very small step in the right direction towards achieving that critical mass.

Hon Murray Criddle: How will the government fund that? Where will the funding come from for that kaleidoscope of stuff?

Hon KIM CHANCE: A large amount of the money that I have been talking about is government funding, and industry is the second largest contributor. The agricultural industry receives very significant funding sources from the research and development corporations and from levies charged on farmers' produce. That establishes the basic building blocks. Public investment on one hand and industry investment on the other establishes the foundation. The growth will come by winning the big national and international contracts. The human genome program, for example, which was up for bid last year, involved about \$26 million for one contract. There are significant contracts out there. The plant genome program, which Western Australia missed out on in 2005 and which we would usually have expected to win in a combined bid between the University of Western Australia and the Department of Agriculture and Food, was awarded to a combination of South Australian and Victorian universities, and was worth about \$18 million. They are just the national bids. We have the ability to win the international bids also because our scientific research is highly respected. I urge members' support for the bill.

Question put and passed.

Bill read a second time.